Foreward

Verne Church is a part of almost all of us who are interested in this Autobiography. His genes have contributed to the personalities of each of us. He has set forth a detailed history of his life during the span of years from 1875 to 1948. In so doing, he has also given the reader a history of the era which included much change in the educational process, politics, world events, economics, technology, career potential and even the morals of the population during those years.

We who are his grandchildren, did not know him as a young person and only remember him as "grandpa". Our relationship was limited. His own children had different memories of him as a person, and the family as a unit. Verna is the only remaining member of that group; we have been interested in reading her own story which provides details of her life and her personal perspective in comparison to that of her father.

I have not made any corrections in spelling; the few errors are probably due to a different acceptable spelling of certain words during the time he was being schooled. Any format errors are mine. In spite of several "proofings" and revisions (bless the invention of word processors), I may have missed some.

It has been a pleasure to recopy this book, for I have had the privilege of becoming much better acquainted with the writer as I read and reread it. I am so impressed with all he accomplished and proud to be a small part of the descending generations of his progeny.

ENJOY!

"Robbie"

Roberta Briggs Dugan

Personal History and Recollections
by Verne H. Church
(written beginning March 31, 1944)

PRE-SCHOOL DAYS...Chapter I

I was born in a log house on a farm in Lowell township, Kent County, Michigan, September 12, 1875. This farm was located one mile north of the south line of the township and about three-fourths of a mile west of the east line of the county. It was purchased by my father, after his return from a service of 20 months in the Civil War, probably in 1966. It consisted of 80 acres, heavily wooded with beech and maple timber, nearly level, and with excellent soil. While he still lived with his parents at the old Church home two and three-quarter miles east, on the same road, in Ionia County, he began the clearing of his farm. He hired some of his neighbors to help with the cutting and clearing and, in addition to the wages paid, he gave them all of the fine maple logs they cared to haul away for use as wood or lumber. As they could use only a small fraction of the logs, the bulk of them were left for other disposal. These men were then hired to haul them together in large piles for burning. When a few acres had been cleared in this manner, Father bought a team of oxen with which he broke up the land among the stumps and sowed it to wheat. Then he built a log house among the stumps, many of which remained in the dooryard for several years afterward. On October 6, 1868, he was married to Elizabeth Ann Leary and took his bride to the new home. For several years prior to her marriage she had been employed in the household of John English, who lived one mile north and one mile east of the old Church home in Ionia Co.

My mother was born in Lincolnshire, England, January 9, 1843. Her father died when she was only three years old and she later acquired a step-father who was utterly worthless and possessed a very cantankerous disposition. As a result, her brothers James and George left home and came to America. When she was 14 years old, she and her older sister Mary, embarked on a sailing vessel at Liverpool bound for the United States. The voyage was a stormy one and six weeks passed before their arrival in New York. They were then driven over the old plank road from Detroit to Pontiac and to the Knapp farm near Novi, where Mother remained and worked for several years. The two brothers finally left that locality and acquired farms in Ionia Co., which eventually brought the sisters to the same vicinity where they each stayed at the John English home until their respective marriages.

By dint of hard work during the early years of their married life, Father and Mother with the aid of an ox team succeeded in clearing and removing most of the stumps from about 60 acres. While Father wielded the ax, Mother skidded the logs with the ox team and burned the log heaps. The timber on the remaining 20 acres of the farm was allowed to stand, from which a large quantity of maple sugar and sirup were made each year. Granulated sugar was unknown in those days and maple sugar was utilized for all household sweetening purposes. The surplus sugar and sirup were sold and provided a part of the farm income. The other cash income items were chiefly from wheat, butter, eggs, wool and meat. The village of Lowell, five miles to the north, was the market place for their products. These trips were made with a wagon drawn by the ox team. Occasionally the team

could be driven with both Father and Mother sitting on the wagon seat, but sometimes the oxen could not be safely controlled and Father had to walk at their heads while mother sat on the seat alone. One particular team of young oxen was inclined to run away at every opportunity. While no serious accidents occurred, I believe they ran away with Mother in the wagon in one instance and ran away from Father several times.

All of the foregoing preceded my appearance on the scene. My own recollections of life on this Kent Co. farm are necessarily quite vague, as we moved to Ionia Co. when I was only four years and three months of age. Nevertheless, I can recall a few occurrences which, though trivial in themselves, left impressions on my memory that have perceptively faded. A lane extended southward through the farm back to the woods at the rear. My mother would sometimes tell me to go down the lane to where my father was working in one of the fields and call him to dinner. His team then consisted of a span of horses and he would sometimes let me take the lines and drive the team up the lane to the barn. On other occasions he would put me on the back of one of the horses and I would ride in that fashion to the barn. A stray dog had been seen on the farm for several days, and Father was fearful that he had designs on our flock of sheep. One day as we came up the lane at noon, the dog was lying in a corner of the rail fence bordering the lane. Father had his axe over his shoulder and he handed me the lines and told me to drive the team up to the barn. He waited for me to get some distance away and then he walked over to the fence. My curiosity was aroused and so I watched. He stepped up to the fence and I saw him swing the axe over it, then he followed me. He would not say what had happened but I heard him tell mother that the dog would cause no further trouble. For a constant playmate and companion I had a dog named Frank. No boy ever thought more of his dog than I did of Frank, hence the untimely fate of the stray mongrel natually made a deep and lasting impression upon my mind. Our nearest neighbors were a family across the road by the name of Charlie and Ida Case. They had adopted a boy by the name of Fred Cook and he often came over to play with me. He was older and considerably larger than I, but we spent many hours together. The only fly in the ointment was that my mother religiously insisted I take my afternoon nap every day. She would call me in from play even if Fred was there and have me go to bed. Sometimes Fred would hang around for awhile playing with my dog and toys, and I would sit up in bed and watch him. If I heard her coming to take a peek at me I would pretend to be soundly asleep. Finally she succeeded in catching me unawares a few times and, at last, decided the afternoon nap was no longer necessary. After that it was one grand holiday for me and joy was unrestrained. Mother would frequently hitch a horse to the buggy and drive to town to do her marketing and shopping. Usually she took me with her and I acquired an unquenchable taste for these jaunts. One day I was in the barn playing in a bin of wheat. When I tired of this I left the barn and found she had gone without me, probably supposing I was in the field with Father. My disappointment was so keen that I never quite forgave her.

Probably my first conception of death in human beings occurred when Uncle Calvin called at our house one day. He was my father's next younger brother who lived on a farm later known as the Babcock place. It was located one mile west and one-half mile north of the South Boston Grange Hall in Ionia Co. He informed us that a baby had been born at his house and that it was dead. Whether it was born dead or died shortly afterward I do not know. Father was quite a good carpenter and I remember he made a wooden box with a top attached with screws, which was to serve as a casket. He then went with Uncle Calvin and they took the little body to the cemetery and buried it.

I can remember only a few people among those who came to our house during those years. One I called "Uncle Dick". He was Dick Thurlby, an Englishman, quite old, and the father of George Thurlby who has been a lifetime friend and who is now well past 80 years of age himself. Uncle Dick lived a mile or two west of us and was past 90 when he died. Another one who came and helped Father occasionally was Ray Rowlader who lived with his parents about a mile east of us on the same road. He left the lacality within a few years and his further history was unknown to me. These two always paid considerable attention to me which tended to fix their personalities in my memory.

Removal to Ionia County

In the fall of 1879, my father sold his farm to George Bartlett for the sum of $4,000. and purchased the old Church farm from my grandfather, Harley B. Church. The purchase price was $7,000. on which Father applied the $4,000, received from the sale of the Kent Co. farm. He gave a mortgage for the other $3,000, payable in annual installments of $500. on the principal plus 7% inter-22est. This proved to be a heavy load but all payments were made as they came due. It meant the strictest economy had to be observed at all times and that my par-ents had to work extremely hard during those years. When my boyish wants were made known to them, the stock answer was "You will have to wait until the mortgage is paid off". My best friend and school chum was Lewis Pratt. When I was about ten years old he had received a gift from his grandmother of a Waterbury watch which cost $1.50. He was extremely proud of his possession and I was equally envious of it, and I was sure that my folks should treat me to a like gift when I presented the facts. Instead, I received the usual answer and explanation. As Christmas approached I was still full of wishful thinking but was again disappointed. Not until two or three years afterward did I get the Waterbury and then I bought it with my own savings.

When my folks were preparing to move to this new home, I was deeply concerned lest my playthings should be left behind. I gave orders that extra precautions be taken to insure the safe transfer of my dog, a wooden express wagon, and an old buggy whip, which seemed to be my choicest properties. Upon our arrival at the new home, they were my first concern and much to my mental relief, they all showed up intact. Numerous things have been lost in our many moves in more recent years which indicates that I must have had a natural instinct concerning moving losses, which was observed by my parents more fully than in later moves supervised by myself.

My first recollections of Christmas was when we attended the annual Christmas celebration at the church across the road from our home. I believe this first occurrence was the Christmas before we moved, although it may have been the one after. It was held in the evening, and a large tree was set on the rostrum, decorated with candles, popcorn, etc., and filled with presents. The presents were distributed to the people present, with oranges, apples and sacks of candy for the children. The minister came down and talked to me and was very pleasant. He was the Rev. S.E. Buser who left that vicinity shortly afterward for a western state. My folks kept in touch with him and when they spent the winter of 1899-1900 in California they contacted him, who was then about 80 years, and had a splendid visit with him. The Christmas tree was an annual event at our church for many years after this first experience of mine. Instead of distributing presents in the homes they were brought to the church and put on the tree. After a program by the Sunday School, the presents were distributed and a social time followed. As years passed, the attendance and quantity of presents increased until it was necessary to have two trees, each 20 feet or more in height. This custom was

followed until I reached manhood, as I recall having been on the committee several times to cut, haul and set up the trees. A year or two after my first Christmas experience, the minister was John Turner. He was a forceful preacher and unusually capable in many ways. In preparation for one of the annual Christmas celebrations he brought some large pails of mixed candies to our place and had father help him cut circular holes in the covers. My hand was the guinea pig for their experiments, the test being to have the holes large enough to admit the open hand and withdraw it with a moderate number of candies; but small enough to prevent withdrawing a fistful. The children were to give a penny for each helping from the pail and the scheme produced a lot of fun and considerable money.

In the first summer after coming to the new home my mother was not very well. One morning in June father hitched up a horse and drove away. When he returned he brought Mrs. Robert Vickery with him. This seemed strange to me as we already had been employing a "hired girl" for some little time. As this good neighbor proceeded to take charge of affairs, I immediately asked her why she was there. She replied that my mother was sick and she was there to take care of her. I was told to go out of doors and play and to keep very quiet. When I had tired of play and came into the house, I was immediately told to go out again and to stay out. This happened several times during the day until I finally became much concerned about it. It was then I went around the house to Mother's bedroom window. The green blinds were closed but the shutters were open to let in a little light. I peeked through the shutters and saw Mother lying in bed. Just at that moment she saw me, laughed and motioned for me to come in. This I did and was introduced to my little baby sister.

The hired girl remained with us for several weeks and it was found that she was over-zealous in her Free Methodist beliefs. She made herself ridiculous and everyone else disgusted with her preachings. Father was postmaster at the time and people came to our house for the mail. She set upon and preached religion to everyone who called until the complaints became so numerous that Father was forced to call a halt on her proselyting activities. On one Sunday she returned from church and found me sitting on the back steps cracking and eating hickory nuts. She took me severely to task for doing such a wicked thing on Sunday. My reply was merely "The nuts have got to be cracked just the same" and I continued with my task while she flounced into the house. I think she must have indignantly reported it to my folks as they, later, were laughing about my retort which I had not mentioned to them. That remark became historic by being often repeated by my folks throughout the remainder of their lives. About a dozen years later, while in high school, I boarded with a widow lady in Saranac. Her mother and a bachelor brother also lived with her and, learning that they formerly had lived at Berlin Centre, I told them that I once knew a crazy girl who came from there and who might be known to them. When I mentioned her name they informed me that she was their niece and granddaughter, much to my embarassment. These people, themselves, were very religious but readily admitted that the girl was unbalanced for a few years over religious matters, but that she later fully recovered her mental equilibrium. She married and I understand she settled in East Lansing where she died a few years ago. I never met her after our original acquaintance in 1880 although, evidently, we were contemporary residents of the same city for many years.

The Post Office of Chandler

When I became old enough to begin writing letters, my post office address was Chandler, Michigan, which continued to be my address until we were given rural free mail delivery about the middle-nineties. I believe my grandfather was

the postmaster during his last years on the farm which we bought from him. I think he moved to Lowell in 1878 with the idea of retiring, leaving his son Dayton on the farm as renter. During his one-year stay, in 1879, he served as postmaster. When Father took over the farm in December of that year he inherited the office, but only kept it for a year or two. There was no salary connected with the position, the income being equal only to the value of stamps cancelled. Stamps had to be kept on hand, sold, and accounted for. As people came for their mail, the office being in our private home, knocks would be heard on the door several times a day. This required the answering of the knocks of each caller, giving him his mail, selling stamps, etc. Thus it was necessary for someone to remain at the house throughout the day and evening. The frequent callers brought in many flies in summer, and much snow and mud in winter. As nearly as I can recall the annual income amounted to considerably less than $100., much too small an amount compared with the work, bother, and responsibility involved. The mail was received and taken away by a star route carrier employed under contract with the government. When Father resigned the postmastership, the office was turned over to John Turner, the minister of our church and removed to his residence, which was the parsonage located one-half mile north of us. The office remained there a few years until he ended his pastorate in South Boston. It was then taken over by Robert Vickery at his residence one-quarter mile west of the South Boston Grange Hall, where it remained until final discontinuance. Some time in the later eighties, there was a change in the star route which had previously extended from Lowell to Hastings and which had served the Chandler office and several others enroute. This long route was abolished and a short route from Clarksville to Chandler and return was substituted. This change was the result of the building of the railroad from Grand Ledge to Grand Rapids through Clarksville, which was called the Detroit, Lansing & Northern, later changed to Pere Marquette. As the new star route passed our house both going and coming, Father made a deal with the carrier to bring our mail from Chandler and pick up our outgoing mail on the way to Chandler each day, thus saving me a daily walk of two and a half mile to the postoffice and return. The carrier charged us only a dollar or two a year although Father usually gave him some produce or extra money as he considered it too cheap. The carrier had to provide his own horse and buggy and received only about $300. a year as a subcontractor. It seems the Government let the star route to the lowest bidders, and we finally learned that the original contractor for our route lived in St. Louis, Mo. and held the contract for $1200. or $1500. a year, as well as many other contracts in other parts of the country. Thus he probably piled up a fortune at Government expense while the poor sub-contractors carried the mails for a pittance, daily, through rain, snow or mud. Complaints were finally made but it is doubtful if the abuse was corrected. Then about 1893 rural free delivery was authorized and started in scattered localities. It came to us about 1895 and ended the star route to Chandler and the Chandler postoffice. Thereafter we received our daily mail from Clarksville. When the arrangement was made with the star route carrier for daily delivery. Father subscribed for the Grand Rapids Daily Press and each night's paper reached us the following morning. From that time onward, we and many of our neighbors had the benefit of a daily paper regularly.

The Original Buildings on the Farm

The house was a two-story frame structure facing north on the highway running east and west. A door on the west side faced a north and south road, and a door from the kitchen on the east side led to the barns and other buildings. This house was built in 1857 and was the second one on this farm. The first one was

a log house which stood about 40 rods east on the north side of the road and just east of a 5-acre apple orchard which extended west to the four corners. That log house was torn down many years before my time, and the barn that was used there had been moved to a site near the new house. This barn faced north and opened directly onto the highway and housed our horses until Father saw fit to move it back to a more suitable location.

About 1888, the house was remodeled. The back one-story portion was increased to two stories which provided a back chamber for myself and hired men and also a large storage room. We found the frame work of this house was of hewn timbers at least six inches square, a much sturdier construction than is used at the present time. A few feet from the rear of the house was a large woodshed which Father filled with split wood for the kitchen stove and chunk wood for the heating stoves each winter; arranged in neat piles and enough for more than a year's needs. There was a large woodbox behind the heating stove in the dining room. From my earliest recollection, it was always one of my daily chores to make sure that both of thse were filled with the proper kinds of fuel.

Aside from the horse barn previously mentioned, there was a larger barn that housed the cattle, grain, hay, and corn fodder, Neither barn had a basement nor room for our flock of sheep and herd of swine. These were housed in poor and inadequate buildings some little distance away from the barns. This meant that the grain, hay and fodder for them had to be carried from the main barn. Grain threshing was mostly done in the main barn, hence the straw stack was just back of it in the open. Straw for feed and bedding had to be carried from the stack to where the live-stock was housed in the different buildings, not an easy task as the straw was often either wet from rains or under snow. Because of these inconveniences, chores occupied much of our time from October to April. From the time I was about 6 years old, I was carrying nearly one-half of them except for the hours I was in school. Fortunately for me, Father liked to milk and I was relieved of that disagreeable task except when he had to be away. While the buildings were made fairly comfortable for the livestock, the chores were a cold job in winter during the severe cold spells.

Paths had to be cleared of snow from the house to the barns and between the different buildings, stables had to be cleaned daily, and livestock had to be led to water at a trough in the barnyard. Water had to be dipped from the main trough into low troughs on the ground for the sheep. These had to be emptied quickly in very cold weather lest they freeze solid. The well and windmill were near the house. Near the mill was a large round storage tank which had to be covered, boxed in and banked with sawdust each fall to keep the water from freezing. An underground pipe led from this storage tank to one in the barnyard which also had to be packed in sawdust for the winter. As an opening had to be provided for the stock to drink, several inches of ice would form beneath the cover in cold weather and have to be chopped out every morning.

In due course of time Father built a one-story sheep barn about 20 X 40 feet. In this we could winter comfortably about 75 breeding ewes, and fatten about 50 lambs each year, for market. These were fed inside on cold and stormy days, and outside in the yard on warm and sunny days. Father also built a two-story hog house with a drive-floor through the middle, a large corn crib on one side, feeding pens on the other, and storage space for tools above. He also built a two-story carriage house with space for two buggies on the ground floor and a work shop on the second floor. A stove was set up in the shop, and it provided a comfortable place to work during the winter, where we repaired tools and machinery and built cupboards, furniture, and anything else needed.

There was also on this farm a large corn crib with a driveway through the middle and a large crib on each side; other buildings included a smoke-house, ice house and, of course, the necessary privy; also a chicken house. The ice house was filled each year with ice cut from Hess Lake which was located about 2 1/2 miles south. Father usually hired Billy Gibbons, who lived on the farm adjoining the lake, to cut the ice for him. Father would load the ice onto the wagon or sleighs by means of a wooden chute that reached from the water on an incline up to the bed of the wagon box. The cakes were sawed 24 inches in length and 16 inches in width, and they ranged from about five inches thick in the mildest winters, to as much as 12 inches or more in the cold winters. The floor of the ice house was covered with about 12 inches of sawdust, then a tier of cakes was laid over this with a space of one inch between the individual cakes and a space of one foot around the outside. Then a layer of sawdust of about one inch was spread over the tier and between the cakes. Then another tier was laid and the process repeated. When the building was full, a final layer of sawdust about one foot thick was placed around the outside and over the top. The ice packed this way would keep throughout the summer and supply all our needs for refrigerator, ice cream, ice water, etc. When the refrigerator needed replenishing, which was two or three times each week, I would dig a hole in the sawdust, pry a cake loose, and lift it out with a pair of ice tongs, then cover the hole with the loose sawdust. The cake had to be carted to the well and washed. If the sawdust happened to be frozen to the ice I often had to shave it off with an axe. Then the cake had to be carried into the house and lifted into the top of the refrigerator. The cakes were heavy and slippery, so that this task was never an easy one.

In the preceding paragraphs I have enumerated only a few of the hundreds of things common to the experiences of the average growing farm boy of 60 years ago. Many such boys encountered far more hardships and difficulties than I did, while some others enjoyed more freedom, more leisure, and less hard work. To relate all the details of those days still retained in my memory would fill a book. Such a recital would be dry reading for young people of the present generation whose interests, naturally, are concerned chiefly with the present and the future. Other conditions and incidents connected with my early years will appear under other headings on subsequent pages.

DISTRICT SCHOOL DAYS--Chapter II

My school career began when I was seven years old at the South Hall district school in South Boston. This building was erected in 1855 and was located about 80 rods west of our home. It was used continuously for approximately 75 years, but burned down about 10 years ago. The seats or desks were home made, painted, and substantial. Each seat held two pupils as far as needed to accommodate the number enrolled. One of the teachers' favorite punishments was to change the location of a pupil for infractions of rules, and such changes were usually quite effective for the purpose. If not, another and different type of change would be made and repeated if necessary to accomplish the objective. The humiliations caused by these changes were a powerful influence for better behavior. In occasional instances changes desired by the pupil were made as a reward of merit.

When I entered this school I was already familiar with both letters and numerals, could read and spell easy words, and could do some simple computations. On the opening day, I was put in the class using the First Reader; the next day

I was assigned to the Second Reader class; the next week I was advanced to the Third Reader; the next week I was given the Fourth Reader at the beginning, the Fifth in the middle. In spelling and arithmetic, advances were less rapid by my stay in some of the classes was very short in comparison with others. These quick advances placed me in classes with those from one to three years older than myself, caused jealousy on the part of some, and subjected me to more than my just share of mean and hateful treatment.

That first term can never be forgotten. I had a more trying time and suffered more anguish than in all the other school years combined. The teacher was a young man born and reared in the neighborhood, and this was his first trial as a teacher. As it was the winter term, there was a considerable number of older boys and girls attending who did not go to school in summer. The teacher was at the age where these older girls were very interesting to him. They took advantage of the situation by dominating both him and the school, making life miserable for some of the young scholars, and completely breaking down all semblance of discipline. Of course, I was one of those subjected to almost continuous hazing by them. They would tantalize me until I would be forced to strike one of them with a stick or with my hand. As they were at least twice my age, I was powerless to inflict any damage or pain. Yet, they would run to the teacher and make bitter complaint and I would be punished. At other times they would make completely unfounded charges and, despite my protests of innocence, I would be punished.

I always went home for dinner at noon. On my return to school after dinner, one day I was met by these girls and a couple of boys who thought it smart to do their bidding. I was set upon by the entire gang, snow-balled, rolled in the snow, and mussed up generally. Just as this happened the teacher stepped out of the schoolhouse door to ring the bell for the one o'clock session, and saw the performance that was taking place. When we were all inside he did some sharp questioning. Notwithstanding the fact that I was the smallest and youngest of the group and in a very wet and bedraggled condition, the girls declared as usual that I had been the aggressor. In spite of my truthful statement of denying the charge, I was ordered to remain in my seat during the afternoon recess. None of the others received any punishment, not even a reprimand. My feelings were hurt more by the teacher's unjust treatment than that received from the gang.

Only a day or two later, as I was again returning from my dinner at home, the same gang was just outside the school grounds waiting as a reception committee. After surveying the situation, I decided that I could not face the inevitable consequences again, so turned around and went back home. I had never mentioned my troubles to my parents as I feared they would not believe me and would punish me, but now I knew I would have to explain. My mother was the only one in the house and I poured out the whole story to her, and was relieved when she said that I need not go back to school that day. I dreaded the prospect of returning to school the next day, but at breakfast Father said I was not to go any more that term. During the forenoon he went over to the schoolhouse and when he came back he had all of my books. I never knew what he had said to the teacher but I suspect it was plenty.

I had assumed that my parents had not known of conditions in the school, because I had made no previous complaint to them. But after having told my story their open conversation indicated they knew a great deal about the matter and that numerous complaints had been heard by them. My father was a member of the school board and that same day he requested a meeting of the board. To complicate the situation, the teacher's father was also a member of the board. The other two told him of the numerous complaints and that his boy was a complete failure as

a teacher. They recommended that he prevail upon his son to resign immediately, otherwise they would discharge him and close the school. He tendered his resignation and the school was closed about Feb. 1.

The spring term opened with a young lady as teacher. I immediately noted that the group of large girls, particularly the ring-leaders, were not in school. The boy who had pestered me at the girls' instigation was there, but I apprehended no trouble from him as he normally was a good friend and playmate of mine. He was about two years older, slightly shorter, but considerably stronger as had been demonstrated in friendly wrestling matches. At the fornoon recess this first day we filed out to play. This boy, apparently with a hang-over from the previous term, ran up behind me, stuck out his foot and tripped me. As I got up he stood grinning at me which, in the light of his pestering during the previous term, threw me into a violent rage. I had never fought back before, and he evidently was considerably surprised when I made a dive for him. I slapped his face, punched his nose, and mauled him until he started to run. I chased him down into a hollow west of the school grounds. He remained down there until the recess ended and, because of the distance from the schoolhouse, he was the last one into the building and a trifle late. The teacher gave him the cold stare and I suspected he would tell her why he was late, but he did not. Neither did anyone else inform the teacher of the fight. From that time onward, that boy was one of my good friends and we never clashed again. That was the only fight I ever had in school or since.

After the First Year

Beginning with the second year life in school became more pleasant for me, and each succeeding year brought added pleasures and fonder memories. There were no grades in the district schools of that day. In the winter the pupils ranged in age from beginners up to 20 years or more and the enrollment was usually around fifty. In summer, the older ones staid at home to work, and the enrollment would be down to thirty or thirty-five. This resulted in the need for many different classes and seldom could any of them exceed 15 minutes in length. Certain basic subjects were required but others were more or less optional at the discretion of the teacher and wishes of the pupil. Being eager for knowledge, I took up practically all of the available subjects and studied diligently. My favorites were reading, spelling, mathematics and geography. As those were comparatively easy for me, I naturally spent much more time on the others such as grammar, history, physiology, civil government etc.

Spelling classes were usually conducted orally. The members formed a standing line, one end of which was designated the head. Words were pronounced by the teacher, beginning with the head pupil. When a word was missed by one, the next pupil in line would try it. Hence the word continued down the line until someone spelled it correctly, then that one would move up the line past those who had missed the word. When the session ended, the one at the head moved down to the foot, which was called "leaving off the head", then the line numbered from the head to the foot so that the same position would be taken at the next session. The teacher usually offered a prize to be given at the end of the term to the one who had "left off the head" the greatest number of times. One girl, Bertha McArthur, and myself succeeded in winning practically all of the prizes given during the years we were in spelling classes. In the summer of 1884, James G. Blaine was the Republican candidate for President and Grover Cleveland was the Democratic candidate. To vary the numbering of the class members, the head of the class became George Washington and the others down the line were the succeeding

presidents. The one at the foot, who has just come down from the head, had the coveted privilege of responding with "Blaine" or "Cleveland" according to his political view-point.

It was customary on Friday afternoons to have a "spell down" of the entire school. For that, two captains would be chosen who made, alternately, choices of members for their side. The two teams stood on opposite sides of the room, and the teacher pronounced words to alternate teams beginning at the head of each. When one missed a word he sat down and the word went to the next in line of the opposite team. A few difficult words would mow down the poor spellers rapidly. As the number of survivors lessened, the contest gained in spirit. The last one left standing became the champion and his team was declared the winner. By my third year in school I had reached the advanced spelling class, and from that time onward either Bertha McArthur or I won most of the spelling contests as long as we attended that school.

A Foreboding Incident

Back of the schoolhouse in each of the two far corners of the schoolyard stood a privy. The one for boys was in the northeast corner with the door facing directly toward the highway. The latch on the door had become broken and the door insistently stood wide open. To remedy this someone had obtained a section of a heavy fence rail about five feet long. By placing one end against the seat and the other against the door, privacy for the occupant was definitely assured. On a certain day someone who had been there during the forenoon had lifted the rail when he was leaving but, instead of moving it to one side, had carelessly allowed it to fall back against the door. Some boys who went there at noon could not get in nor was there any verbal response from within. They immediately reported the fact to the teacher, who was a middle-aged grass widow and had two daughters of school age attending our school. She immediately proceeded to make an investigation. She pounded on the door and demanded to know who was inside. There being no answer she reluctantly decided the place was not inhabited. The entire school of both boys and girls had formed a solid semi-circle around her to enjoy the proceedings. She pushed, pounded, and otherwise tried to force the door open but to no avail. Pausing for breath she asked "Who could be so mean as to do a trick like that?" Johnnie, an unsophisticated and frankly-speaking lad volunteered the opinion that _____ had been there last. Had those been his exact words, this story would not be worth the telling. Instead, he stated in plain English (or, perhaps some equally well known language) his views on the exact purpose of the criminal's visit. The girls blushed deeply and immediately abandoned all interest in the proceedings. The teacher's only response to the remark was: "Why, Johnnie!" The problem was solved by procuring a pole which, in the hands of Lew Pratt perched on the fence, was shoved through the diamond-shaped ventilator and use as a lever to lift the rail. The teacher had the school board immediately install a new latch on the door.

Our Barn as a Play-House

While the episode to be related had no connection with school activities it is inserted here because it resulted from certain student actions. When the snow was deep and the winter days were cold and stormy, the pupils did not relish going outside to play. The desks occupied one-half or more of the one room, so close contact of the group of all ages made their play uninteresting. The older boys, in particular, found it cramped their style of play too much, so they formed the habit of coming to our place and going into our horse barn which stood at the roadside. There I would find them when I had finished my dinner. We would turn hand-springs and somersaults or have wrestling matches in the hay-mow or on

the pile of hay that had been thrown down on the barn floor for feeding to the horses. Father did not like very well the tracking of snow, mud and wet into the hay nor the possibility of other unsatisfactory doings, but he refrained from making any objection. Aside from the horses our thorough-bred Merino ram was kept there. That breed has very substantial horns which gives them a solid forehead capable of inflicting extensive damage. This ram was gentle and peaceable, but some of the boys could not resist tantalizing him. They would run toward him and then away until they had taught him to chase them. He would run to the end of the rope with which he was tied while the boys managed to get beyond his reach. He soon learned to launch these attacks whenever they came into the barn, but he did not molest Father or I when we were feeding and caring for him. However, I began to notice a desire on his part to do so, and it is probable that Father had noted it too. However, one day when we were in the barnyard and Father was dipping water into the sheep drinking trough, the flock was a little distance away feeding and I was still farther away behind them. The ram was with the flock and I happened to look up as he started across the yard toward the trough. He was walking sedately and I naturally assumed he had taken a notion to have a drink. Father did not see him as his back was toward the ram. When the ram was within about 20 feet of Father, he suddenly lowered his head and charged at full speed. The ram struck his legs behind his knees which threw him to the ground. When Father started to get up the ram charged again but Father caught him by one horn, picked up a switch, and gave him a good switching across the nose. As an interested spectator I had a strong desire to laugh at the performance, but succeeded in repressing it for my own well-being. Father readily suspected the cause of the ram's behavior, and I admitted it upon being questioned. It was then he sent word to the teacher to forbid the boys using our barn as a play ground. The ram never caused any further trouble but we always kept at least one eye on him whenever he was near us.

Playing With Burdock Burrs

In the corners of the rail fence around the school yard were many thrifty burdock plants. In one certain fall the burrs were unusually large and numerous, and some of the other boys and myself would pick these, press them into small balls and throw them at each other. The older girls were back of the schoolhouse at noon and we thought it fun to throw the burrs at them. The burrs would stick to clothing and had to be pulled off. Lew Pratt gathered a large ball of them and ran towards Anna Tucker. She turned to run away just as he threw the ball at her and it landed in her hair at the back of the head just above the braids hanging down her back. It clung fast and she and the other girls could not remove it, so she went to the teacher with her predicament. School was called just then and the teacher had Emma sit on a stool placed on the rostrum. Then she told Lew he was to pick the burrs out and warned him that he must not hurt her in doing so. He proceeded with his assigned task while the rest of us presumed to study, but we found it interesting to watch his progress which was necessarily slow and extremely tedious. Occasionally he would look down at me with a serious and sickly grin, and I tried to show him that I was enjoying his performance immensely. He had to separate into thin strands or single hairs, then hold these tightly while he pulled out the burrs one by one. Although he worked carefully, a hair would frequently be pulled and in two or three cases Emma let out a loud scream. This would bring a sharp reprimand to Lew from the teacher. Although he began the task at one o'clock and continued right through the afternoon recess, he only finished the task at four o'clock just as the school was closing for the day. He was my

seat-mate and afterwards admitted to me that he was almost physically exhausted, as he had had to stand on his feet throughout the entire time. Obviously, that particular game lost its popularity and was abandoned. I do not recall that Lew needed or received punishment at any other time, hence this instance was conducive to the keenest enjoyment on my part. The undescribable expression on his face while on the platform is indelibly etched in my memory.

Last Two Years in the District School

After reaching the age of ten years I did not go to this school during the spring terms as Father wanted my help on the farm. The fall and winter terms covered a period of six months from October to March, inclusive; hence I had to cover as much study in that time as many others did in the entire nine months of the school year. During my last two years there, I finished all of the higher subjects taught and, being one of the advanced pupils, enjoyed their companionship. Our chief outdoor past-times consisted of skating, and sliding down the hills in the vicinity whenever there was sufficient snow. Father had made for me a large and strong sled, and some of the other boys had him build one like it for them. These would carry four or all that could cling to it, and there was a hill in the road almost in front of the schoolhouse that was fine for sliding. In stormy weather we played games inside the schoolhouse. My last teacher there was Alice Peterson and she promoted the indoor games and, while she seldom took part, she enjoyed our wholesome fun. We played The Miller, Michigan Girls, Forfeits, and other similar games. Many of these are unfamiliar to boys and girls of the Twentieth Century, especially the second which appears to have been less widely known than the others. For that reason, I will try to describe it. Two lines were formed facing each other, the boys in one and the girls in the other. The various movements were somewhat similar to the Virginia Reel, and were done in step with the music of a song which we sang in unison. The song went something like this:

Michigan girls, you know we call;
Invitation is to all.
The road is broad, the way is clear;
Michigan girls, come volunteer.

The Miller song was like this:

Happy is the miller that lives by the mill;
The mill turns round and he's gaining on his will.
Hand in the hopper, and the other on the bag
The mill turns round, and he cries out "Grab".

At the word "Grab" each boy grabbed another girl and paraded with her until the word was heard again, then they changed partners and repeated, continuing with the song and steps until a halt was called by mutual consent.

In my library is a book entitled "Robinson's Progressive Practical Arithmetic". On a fly leaf in this book is the following notation in pencil: "Verne Church finished Practical Arithmetic January 14, 1887. Examination standing 9.9--L.E.D." This standing was on the basis of 10 as perfect, hence was equivalent to 99%. The teacher was Mrs. Lodema E. Meyers, but she momentarily forgot she was married and used the initial of her maiden name "Dillenbeck". From the date it will be noted I was then 11 years old. This book was considered as of intermediate difficulty at that time, but is nearly comparable to the advanced arithmetics used in the schools of today. Following this I studied Robinson's Higher Arithmetic and finished that the following year which was my last in that school

In the fall of 1887, it was announced that a school would be conducted at

the South Boston Grange Hall by Miss Jessie Hooker. This was in the nature of a private school and was being organized by her. She had taught several terms in the North Bell school but apparently wanted to teach older students and more advanced subjects. Two or three from our school enrolled and they urged me to go with them. I realized it would have certain advantages, but it meant I would have to walk a mile to it, pay tuition, and be in classes with strangers coming from other localities as much as five or six miles away and who ranged in age from 16 to past 20 years. I had just reached my 12th birthday, and I feared the competition might prove rather strong for me. Also, I had had such a splendid time in the district school during the previous year, and the same ones with few exceptions would be back again. My chum, Lew Pratt, insisted on staying in the district school and I finally decided to do likewise. I have already mentioned some of our activities during recess periods of those years. In addition, the boys became addicted to baseball playing. We played One Old Cat, Two Old Cat, Work Up, and in due course, we formed a regular team and had Saturday games with other schools in that part of the township. In these games, I usually was the pitcher and Lew Pratt the catcher. Football and basketball was unknown to us at that time.

Thus my district school days ended with the winter term that closed in March, 1888. I had attended a total of six fall and winter terms but only three spring terms at that school, yet had completed all of the subjects taught there. It was then necessary for me to seek further education elsewhere.

THE SOUTH BOSTON SELECT SCHOOL--Chapter III

Those who attended during the first year of the Select School rendered glowing accounts of its quality and their progress. The enrollment had been only about 30 students, but the announcement of its continuance for the following year came out early, the teacher put forth more effort to obtain students, and with the aid of the scholars themselves, more than 50 signed up. I was one of these and was starting there just after my 13th birthday. While I knew many of the students, there were a dozen or more who were entire strangers and who drove in daily from outlying localities like Clarksville and some even more distant. Here I was able to take up a course in algebra and one or two other subjects that were new. The remaining subjects were ones I had already studied in the district school, but the scope was far greater. The subject-matter was presented more clearly and interestingly than I had experienced before, and only a few days had elapsed before I was thoroughly convinced that I had made no mistake in choosing this school.

The teacher, Miss Jessie Hooker, was a graduate of Lebanon College, Ohio, with an A.B. degree. Her parents lived in Lowell but after her return from college, and possibly even before her college days, she made her home with Mrs. Ora Morton of South Boston who was her mother's sister. This may have been due in part to the fact that her father, John Hooker, had always been addicted to alcoholic drinks from the time he came to Lowell as a young man. As a matter of fact, he came there via canoe down the Grand River when there was only an Indian trading post in that vicinity on the bank of the river. He secured a job at the post, learned the Indian language, and became very familiar with their habits and mode of living. He was a fairly good writer and often wrote bits of Lowell history for the local papers. Along in the nineties he wrote a rather complete history of Lowell and vicinity which was published in weekly installments in one of the Lowell weeklies. I am quite certain that my mother clipped and saved this history

along with other interesting news., If it is still in existence, it is probably in the possession of my sister.

While living and teaching in South Boston, Jessie Hooker was the foremost leader in the community's intellectual life. She promoted and helped organize a local literary society made up of older students and their parents. It's meetings were held at the homes of the members and were entertaining and instructive. Good books and poems were read aloud, scientific and general subjects discussed, experiments in physics demonstrated and explained, and interesting games played. All members actively participated and the venture was a complete success. The society continued throughout the years of her residence in the community, but soon fell apart after she left the locality.

In her teaching she used an outline method which had been developed and used at Lebanon College. We would copy the outline in a special notebook designed for the purpose. Our daily assignments would include a certain number or group of subjects in this outline, and these subjects would be studied from any and all textbooks available. She had a considerable library which she placed in the school and we were free to use any books from it. This method was much more helpful and practical than studying the individual subjects from a single textbook. She made each subject so interesting and inspirational that all students of this school--really a select group--applied themselves to their utmost. For that reason, a minimum of rules and practically no disciplinary action was required.

The weather during the fall months was unusually pleasant, and baseball was usually played by the boys during the noon hour in an adjoining field. Being interested in that game, I began playing with them. While I was around six feet tall, I was very slim and light in weight which was a handicap in playing with these boys who ranged from three to eight years older, and who were not only much heavier in weight but much more experienced in the game. On a certain day when at bat, I faced a strong pitcher. He could throw a swift curve and on this occasion he was throwing with all the force at his command. The ball was aimed directly at me about shoulder height. I could not tell which way the ball would curve or whether to step forward or back. In the split-second I had for decision I concluded the ball would be a high one, so I dropped to the ground as my best guess to avoid being hit. This proved wrong as it was a drop-ball instead of a lateral curve, and it hit the left side of my head just above the ear. I nearly passed out and when they helped me up I could see at least a million stars floating before my eyes. I remained in school but the pain in my head was intense that afternoon, during the night, and throughout the following day and night. I could still see stars on the morning after I was hit. When fully recovered I went back to playing again, but found that every ball pitched in my general direction appeared aimed directly at my head. I would unconsciously step away from the plate in spite of my efforts not to do so, and rarely could I hit the ball. After a few days of futile trying to overcome this gun-shyness, I gave up in disgust and went over to the spectators' group. Thus my baseball career ended at 13 years of age.

When the days later grew too cold for baseball, the boys took up the game of "shinny". They used baseball bats or any strong club of about that size, and knocked a tin can back and forth. Occasionally they used a wooden croquet ball instead of the can. In either case, when the swiftly driven object or a club happened to hit one's shins, well--he knew the game was appropriately named. I played it some with single individuals but when they chose sides and all played together, I decided that discretion was the better part of valor and staid with the spectators. I not only missed the fun of these games but was deeply humiliated at my failure to meet the physical requirements necessary to enjoy them. Our

teacher, who usually stood near the fence and watched the games, would invite me to join her. Evidently she perceived my discomfiture, because she immediately assured me that it was the only right and sensible thing for me to forego the rougher games. She even urged me to stay out of them entirely. From that time onward she would single me out from the others and spend the greater part of the noon hour conversing with me, at least two or three days each week. She would tell me many interesting things, inquire about desires, hopes and plans I had in mind, and offer many helpful suggestions towards their attainment. No other teacher gave me such sound and practical help and inspiration. Yet these confidential talks were to continue only a comparatively short time--scarcely more than a few weeks.

Horses Changed in the Middle of the Stream

At the opening of an afternoon session shortly after the holidays, she requested that all of us assemble in the larger of the two rooms we were occupying, at four o'clock, instead of immediately leaving for home. During the afternoon, whispered inquiries passed from one to another throughout the group, but it developed that no one knew the reason or could guess the purpose of this unusual request. When they had assembled and seated themselves at four o'clock, she arose from her chair and hesitatingly told us that she received a very flattering offer from Lebanon College to come there as an instructor. She informed us that it was the fulfillment of a cherished ambition, that it would enhance her prestige, and that she would have an opportunity to take post-graduate work which she would like to do. She pointed out that she had contracted with us to conduct this school for the entire year, and that she had received the tuition from us for doing so. She tried to present fully the advantages this change would mean to her, and the disadvantages it would mean to us. She said she would leave the decision entirely to us; if we said "No", she would reject the offer and fulfill her contract; if we said "Yes", she would secure the services of the best teacher available to complete our school year. Then she called for a vote. We had no opportunity to discuss the matter with each other, but every one voted and it was unanimous in favor of releasing her. It was then that she broke down and cried, and there were few dry eyes in the room when we filed out to go home.

She obtained the services of Mr. Hiram Stark to replace her and he assumed his duties on the following Monday. He owned and lived on a large farm at the west end of Morrison Lake. He had taught school for many years but had not done any teaching for several years immediately preceding his coming to us. His last previous teaching experience had been as principal of the Saranac High School. While there he had whipped a girl which resulted in his being sued for damages by her parents. I believe he was either exonerated or compelled to pay only a nominal sum. He received much unfavorable publicity and acquired numerous enemies through this experience. I had heard him say on one or more occasions that he no longer cared to teach if he were barred from maintaining proper discipline. He and his numerous family were regular attendants at our South Boston Congregational church, and took an active part in our literary society and other local social affairs. For that reason he was well and favorably known to most of the students. He was a good teacher but could not inspire us to the extent that his predecessor did. As previously mentioned, discipline was a very minor problem in this school. He continued to the end of the term without incident, and then resumed his farm duties.

An Invitation to College

When Jessie Hooker left us she requested that each of us write to her and promised that she would write to us. In the following July I received a short but

nice letter from her. Naturally, I treasured that letter and placed it with my other keepsakes. To my regret, these keepsakes were lost somewhere in these United States in the course of our moves about the Country. In that letter she asked me to coax my father to let me come down to Lebanon and enter college that fall. She said that, while I would be only 14, which was exceptionally young for College entrance, she knew that I could make the grade. Also, she promised to give me any needed help and to guarantee that I would be able to meet all requirements. The offer strongly appealed to me but I did not give it the consideration it deserved because I knew that my parents did not fully approve of it nor feel financially able to provide the necessary expense.

A Great Loss

Either in the late fall of that year or of the following year, I am unable to recall which, we received the news that Jessie Hooker had returned to her parents' home in Lowell and that she was ill. Reports at intervals indicated her health was improving, but they were interspersed with others that it was declining. As I was attending school at the time, and as travel was not as easy as it is today, I did not go to see her. Later in the winter I learned that she was a victim of tuberculosis which, at that time, was considered a fatal disease. In the spring we received the sad news that she had passed away. She had asked that all of her students attend her funeral as a group. Only a few, those living outside our neighborhool, failed to do so. She further requested that six of the girls be dressed in white and serve as pall bearers..The funeral was held at the residence and was impressively sad. She had designated the minister, the passages of scripture, the songs, and the singers--a mixed quartet of Lowell people. She was laid to rest in the Lowell cemetery. I believe her age was 28 years.

She had prepared a will in which she distributed her possessions to relatives and close friends. Her library was then at the home of Mrs. Morton in South Boston. She requested that it be kept there permanently for the express benefit of her students, and urged that they make unreserved use of it. I did not avail myself of this opportunity until after I ended my school career. I wished to continue my study of botany and borrowed a book on the subject from her collection. My study did not progress very fast while working on the farm and I kept the book for a considerable time. When I returned it Mrs. Morton said that most of the books had been borrowed and not returned, and she suggested that I keep the book as my share as she was making no effort to recover the books and considered it futile to maintain the library longer. I prized the book because of the circumstances through which it came to be my property, but, this too, later disappeared. Perhaps I had loaned it without its being returned; I do not know.

The will provided that the monetary portion of the estate was to be used in paying medical and funeral expenses and for the purchase of a suitable monument. Any residue was to be divided among her legal heirs. There were her father, mother and a brother. The last was a young man in his early twenties, not showing any particular ability or ambition. He was considered to be slightly unstable and more or less a ne'r-do-well. He had been a student in the select school, afterwards going to California. My father was appointed Administrator of the estate and faithfully and conscientiously carried out the provisions of the will. After paying the medical and funeral expenses, there was only about $500. remaining. He proposed to use the entire amount in purchasing the finest monument available and had it erected at her grave. Shortly after he completed the closng of the estate, from which he accepted no fees for his services, he received a very bitter letter from the brother in California. It charged Father with deliberately "wasting the funds of his dear sister", spending a needless amount for a monu-

ment, and numerous other things. It ended with a statement that he would return to Michigan at the earliest possible moment and see that justice was done to his sister and himself. Father showed this letter to several friends then filed it away for safe-keeping. As far as I knw the brother never returned to Michigan.

Thus this favorite teacher of mine had, during the brief span of life allotted to her, risen above and detached herself from sinister family influences, obtained entirely through her own efforts a splendid education, endeavored to share this learning with as many others as possible, and exerted an overpowering influence for good in the community where she had lived not more than four or five years. Although she left us more than 55 years ago, her good deeds, her inspiring influence, and her lovely personality are still alive in the memories of all surviving acquaintances.

THE CLARKSVILLE ACADEMY--Chapter IV

In the spring of 1889 there came to Clarksville from Jamestown, New York, the Reverend N.L.A. Eastman to preach in the Free Methodist Church. However, for reasons best known to himself he immediately began the promotion of an Academy. He succeeded in raising enough funds to start the project, and gave the people the assurance that the Lord would provide whatever additional money was needed. In accordance therewith, building operations began. Laymen of the church did much of the construction work, but materials had to be purchased and skilled workmen employed for the more important details. By mid-summer rumors were afloat that the finances were running low and that the hired workmen were not being paid promptly. One of the carpenters told me afterwards that when his pay had become delinquent for several weeks, he called on the Rev. Eastman and told him he needed some money for living expenses. When the Reverend pleaded inability to pay, my friend insisted that he must have $10. at least. The Reverend then said he would go into his bedroom and pray. When the prayer was ended he returned and handed out $5. which he stated was all that the Lord let him have.

The Academy building was quite commodious, of square type, flat roof, and had two stories with a basement. It was rushed to completion in time for use at the opening of the fall term. A 3-story dormitory was also under construction, which was to house the faculty and students whose homes were distant from the town. Only a part of the building was finished in time for use at the opening of school, and those rooms were occupied by the faculty; but only a few foreign students materialized so that the housing problem was not difficult. Rents and tuition fees aided in completing the building during the winter, but the finances of the institution were desperately meager and many large bills were outstanding at the beginning of the term. The faculty as organized, consisted of Charles, Guy and Nora Transue, and a Mr. DeCamp. The Transues lived on their father's farm near Waterville, and had taught but little, if any, prior to taking this position. All three were graduates of the Ypsilanti State Normal College and each had an A.B. degree.

Again I was faced with the problem of selecting the school for further education. The choice lay between the Academy and the Saranac High School. With no one to offer me sound advice, other than my parents, I followed the path of least resistance and chose the former. I realized it was a gamble, but I was influenced by the fact that I could live at home and that the cost would be much less. Furthermore, my father promised that he would buy me a pony to ride or drive which served as a special inducement. The Academy was 3 1/2 miles from my home and I started the term by walking that distance except when I occasionally caught a

ride. A little later my father found a pony for sale in Ionia. He bought it together with a harness and a two wheel cart such as were quite commonly used in those days. The pony was about the size of the wild western ponies used on the cattle ranges, but the seller claimed it was not of that breed. Be that as it may, he was found to possess quite similar characteristics. I began driving him to school and after we got him fed up to good spirits, he began running away with me at every slight pretext. I was unable to hold him and he would run until he tired of the sport. Nothing serious happened although one evening, as I was leaving Clarksville homeward bound, a boy ran out from the curb towards him and he started to run. We had just started down a hill at the foot of which was a small creek with a plank bridge over it. This bridge was too narrow for two rigs to pass on it. Just beyond the bridge was a farmer, with a slowly plodding horse and open buggy, moving towards me. It looked like a choice between locking wheels with that buggy or allowing one wheel of the cart to run off the end of the planks, either of which would prove disastrous. Fortunately, Lew Pratt was with me as he was attending the same school, and I asked him to lend a hand. He took hold of the lines with me and our combined strength was sufficient to check the pony's speed, straighten and steady our course, and allow a little time for the farmer to get his rig over to the edge of the road. We probably missed him by no more than a couple of inches. After that I dreaded to drive alone fearing the possibility of getting into a similar tight place. When I tried to ride the pony he would buck like a western bronco, and I had no saddle to help me stay on his back.

The roads were of ordinary dirt with no gravel. There were no automobiles nor the present-day type of bicycles; the only bicycles in use being the high-wheeled Columbias which had a very small rear wheel and about a 4-foot front wheel. They would run only on a smooth surface so were useless on country roads, and only an acrobat could ride one. The roads became very muddy from heavy fall rains and, the winter being a mild one, they continued to be muddy and deeply rutted all through the winter. They would usually freeze at night and be very rough in the morning, thaw through the day and be deep with mud at night. Travel on them was slow, rough, and tedious, and I finally decided that walking was easier to endure as I could travel along the roadsides or cut across fields.

The Fall Term

I can recall but little concerning the school work there. I believe the classes were given grade designations, but I do not believe individual students were confined to a single grade. I am under the impression that I was permitted to select mostly the subjects that I desired, and then recited in whichever grades they were allocated. I was in the large auditorium on the first floor with the more advanced students and where students of intermediate grades were also located. My teacher was Charles Transue. His brother Guy taught mathematics and some of the sciences in another part of the building, while their sister Nora taught music and the lower grades on the second floor. Mr. DeCamp, the other teacher, occupied the basement as living quarters for his family.

Opening exercises were held each Monday morning when all pupils assembled in our room, the smaller children being seated in front next to the rostrum. The teachers would sit on the rostrum and Mr. Eastman conducted the exercises. After singing a few gospel and patriotic songs, the Rev. Eastman offered a prayer, after which came whatever announcements were to be made. In delivering his prayer, the Reverend would kneel on both knees near the front of the platform, and his supplications to Deity were usually quite long and rather prosy. On several occasions, the small children just in front of him became restless, inatten-

tive, and rather noisy. He then would stop suddenly, open his eyes, and give the offenders a sharp scolding while still on his knees. After this he would close his eyes again and continue with his prayer.

The Joke Was On Somebody

At one of these assemblies the Reverend announced that he had received a complaint from the family living below that some of the children were annoying them by placing their faces against the basement windows and peering into their rooms. He evidently wished to impress the children as gently as possible that this was a very improper thing to do, and, after pleasantly talking to them about it he asked; "Now children, who can tell me why you should not do that?" A little hand shot up immediately and the Reverend asked: "Well, my little man why should you not do it? The prompt answer was "So we won't get our faces dirty."

There was a young boy in the lower grades upstairs whose I.Q. was somewhat below par. On one occasion he came down the stairs into the hall whose doors on one side opened outdoors and on the other opened into our room. He went outside and, in a little while, returned. Instead of immediately going upstairs he stood hesitatingly at the foot of them. Our teacher, Charles Transue, wore sideburn whiskers which, with his erect stance, gave him an expression of considerable dignity. He was standing on the rostrum in front of us conducting a class when he observed the boy in the hallway. He called to him and inquired what was the matter. There was no response so he asked him what he wanted. Again there was no reply whereupon he ordered the boy to come to him. The boy hesitatingly came, walked onto the platform and up to the teacher without a word, then turned around. He was holding up his knee-length trousers with one hand. The trouble being clearly obvious to the teacher as well as to all of us. He stooped and buttoned the boy's pants to his waist, then firmly ordered him to go to his room. Of course we could not suppress our mirth, and when the teacher faced us he dryly remarked: "I guess we were all young once."

A Change in Management

Rumors had persisted from the beginning that the finances of the institution were in an unsatisfactory state. Shortly after the holidays there was a report that the Transues had levied upon the property for unpaid salaries. Mr. DeCamp left the school about that time and moved away. We did not know what to expect for the future and the students began to lose interest. About the end of January I was ill for a few days and remained at home. When I returned to school on the following Monday I found it closed. It was announced that it would soon reopen, but I carried all of my books home. I was not feeling well, the weather and roads were bad, and I had been having trouble with my eyes. The school did reopen within a week or two with the Transues in full charge, but I had decided not to go back. Becoming restless at home, I conceived the idea of returning to our district school. One day proved to be enough. The hard benches, the stale air in the crowded room, and the poorer teaching methods convinced me that there was almost nothing to be gained there. Hence that school year was partially lost and resulted in but little progress being made.

Later I learned that the Transues had received no salaries from the beginning, and that when they sought legal means to collect them they found the property mortgaged to the extreme limit. In order to try and recover some of their losses they purchased the property, probably paying very little for the equity which was practically worthless. They carried on the school for a time then closed it down. I believe they re-opened it once or twice but it was a losing venture in each case. Some time in the Nineties they sold the dormitory building to John Lenhard who moved it onto Main St., rented the front part of the first

floor for business, and the remainder of the building for living apartments. When we moved to Clarksville from our farm we rented the ground floor of the building for living and business purposes, and lived there for more than a year. It was in this building that our Jessie was born. Many years later the Masons acquired the building, remodeled it, and it is still being used by them for Masonic activities. The Academy building was used by the Transues for various purposes until it finally fell into a state of disrepair and remained empty for years. Finally, some years ago it was torn down and the lumber salvaged for other purposes.

THE SARANAC HIGH SCHOOL--Chapter V

In the fall of 1890, at the age of 15, I entered the Saranac High School. It was planned that I would drive to and from school and continue to live at home on the farm. It so happened that, on the opening day, my father was to deliver a load of live hogs at Saranac. I could ride both ways with him as he would remain all day, transact his business, and arrange for a place to keep the horse that I would drive. Accordingly, we arose early, did the chores, ate breakfast, loaded the hogs, mounted the seat on the high rack, and headed for Saranac. Because of the nature of our load it was necessary for the horses to travel at a walk most of the entire seven miles. I was fearful that my clothes would hold some lingering smells absorbed from our live cargo, but this could not be helped if it proved to be the case. I was about an hour late in arriving at the school and it was already in session. Hence, I had to find my way to the proper room without help from anyone and I was not familiar with the building. When I finally reached the right room on the second floor, everyone including the principal were busy and scarcely anyone saw me come in. Every desk was occupied so I sat down by the side of a likely-looking boy. After waiting a while without receiving any attention, I asked the boy what I was supposed to do. He took me up to the principal and told him I was a new student just entering. As I never had been officially graded elsewhere and had no credentials, it was necessary for me to write examinations in the subjects which I claimed to have finished. This occupied the greater part of the next two days, and resulted in my being placed in the 9th grade although I was through with about one-half the subjects in that grade and one or two in the 10th grade.

My daily routine settled down to arising at 5 am, feeding and caring for all of the horses on the farm, getting breakfast, changing my clothes, harnessing and hitching up my horse, driving the seven miles, unhitching and unharnessing the horse, and arriving at school at nine o'clock. Our only single buggy was an open runabout which was satisfactory on pleasant days, but on rainy, snowy, or very cold days offered no protection. Most of the fall days were pleasant enough but the winter months were extremely cold with temperatures on some days as much as 20 or more degrees below zero. There was enough snow at times for sleighing; then I could use the cutter which, though open, was more comfortable. When the weather was bad I would buckle the ends of the lines together and place them around my neck. The horse was gentle and could be depended on to follow the road, and in this way I could keep my hands warm under the buffalo robe which was over my lap. Under all of these circumstances it was difficult for me to keep my clothes clean and neat. I felt that I suffered in comparison with the town people who had none of these inconveniences. I also missed all of the social activities that my classmates outside of school hours enjoyed. my progress in school was satisfactory but I was not completely happy for the reasons I have mentioned. I tried to induce Lew Pratt to enter the school, but he did not think he could

stand the driving as I was doing and if he boarded in town, he would have to work for it and for his room.

Dr. Gesler lived in Saranac and he was our family physician. His wife also was a doctor and both of them were always very busy. Much of their practice was in the farming communities and they had to do much driving on both day and night calls. They had to keep four or five driving horses and two or more rigs in constant readiness for use. They happened to tell me one day that they were having difficulty in keeping a man to properly care for the horses, and asked me if I knew of such a one. I told them about Lew Pratt and his desire to come to the Saranac school. He was a good hand with horses, liked to care for them, and understood the feeding and handling of them. They asked me to send him in, which I promptly did. They made a deal whereby he got his board and room in exchange for his services and he remained with them for the remainder of the winter. He was free to use the books in their library and to use their office for a study when they were away, which was most of the time.

A Strenuous Holiday Season

When I went home on the final day of the fall term in December, I joyfully looked forward to the two-week holiday season during which I would not have to face the long drives in zero temperatures. I had been home only a day or two when Father was taken down with what appeared to be a hard cold. This gave me all of the chores to do and, as the weather was bitterly cold, the livestock had to be kept in the barns, let out only long enough to drink, and then returned to their stalls. Pumps had to be thawed out each morning and ice removed from the tanks. These and other extra chores occasioned by the cold kept me busy practically all of the time. The following morning after Father was taken ill, his condition was much worse and it was necessary to have a doctor. There were no telephones in those days and as soon as I could get away after breakfast I again headed for Saranac in a sub-zero temperature, got Dr. Gesler to come out, and returned home immediately to continue my chores. The Doctor ordered Father to stay in bed and it seemed his case was rather serious. We did not immediately give it a name but in a few days a general epidemic broke out all over the country which the learned doctors finally designated as Le Grippe. It was a French word and new to everyone but the symptoms were practically the same as those we now find in severe cases of Influenza. On the following morning Father was in even worse condition and I made another trip for the Doctor. The next day Mother came down with the same disease and again I had to get the Doctor. I made either three or four such trips on as many successive days with the temperature on each morning between 10 degrees below and 25 degrees below zero. After both parents were in bed, I had to do some of the cooking and get the meals in addition to doing all of the chores at the barns. When the vacation ended and time came for me to return to school, Father was just beginning to be able to do some of the chores. Fortunately, neither Lena nor I had the disease.

A Change of Operations Base

Around the 1st of February the horse I had been driving developed lameness, and we had no other one suitable for driving. The weather was still very cold and we knew that the roads would be bad when the winter break-up came which would be soon. Father decided that I might get board and room in town instead of doing any more driving. Will Pickens, who had become a good friend of mine, was rooming and boarding at the home of Mrs. Canright. He suggested that I come and room with him and the matter was satisfactorily arranged with Mrs. Canright. She was the widow of a Civil War veteran and was glad to have the added income to supplement her pension Two doors away lived Mrs. Canright's sister who also was a widow pension-

er. She had a daughter afflicted with what was suspected to be tuberculosis, and Will was deeply in love with her. In the spring he decided they needed his help in caring for her and the garden, so moved over there. In previous summers he had cared for Mrs. Canright's garden in exchange for his board and room. When he left I immediately applied for the job and obtained it. I spaded the entire garden, planted it, and began tending it. Mrs. Canright's bachelor brother came to live with her and she decided he could look after the garden, which should not have been difficult after the hard work had been done. About that time, Lew Pratt left Dr. Gesler's and returned home. He planned to drive for the remainder of the spring term and I planned to ride with him. He would drive one week and I would drive the next. Our meeting place was 1 1/2 miles east of our house and one mile north of his home, so one of us had to walk that far each day.

Botany and Botany Students

I was anxious to study botany and secured the principal's cooperation in organizing a class. It consisted of seven or eight girls, Lew Pratt, and myself. We set up a room in the basement where, on tables we could prepare flower specimens for mounting as each student was required to complete a herbarium. The class recited in the regular class room upstairs, but we had to spend some time each day with our flowers in the room in the basement. That gave us an opportunity to talk freely and become well acquainted. It was necessary to keep a supply of flowers on hand for analysis and identification in class, and a trip to the woods had to be made two or three times a week. The teacher suggested that the students alternate and that two go together on each trip. This was done, but Lew and I being the only boys, assumed the responsibility unless others expressed a desire to go. The best source of wild flowers proved to be a woodlot more than a mile east of town on the Ed Hunt farm. The woods extended from the railroad north to the river and it formed a beautiful natural park. Lew and I found it a little irksome to make a trip up there after four o'clock, carry the flowers back to the school, and then drive the long distance home. We decided an improvement would be to have two girls accompany us. The only one of my regular classmates taking botany was Alice Hogue whom I had escorted on a few occasions to parties. Her particular chum was Kate Richards, a classmate but not a botany student, and one in whom Lew was somewhat interested. Alice readily assented to the plan and Kate agreed, thenceforward the trips became much more pleasant. We would follow the railroad tracks to the woods, gather our flowers, sit on the bank of the river awhile, then return. We found it increasingly difficult to deposit our flowers and get away from Saranac by six o'clock which meant we would be late for supper at home and under an ordeal of questioning by our parents. The class in botany ended with the completion of the spring term in June; also those pleasant flower-gathering expeditions. Each of us took home a herbarium of about 50 specimens.

While working with the flowers in the basement one afternoon, I started pestering Lew in some manner. He threatened to put me outdoors if I did not stop and I promptly told him he couldn't do it. He grabbed me and, as he was a year and a half older and somewhat heavier than I, he finally got me to the door opening into the back yard, got the door open and pushed me out. It was a sashdoor and in our struggle one of us stuck his elbow through the glass. We expected the janitor would discover it that evening and report it to the principal, and that we would be punished in addition to paying for the damage done. On the way home we agreed that we would see the janitor in the morning and insist on paying for a new glass, in the hope that by so doing he might not report it if he had not already done so. We also agreed that we were equally to blame and should share the cost equally. I dreaded the prospect of facing the situation, and concluded

I did not feel well enough to go to school the next morning. I was well satisfied to let Lew face it alone so staid at home. The next morning I had fully recovered and was at the corner to meet him as usual. He told me that he had contacted the janitor before school opened in the morning and told him how it happened. He asked him to get it fixed and we would pay all costs. The kindly old man told him he would fix it himself and that he would say nothing about it to anyone, nor would he accept any pay from us as it had been broken "by accident". This was the last term that Lew and I were in school together.

Last Year in High School

After the close of the spring term described above, Lew obtained a job in a hardware store at Ionia. He roomed and boarded with relatives there, and in the fall he decided to remain there and attend the Ionia High School and continue to work in the store on Saturdays and during vacations. I decided to live in Saranac during the coming school year, and secured board and room with a Mrs. Woodruff who was Will Picken's grandmother. She had been living alone and was quite old. She had almost no income and lived very meagerly. The food was very slim in amount, and my bed and other furnishings were poor. There was little variety in the diet and it lacked some of the elements essential for good health. My digestion became impaired and, although not sick, I did not feel very well much of the time. I felt sorry for the old lady and determined to stay so she could have the little added income that I paid her. Toward the end of the fall term I told my folks something of the conditions there, and they insisted that I find another boarding place for the following term.

The Congregational minister was the Rev. Wilfred Lindsay who preached in Saranac on Sunday mornings and evenings and at our South Boston church in the afternoon. He drove a team of ponies belonging to his landlord to these afternoon services. As I was at home each weekend it was convenient for me to return to Saranac with him. He urged me to get board and room with Mrs. Wilkinson, the same place where he and his wife stayed, and just across the street from where I had been staying. This was supposed to be the finest boarding place in Saranac and I was fearful that the cost would be prohibitive, but when I investigated I found it only slightly higher in price than I had been paying. Mrs. Wilkinson was a fine cook and she continually begged us to eat more and to tell what special things we liked so that she could serve them. I had a nice room next to the Lindsays and they often invited me in to study and use the books in their library. They also were able to give me help in my studies whenever particularly needed. They were natives of Canada, full of jokes and fun, and we spent many happy hours together. My school work progressed well and, as I had become well acquainted with all of the young people, had many invitations to their parties and social affairs.

"Under The Laurels"

Adjacent to our school room was a smaller room designated as "The Library". Around the walls were shelves extending from the floor to the ceiling and inclosed with glass doors. In the middle of the room were two long tables placed end to end. There were few or no books on the shelves and the room was serving no useful purpose. We were studying Physics and found we needed apparatus for use in laboratory experiments. The principal, who was our teacher, suggested our Senior class might undertake a money-raising project, buy some physics equipment, and put it in that empty library room. After some discussion we decided to put on a stage play, and for the purpose selected a stirring drama "Under the Laurels". The cast included the entire senior class and a few others. Rehearsals were held twice a week at first and then more frequently until, the final week,

they were held nightly and on Saturday afternoon prior to the evening of public performance. We were given many helpful suggestions by Mr. S.S. Manley, the Grand Trunk R.R. agent. He had taken the leading part in many local theatricals and rated high as a comedian. On the evening of the play he came over and did the "make-ups" which added much to the success of the performance.

Shaw's Hall was packed that night, the play was well executed, and the audience was highly pleased with it. Favorable press notices led to invitations from Lowell and Clarksville to give it in those places. We did go to Lowell but cannot recall whether we went to Glarksville or not. A little later the Saranac people asked for a repeat performance and we accepted. Altogether we netted quite a tidy sum which enabled the purchase of an electrostatic machine, air pump, and various other equipment. My assignment in the play was that of the villain's assistant, a rough and uncouth individual, roughly dressed, and a rather disreputable character. I must have fitted the part well because I got many compliments. An old slouch hat and some of my old and ragged farm clothes made a suitable costume. With black smudges on my hands and face, and with a piece of licorice in my cheek with which to "spit tobacco juice", I would awkwardly slouch onto the stage, talk roughly with a drawl, and succeed in getting considerable genuine applause.

County Examination for Teachers

Once or twice a year, the County Commissioner of Schools held an examination for those who wished to qualify as school teachers. The subjects included all of those usually taught in district and grade schools together with the Theory and Art of Teaching. Our principal wanted our senior class to apply for and write the examination, deeming it good practice and of educational benefit to us. About five or six of the class of nine made application of which I was one. I wrote to Lew Pratt in Ionia, told him what we were planning and suggested that he also apply for it, which he did. The examination required two days and I spent the intervening night with him at his boarding place. At the beginning of the test, the commissioner warned that anyone discovered whispering or passing notes would be immediately expelled from the examination. One of the requirements for a teacher's certificate was that the applicant must be 17 years or more of age. Of course I was only a little over 16 but, for obvious reasons, I listed my age as 17. I salved my conscience by the fact that I did not intend to teach and, anyway, I was in my 17th year.

The only subject that proved very difficult was the Theory and Art of Teaching. Lew had borrowed a book on that subject and I scanned it during the evening of the first day. Otherwise, I had to answer the questionsl solely from my observations gained in the schools I had attended. The problems in arithmetic were a little tough but I managed to solve all of them, although I had not been in a class in arithmetic since leaving the district school at the age of 12. When I had finished the subject I noted that Lew, who sat opposite me on the other side of an aisle, was still struggling with his problems. Soon a wadded up note landed on my desk asking me how to work certain ones. I sent over my scratch sheet of figures to him which enabled him to complete his test in that subject.

While at the Ionia depot waiting for the train to go back to Saranac, I met Lizzie Hughson, a South Boston girl who was intending to teach and who had attended the examination although I had not seen her in the large group assembled there. We visited together until the train arrived, then I picked up her grip and carried it onto the train. The train was rather full and several of us (the boys) had to stand in the aisles. When the train started one of the boys said "Your girl is going to get left". It seems she had discovered that she had left her

pocketbook in the depot and had made a dash to get it, and the train pulled out while she was in the depot. When we reached Saranac I took her grip with me and walked up the street with the group. After we were a block and a half away from the station, we heard a shout. Looking back, we saw the train conductor coming on the run. We stopped and when he reached us he gruffly asked me what I was doing with that grip. I told him I was taking care of it for the owner who had missed her train. He ordered me to give it to him saying he was the one responsible for it. Accordingly, the grip traveled with him to Grand Haven and came back on a later train. When Lizzie came in on the next train from Ionia her grip was not at the station, so she had to return home without it and make the 14 mile round trip to Saranac on another day to get it.

In about two weeks the results of the examination began coming in by mail, until all had received their standings except me. Not one of them received a passing grade and so my hopes melted away. When mine finally came I found that I had passed it successfully and inclosed was the certificate permitting me to teach school. When I next saw Lew Pratt, I learned he had lacked just one point of making the passing grade. Within a few weeks prior to writing this page, I read a news item telling of the death of the commissioner who awarded my certificate about 54 years ago.

The Last Term of High School

During this second year at Saranac, the school board decided to add another year to the course making it an 11-grade instead of a 10-grade school. To make the change less abrupt some of the extra subjects were added during my last year, I was able to handle these very well because I had been able to pass some of the 9th and 10th grade subjects when I originally enrolled. In addition, I begged for a course in geometry which was not on the list. The principal's teaching schedule was already filled but he arranged to teach the class after regular school hours. By that means I obtained one term in that subject during which I completed plane geometry. There were only one or two others taking the extra course. Even with this extra work my last term was a comparatively easy one, and the class found ample time for social activities. Parents of class members invited us to their homes for evening parties, and for picnics on their lawns. Some other leading citizens of the village also gave parties and picnics for us. Our teacher during both years that I attended that school was E.L. Griffith. He wore sideburn whiskers which gave him a rather dignified appearance according to the standards in vogue at that time. We always addressed him with the courteous title of "professor" although I doubt he technically was entitled to it. He began laying plans early in the term for our graduation. Each member of the class was to prepare and deliver an oration, the girls were to dress in white and the boys to have black Prince Albert suits.

At the beginning of this final term the principal permitted two members of the class to do their studying in the library for a half day at a time. We sought this permission frequently and obtained it if no others were ahead of us. One rather warm afternoon Howard Frace and I got this privilege. It was customary to shut the door so that the two occupants could talk and do as they pleased without being seen from the main room. We found the door would not latch and, as all windows were open, the breeze would push it open. Those in the large room would smirk and grin at us because we could not maintain the privacy we sought. Howard placed a chair against the door but that failed to hold it, then I suggested he take a hammer that laid on a shelf and set it at the base at a 45-degree angle. This he did, and by setting it into the wood firmly it held. It was customary for the teacher to come to the door and call the occupants when their classes start-

ed. When he came to call us he pushed on the door and it did not give way. He began lunging heavily against it which set the hammer still deeper into the wood. Howard sprang up as quickly as he could to remove the hammer, and, as he leaned over and removed it, the door came open from the heavy force behind it with a rush. It hit Howard in the head and knocked him over backwards, and the professor almost fell on top of him. Of course the school roared and the professor's face turned very red. As we walked to the class he made an angry remark to us. One of us started to explain but he cut us short and said: "you must have some very important secrets that you needed to lock the door. You need not ask to use that room again". This peeved us to the extent that we never informed him that we were innocent victims of an unforseen circumstance, nor did we ever try to use the room again.

A Leap-Year Party

This paragraph properly belongs ahead of the preceding subject, as the event occurred during the winter term. The people of Saranac decided to give a leap-year party for charitable purposes on Washington's birthday. None of the girls in my class knew how to dance, as far as I know, so the boys were not invited by them. To my complete surprise I was invited by Grace Daniels to attend. She was a niece of Mrs. Wilkinson, living only two doors away, and did dressmaking. She was probably six or seven years older than I but a lively and very nice girl. I demurred because I had only been to one dance, a neighborhood affair in South Boston some three or four years before, and could remember practically nothing about the steps. However, she insisted and we went. There was a large crowd, made up mostly of the younger married set and single adults of about the same age. The dances were all, or nearly all, square dances which were the most popular at that time. Of course, being a leap-year affair, the ladies did the asking. I danced nearly every set and, with their help, learned most of the steps. It was a very nice party and I enjoyed it greatly.

Afterward, Grace and I went for an evening walk a few times. I do not recall that I ever saw her after my graduation from Saranac High. In 1925, I served as president of the Saranac School Reunion which had been organized in 1924. In order to increase the interest and attendance, I made a considerable effort to locate old students living in other states and send invitations to them. I was quite successful, and among 100 or more addresses obtained was that of Grace Daniels. Her address was in the 100 block of Forty-Fifth St., New York City, which I assume was just off Fifth Avenue, and near the center of the shopping district. I understood she had risen to the ownership of an aristocratic dress-making establishment and had been very successful financially. She responded to my letter of invitation but gave no information about herself. Her handwriting was very poor and I concluded she may have been in poor health.

My Graduation

In our study of English Literature each member of the class had to write many essays and poems. We studied the numerous meters used in poetry and were required to write poems using all of the different ones. We converted articles in prose into poetry and poems into prose. I developed some writing ability and only one other in the class seemed able to do as well. My weakest point was in deciding the subject of each essay, and I always begged the teacher to assign the subject. When it came to a subject for the graduation essay, I could make no decision so the Professor suggested "The World Moves". I accepted it but found it difficult to enumerate the many advances in science and invention that had been made in the past. Quite recently I found that noble effort and felt quite ashamed of its inadequateness. On that subject I could write quite a book today.

However, I wrote and commited it to memory.

On the evening of June 24, 1892, the date of the great event, I found myself on the platform with the Professor and eight classmates facing an audience that completely filled the large room. I had followed the Professor's request by having had a Prince Albert suit made to order by a tailor in Lowell. When I mounted the stage I immediately noted, to my dismay, that the other boys were wearing only regulation suits. The Professor, who always wore a Prince Albert suit, and I were the only ones in formal attire. This disconcerted me so much that I never owned another formal suit afterward, except the regulation dress uniform of the Knight Templars.

When my place on the program was reached I stepped forward to the front of the stage and proceeded to inform the audience in what ways the world had moved. My paper was in my inside coat pocket for use if needed. When I was about half way through, I momentarily forgot my lines. I hesitated, then placed my hand inside the front of my coat to get the paper. Before getting it out of my pocket the proper words came to me and I finished without further interruption. Several members of the class and audience afterward told me that they thought I had suffered some sort of a heart attack when they saw me place my hand over my heart. After receiving our diplomas we were each congratulated by our respective friends. There were no presents or flowers except that I believe one of the girls did receive a small bouquet of flowers from her parents. Thus in nine school years, five of which were six months or less in duration, and spent in four different schools, I graduated as the youngest member of a class of nine. The most of these had been in the same school for ten years of nine months each.

Introduction to the Graduates

The entire class and the Professor went to Ionia around the graduation date and had individual and group pictures taken. These are in my photograph album. Our choice of photographer was not too good because the pictures proved disappointing in quality, but serve as a reminder of how we looked at that time. I will endeavor to introduce each one by giving a brief appraisal of their predominant traits.

Kate Richards: She was by far the prettiest girl in the class, friendly yet dignified, not physically strong, pale in complexion, unable to take part in strenuous games, but well liked by all. Her father was a druggist. In her picture it will be noted she is standing in front of and holding onto drapes used as a background. This was because of her weakness and inability to stand firmly in a steady position. Early in the following spring I received the news that she was ill and had been so for many weeks. In two or three months we were informed of her death from that dread disease, tuberculosis. Our class attended the funeral and I believe that the boys of the class, including myself, were the pall bearers.

Lula Payne: Highly intelligent and a good conversationalist, also a good writer. She gave me my stiffest competition in getting top grades. She was a good student in all subjects and usually excelled in those of a literary type. She was active and forceful in all our school and social activities, friendly and generally popular. Her worst habit was to fly into a rage when anyone displeased her or when disappointed over something. She would stamp a foot and volubly express her feelings. We became accustomed to these outbursts and gradually paid less and less attention to them. Her father was a brick and stone mason who died a few years later, after which Lula became the sole support of her mother. She worked for a time in the local postoffice, then secured a position with one of the Saranac newspapers. When that paper was absorbed by its competitor, she continued

to work for the latter. Many years later she moved to Grand Rapids with her mother; here she worked in the city hall for a time and then as bookkeeper for a wholesale lumber firm. When she had reached the age of about 55 she was married to Royal Lewis, a well-to-do farmer in Boston township, and a brother of Fred and Burt Lewis. About ten years later her husband died, since which time she has worked in Saranac and in Grand Rapids. She was valedictorian at our class graduation. I was her escort on many occasions and we enjoyed each other's company.

Anna Lord: Her parents were well educated and were considered wealthy. They had lived in Saranac many years and her father had done no work other than look after his investments during and several years prior to my acquaintance with him. Anna was a musician and usually played the piano for our daily marches and for the Monday morning assemblies, as well as being accompanist for soloists at many of the town's social functions. She was bright, active, and average in her studies. She gave the class prophecy at the graduating exercises and did it well. She drew fantastic pictures of each one's future which were highly amusing. For me she predicted that I would become a noted scientist and that I would create a large city of wonderful buildings in the midst of which would stand a "proud church". Several years after graduation she married Dr. C.G. Johnston a local physician. Some years later they moved to Milwaukee where, at last account, he is still practicing his profession.

Josie Newman: I believe she came to Saranac shortly after my entry into that school and that she lived with her mother. We were never at her home, nor did we learn anything of her previous life. She was jolly and friendly but never seemed unusually intimate with the other girls. None of us felt that we could wholly rely upon her statements. Some of the boys dated her at first quite regularly, but much less as they became better acquainted. She seemed to prefer boys outside the class who we had little use for. I think she remained in Saranac only a year or two after graduation and I knew nothing of her afterward. Several years ago someone told me that she had been heard from, that she was married and living in California.

May MacKersie: She was extremely quiet, slow-moving, and non-commital. She was tardy at school and elsewhere and recited hesitatingly in class, but succeeded in making her grades. She attended some of the more important social functions but did not fraternize with the others. She seemed timid and lifeless. She lived with a family just east of the village limits on the Ionia road, and I suspected that she worked for her room and board. When we held a late party one of the boys usually escorted her home because of the distance she had to go and the loneliness of the road. It must be remembered there were no street lights nor electric lights in the homes, so that it was extremely dark unless there was a bright moon. Many carried lanterns when traveling about town. It fell my lot to escort her home a few times and I found she would talk quite freely when away from the others. She told me something of her home which I believe was at some distant place in the state. I came to the conclusion that she had to earn her own way, and that her apparent slowness was the result of being tired. She uttered no complaint of any kind, and I always felt that if the class had given her more sympathy and encouragement they would have found her more responsive and congenial. Several years afterward I read of her death but never learned the circumstances.

Howard Frace: The third son of one of Saranac's most substantial business men. A rather dignified, quiet and unassuming boy yet full of fun and friendly with all of us. He lived in a beautiful home, the finest one in town, and I was invited there a few times for a meal or to spend a night. His father was a

member of the school board for many years; also village president for a time. Howard was the first owner of a kodak that I knew and we often went around together taking pictures. After graduating from high school he took a course at a dental college and has followed that profession. After we came to Lansing, on a trip through the Upper Peninsula, I called upon him at Ironwood and he asked me to spend the evening with him. He took me around the city in his car and out to the big iron mines near there, also over to Hurley, Wisconsin separated from Ironwood by only a river and famed at that time for the number of its saloons. Howard told me he had a fine practice and that he had reached a stage where he could choose his clients from the best group of people and turn away the undesirables. Later he moved to Hollywood, California and, at last account, was still serving the wealthy movie people there. He married rather late in life and I never knew his wife.

Melvin Dodge: He was the most democratic boy in the class and he and I chummed together a great deal. His father had been a stone mason, but when he became too old and in too poor health for that he started a grocery business. This was about the time that I entered the Saranac school. Melvin shared in the firm name and worked in the store after school and in the evening. I spent many evenings at the store listening to hunting and fishing tales by the father who went deer-hunting every year. He was a fine man and a good story teller. I was invited to the home a number of times to meals. Melvin was a good-hearted fellow, very ordinary in his speech, manners and dress, and always a reliable friend. Later he married Sadie Kester who had moved to Saranac about the time I left. When we moved to Lansing, I found Melvin living here and serving as accountant for the Lansing Laundry Company. I did not have much contact with him here, and a few years after we moved to East Lansing he died. We attended the funeral but I do not remember the cause of his death. My first camping trip was made with him. A year or so after our graduation we loaded our equipment into a boat and rowed up Grand River from Saranac, watching along the way for a good camping spot. Late in the afternoon we were in sight of the State House of Correction just west of Ionia. Knowing it was useless to go further in that direction we turned about and headed downstream until we came to the best place we had noted on the way up. We set up a tent in some woods and proceeded to cook a meal, and found that neither of us had any previous experience worth mentioning in that art. The results were none too good, our supplies did not keep very well in the hot weather, and the fishing was poor. On the morning following our arrival here we were surprised to have Melvin's father arrive. He had mislaid the combination to the store safe and Melvin was the only one who had it memorized, so he had driven up the Ionia road until he located us.

J. Clyde Watt: Clyde's father operated a general store and was one of the county's smooth politicos. Clyde was the class "cut-up" and tried to make life miserable for someone all of the time. He was quick to learn and, though not exceptional in class work, he made his grades easily and always found ample time to plan plenty of mischief. Some of his pranks bordered on real meanness although he probably did not realize that fact too fully. The Professor finally became his chief target and they had numerous clashes. The boys use to put water on the hill west of the school house to make it icy for their evening sliding parties. By that means the long bobs they used would go all the way from the school house down to the depot, a distance of two or three blocks. While there were no autos there was some travel on the cross streets with horses, and this made it somewhat dangerous to slide at high speed especially after dark. On one occasion, the boys got the hill into an extremely slippery condition, and the Professor went over

there in the evening and ordered them to quit sliding and go home. Clyde and a few others refused, saying he had no jurisdiction over their doings away from school. The next day the group were kept after school and Clyde acted as spokesman. He told the Professor that he did not own nor pay taxes on the hill, had no right to forbid anyone using it, and no authority over their lives outside the school room. The matter was dropped but Clyde lost no opportunity to discomfort the teacher. He staid away from school one afternoon and came the next morning without a written excuse. The teacher told him to bring it at noon. He failed to do so and the teacher ordered him to go back and get it, and not to return to school without it. He was gone about half an hour and when he returned he carried the paper in his hand up to the teacher's desk. stepped back and awaited the teacher's o.k. The teacher unfolded it and found it was a sheet of wrapping paper from the store, larger than his desk and with the excuse written in the center of it. The teacher said it was o.k. and Clyde walked grinning back to his seat. We suspect he wrote the excuse himself and perhaps signed his father's name to it as well. The winter following our graduation he attended the same business college in Grand Rapids that I did. There he tried to play tricks on me and a few others that he knew, but was a little more reserved than in his home town. Towards spring he was stricken with typhoid fever and had a long siege of illness, and I do not think he returned there to school unless it may have been in spring term after I had gone home. Either during that or the following summer he attended a picnic at Morrison Lake. In going ashore from a boat ride he picked up a gun lying in the boat and it accidentally discharged striking him in the arm. The arm was amputated just below the shoulder, and Clyde thereafter became very despondent. Members of our class spent hours with him trying to change his mood. Eventually he became normal but much sobered. Then he resolved to go to College and took a law course at the University of Michigan. On his return he began the practice of law, and soon acquired an office at Ionia. About the time we left Clarksville he was married to Pearl Flint of that village. Later he became Ionia County's prosecuting attorney and when we came to Lansing he was a member of the State Legislature where I saw him last. Subsequently, I heard that he drank heavily, as his father had done before him. He died several years ago.

Alice Hogue: She was a member of most of our classes but did not graduate with us. Late in the term it was discovered she lacked one or two subjects, too late to be made up. She was greatly disappointed as were all of us. She graduated with a class the following February at the midterm. I have already mentioned her with my botany class work. She was a good student, friendly, and a general favorite. After her graduation she worked in the post office for a time then secured a position in the general furniture and novelty store of O.J. Bretz where she remained for several years. She married Charles Bretz who was a nephew, I believe, of O.J. They moved onto a farm near Rudyard, Michigan, and some years later to Engadine where they were running a general store when I first visited them after we came to Lansing. Later they moved to Manistique to get better school facilities for their children. We called on them there when on our northern camping trip, and they have called on us a couple of times in East Lansing.

THE COLUMBIA COLLEGE OF COMMERCE--Chapter VI

In the summer of 1892, following graduation from high school, I was faced with the momentous decision concerning my further education. The Professor at Saranac contended that, because of my mathematical ability, I should become an engineer; and suggested that I consider a course at the Michigan School of

Mining at Houghton. I did not feel interested in becoming associated with the mining industry and gave very little consideration to his advice.

My father had always liked farming and he wanted me to follow it, too. As an inducement he promised to let me work with him on a partnership basis. Therefore, any further education should be obtained from an agricultural college if I was going to be a farmer. I knew two or three boys who had attended the Michigan Agricultural College during the previous year and I discussed the matter with them. They recommended the College and described the routine of work there. I learned that each student had to work a certain number of hours each week on the farm, and that he could work additional hours if he could find the time. For this work on the College farm they received wages at a certain hourly rate which helped towards their expenses. Room and board was obtained at dormitories on the Campus. Students could take military training which I think was optional but may have been obligatory. All students wore a blue uniform similar to the one used in the army at that time. All of these conditions appealed to me and, about August, I came to look over the situation. Getting off the train at the Union Depot I boarded a street car for the Campus. The car was drawn by a pair of old horses and it took about an hour to reach my destination. I got off the car at the west entrance and followed the path overlooking the Red Cedar River. On the way, I met a student from Clarksville whom I knew and who told me more details of the school. I wandered over the Campus which apparently had homes on it for the entire faculty. The school buildings were all of red brick such as the Forestry and Botany buildings still in use, and believe there were no more than six or seven in all. Wells Hall and Abbott Hall were there, but Williams Hall had burned down the previous year. The barns stood on the sites of the present Chemistry and Engineering buildings. There was no East Lansing, but there were perhaps a half dozen or so houses scattered around in sight and north of the Campus. Also there was a store or possibly two of too little interest to cause me to walk over to them. I believe it was called Collegeville at that time or soon afterward. About the only activity I noticed was a few students hauling hay and grain from a back field up the lane, over an old wooden bridge on the Red Cedar, with a team and wagon, to the barns. Most of the small faculty were probably on vacation. I was not much impressed.

In our home neighborhood were two former graduates of M.A.C., each the son of a prosperous farmer. The father in each case had given the son a tract of land with buildings on it, but neither son was able to make more than the barest living and had accumulated some debts. My father had often referred to those two cases, within my hearing, as shining examples of the results of a college education in agriculture. Thus I knew his opinion on the subject, nevertheless he told me he would try to see me through college if I really wanted to go.

During my last year in Saranac several South Boston boy friends were attending the Grand Rapids Business College. They were quartered in a dormitory and invited me to come down and see them. I spent a weekend there with them and they showed me their school, and told me they liked it very much. At Saranac I had taken a term course in single-entry book-keeping, and liked it but at Grand Rapids I learned that single-entry was passe, and that double-entry was the only kind used. I learned that Art Burr was planning to go there that fall and he urged me to go with him, so I decided to do so except that I could not start at the beginning of the term as I had to help finish the season's work on the farm. From the boys who had been there during the previous winter, we learned that a leading teacher in bookkeeping and one in stenography at the Grand Rapids Business College had resigned their positions and were opening a new school of their

own. The boys recommended these teachers highly and advised us to go to their school instead, which we decided to do. It was late in October when I was ready to go, and Father went down with me, bought me a new overcoat and some other things I needed. We went up to the Columbia College of Commerce which occupied the fourth floor of the McMullen Block, and met these two men who had launched the new school. They explained that the bookkeeping course and allied subjects was a one year course and said that if I would pay six months tuition in advance they would give a certain discount. Father made the six months' payment and we set out to find a room and board. We made arrangements at the Fletcher Hotel located on the opposite corner from the school. This proved to be a fairly comfortable place and the meals were satisfactory. A lot of old people staid there who were not particularly interesting to me, and I soon tired of their chatter in the dining room and in the sitting room around the big stove, but I was forced to stay there evenings as, with stove heat, I had no heat in my room. The cost here was much more than in a private home, and it seemed quite lonesome for me.

Living With the Van Valkenbergs

Art Burr had started at the beginning of the term and was living with the Vans at 484 Terrace Ave. This was about two miles from the school and he was walking it most of the time although there was streetcar service available. The Vans had formerly lived on a farm in South Boston one mile west of us and adjoining the Burr farm. They were Dutch and thrifty penny-pinchers. He had retired as he was quite old and had moved to Grand Rapids several years before. They had a rather eccentric old maid daughter who had been away to music school and who was now teaching music in Grand Rapids and living with them. Art begged me to come out and room with him and it was so arranged, the cost to me being considerably less than at the downtown hotel. The long walk was good exercise and we could take the streetcar in bad weather. Art knew the family better than I and acted more freely with them. Effie, the old maid, was rather serious-minded and we enjoyed playing little tricks and jokes on her. She tried hard to move in the City's aristocratic cultured circles, but we noted that her close friends were mostly old maids like herself. When she made an evening call on one of them she would ask one of us to call for her when she was ready to walk home. When her friends called on her she would have us escort them home. All of these things gave Art and I food for remarks between ourselves about her and her peculiar ways. Many of these remarks were passed in a low voice after we had gone to bed. The volume and variety of food served us became rather scanty at times which also led to remarks about it.

Our bedroom was a very small one off the living room. The old folks slept in a bedroom off the kitchen and the door between the kitchen and living room was always kept shut at night. This enabled us to leave our bedroom door open and get some heat from the large hard-coal base-burner in the living room. The one thing that we did not give sufficient consideration was the fact that the stove pipe passed through the wall into our bedroom, thence upward through the ceiling into Effie's room above us, and from there into the chimney. Of course that pipe was equivalent to a telephone and evidently Effie had heard much of our numerous conversations.

One Saturday night Art and I went down to a show and came home late. Of course we were in a jubilant mood and talked a while after going to bed. Suddenly we heard the kitchen door quietly open and close and we immediately ceased our talk. In the living room we saw a white wraith in the glow from the coal stove. It moved to a rocker and sat down and all was quiet for a few minutes. Suddenly

the nightgowned wraith began a monologue in very fervid language. It repeated many of the remarks we had made about Effie with some added observations as to their impropriety. It also said: "The board isn't good enough, eh, then you'd better try the Morton House" (the City's most aristocratic hotel). This monologue lasted for perhaps a half hour, during which Art whispered to me to say nothing, then the wraith disappeared through the kitchen door. Our comments were communicated in whispers, and I told Art it meant we would be seeking a new boarding place but he did not think so. Sunday morning we arose and dressed. Art went into the kitchen first and was greeted by the lady of the house with these strange words: "Good morning, Mr. Burr" and when I arrived it was "Good morning, Mr. Church". While we sat along the wall waiting for breakfast, Effie came in, greeted us quite cordially as did Mr. Van, then she went into the pantry. From there she called: "Ma, shall I put the cookies on?" Ma said: "Yes, put them on, If they want them they can have them; if they don't they can let 'em alone". There was little conversation at breakfast and none from the old lady. After breakfast I finished my toilet, put my things in my trunk and locked it. Art refused to do anything about it as he said it was just one of the old lady's tantrums to which she was periodically subject, but I was determined to get away from there. I spent the entire day visiting different people that I knew and making inquiries of them about available boarding places. However, I had no good luck so returned at night to the old place. The next day normalcy was nearly restored and nothing further happened except that we received a few extra favors from that time forward.

The water supply in Grand Rapids was not good. Several of the boys had a siege of typhoid fever during the previous winter, and some were coming down with it while we were there. Mr. Van thought we were safe as they had a drive well and did not use the city water. Mrs. Van considered herself almost a doctor and her favorite remedy was boneset tea, which she made from the herbs she had gathered in the country and dried. Whenever we complained of a headache, cold or anything else she would make the tea and insist on our taking it. She contended, too, that anyone taking it would not have typhoid. After I had taken it a few times I decided I would prefer the typhoid. The Van's had only an outdoor toilet and three or four trips during a cold winter's night, then some more before and after breakfast are what led to that decision. It must have cured me because, no matter how I felt, I never complained of not feeling well after those experiences.

Progress in School

Having entered this school six weeks after the beginning of the term, I expected to have some difficulty in catching up with my studies. This did not prove very troublesome as the subjects of bookkeeping, penmanship, spelling, correspondence, etc. were mainly on an independent individual basis. Commercial law, commercial grammer, and civil government of the United States were the only ones requiring a review of past lessons. This was not difficult as they comprised my only study outside school hours, and the long evenings afforded ample time. Being well grounded in arithmetic, the subject of commercial arithmetic was not too different nor difficult, particularly the portion which the class had completed before my arrival. A course in German was offered and I decided to take it. A teacher from some other school was to come in each day to teach it. When I appeared in the classroom on the opening day I was greatly surprised to find it being taught by Earl Drew. He had been born and reared on a farm within a mile of ours, and when I had last seen him he knew no more about German than I did. The Drew family cared little about education and were interested only in farming, but Earl was somewhat different. He went away to College and had become a teacher

against the sneers and ridicule of his brothers and parents. He proved to be a good teacher and we made good progress. Within three or four weeks the class was conducted almost entirely in German but the Holiday vacation arrived about that time. When we returned after the holidays Earl failed to put in an appearance. Upon investigation it was found that he had left town and had not returned. We never saw or heard of him afterward; and it was conceded that he had probably been involved in some trouble with his family. Thus my education in German ended at that point which I regretted, as there were many German people living around Clarksville. However, when in the drug business there a few years later I found that, while they could understand my German phrases, I could not understand their answers. When I inquired the reason I was told that my brand was known as High German whereas theirs was Low German. They could understand both but speak only the one. The class in German had been held after the regular school closing hour of four o'clock.

We were also offered a course in Rapid Calculation which had to be scheduled for a portion of the usual noon hour. The course was not required but we were urged to take it because of its practical value. When I entered this class they were practicing addition. The blackboard was covered with numbers and the class added these in unison with the teacher leading them, and in accordance with certain rules. I considered myself very good in all types of mathematical calculations, and was surprised to find I could not maintain their speed in adding even when using their "moderate" rate. There were others like myself and the teacher instructed us to start with him, follow as far as we could, drop out, then catch in again, and repeat in this manner to the end. I soon found I could maintain the moderate speed and at the end of a week I could follow their fastest speed. The principle involved, as he explained, the acquiring of an ability to automatically use the sum of two numbers instead of the numbers themselves, just as the pianist automatically plays the proper keys without thinking of the names of the notes. He further reasoned that when it became automatic it would be impossible to make a mistake, and that one's mind could revert to other things while adding without causing errors. He continually demonstrated this by glancing out the window, looking at his watch, and doing other things while adding at top speed. This training has been of special value to me in my life work by giving speed and accuracy in calculations. Many times in my office experience I have made good speed with calculations while listening to one or more persons talking and even entering into the conversation myself, thus proving that the brain can be made to function as automatically as an adding machine. We were also taught many short cuts in handling figures which proved very useful to me in after life. One of the most practical was a method of computing interest, which I have never seen in any arithmetic but which I have used to good advantage and am still using. I find it works just as well for present incoming interest as it did over many past years with outgoing interest.

I wanted to learn something about typewriting, so paid a small fee for the privilege of practicing on one of the school's typewriters, but did not take the regular typewriting course taught in the shorthand department. Some of the students taking it gave me pointers and suggestions that were helpful. This brief practice benefitted me in later years when it became necessary for me to use a machine in Government work.

The Course in Bookkeeping

The proprietors of the school were Head & Dillingham. The latter conducted the Shorthand Department while the former, Mr. Gary A. Head, handled the Commercial Department. He taught all the commercial subjects very capably, and he laid

down many principles in bookkeeping not found in our textbook, but which greatly clarified the principles relating to debits and credits. His simple maxim of "Debit what comes into the business and Credit what goes out" was capable of application to every conceivable type of transaction. Whenever we would ask him how to make a certain entry his answer would always include that stock phrase, and seldom anything additional in the way of explanation. In this way we learned that he expected us to use our own reasoning powers in applying the principle. The textbook used was that of Williams & Rogers which is now in my bookcase along with the other textbooks used in that school. The first part of the book dealt with the definitions, explanations, and rules of double-entry bookkeeping. Then followed many pages of all types of transactions which we entered in the various books used at that time, such as day-book, cash book, journal, ledger, etc. Single-entry bookkeeping was then taken up and studied, and then how to change the books over from single to double-entry.

Then came actual practice in carrying on a definite business, the student being the owner or partner. The transactions day by day were in the textbook, and the books had to be opened and carried forward. Prices of all commodities were in a table of ten columns numbered from one to ten. Each student was given a different number and he used the price series under that number. Thus each student would have a different set of figures in his results and two students could not check with each other. Of course there were many more than ten students but we had no way of knowing which ones had the same number as our own. When the series of transactions, covering a week, month, or several months had been completed, the books would be closed and a balance sheet made. The present worth was the final answer and we took that to the teacher. He compared it with his key which he always kept under lock. If our result checked with his key to the exact cent, he stamped our books with an O.K.; if not, we had to go back and look for and correct our mistakes. If it involved too many corrections a new set of books had to be made out. The following different sets of books had to be completed during the course; retail grocery business, retail coal business, wholesale and retail lumber business, shipping and commission, jobbing, installment houses and state agencies, manufacturing, joint stock companies, changing from a proprietorship to a joint stock company, and banking. All except the last one were completed at an average rate of about one per week, and in only two or three did I have the wrong answer on the first trial. All except banking were completed that winter.

A Serious Fire

The school closed the week before Christmas and I went home on a two weeks vacation. I did not tell my folks about our trouble at Vans as I feared they would insist on my boarding elsewhere, but Art told his folks the whole story and his father told my father about it. They joked about it and the matter was mostly forgotten as harmony had been continuous after that one outburst at the boarding house. Just a day or so before the end of the vacation I read that there had been a bad fire in the block where the school was located. The top or 5th floor was occupied by a shirt factory and that was where the fire started. The school was underneath it on the next floor. The fire department kept the fire mostly confined to the 5th floor but it burned through the ceiling of our room and much water, smoke, and dirt came through the openings. I hurried back to Grand Rapids to look after my school materials and find what plans were under way for the school. I found the textbooks very little damaged but the bookkeeping blanks and forms were water-soaked and badly soiled. Nothing of particular importance was completely missing. After learning that rooms on a lower floor were being fitted

up for our use, I returned home. In about two weeks we received word that school was ready to resume. I went back and continued until early in March when I had to go home to help with the farm work. Thus I obtained only about three months and a half of school work that winter.

Final Winter of School

My early return home in the spring of 1893 was due to the fact that my father agreed to give me a share in the proceeds from the farm, thus I was on my own and responsible for my own expenses thereafter. Because of this arrangement I staid at home until the season's work was entirely completed and did not get back into school until about two weeks before the Holiday vacation. In the fall I received a letter from Mrs. Simeon Hunt, a well-to-do elderly widow living in Grand Rapids and who was a sister of my grandmother. She asked that, if I needed a boarding place, I consider a needy friend of hers by the name of Mrs. William Adzit who lived on Sheldon St. only four or five blocks from the school. I did so and found it very satisfactory. I roomed with her son Henry who was a few years older than I. He was working for wages when I went there, but during the few weeks of my stay he took a small interest in the Grand Rapids Lithographing Company which also operated a box board factory. In a few years he rose to the position of manager and was still with the concern when I last saw him a number of years ago.

In order to cut my expenses as much as possible I had studied some during the summer. I had finished the course up to banking during the previous winter, so I sent to the school and obtained my price key assignment and the bookkeeping blanks for the banking course. That course involved the keeping of about eight different books and was considered the toughest subject of all. I studied and worked this course on hot summer evenings after working through the day on the farm, by the light of an oil lamp in my bedroom on the second floor of our farmhouse. I had finished it and gotten the final results before returning to school. I had received no help from anyone and was apprehensive of the inspection of my work. I took it immediately to the teacher and he found it checked with his key to the exact cent. Thus I had only one subject more to take up which was Business Practice.

For that we engaged in a regular line of business. The teacher was our banker to whom we deposited our stage money and upon whom we drew our checks. All the forms used in the busines, such as a store lease, deeds, mortgages, checks, drafts, bills of lading, and many others, had to be made out as needed in the various transactions. Of course the regular set of books had to be kept, too. It was conducted as nearly like an actual business as it was possible to do. Having my entire time for this one subject I made rapid progress and found my course finished within a week or two after going back from the holiday vacation. When I went to the office to settle up, the records showed that I had completed the one-year commercial course in 4 1/2 months. As six months tuition had been advanced at the time of my enrollment, they refunded the six weeks' portion to which I was entitled. They then informed me that I had completed the work in less time than anyone in their previous experience.

Other Experiences in Grand Rapids

Shortly after entering school in the fall of 1892 several of the boys planned a Saturday afternoon trip to the gypsum mines near the southwestern edge of the city. I went with them and found it interesting. It was my first and only entry into a mine. The entrance was in the side of a high hill and sloped downward into the mine. There were tracks over which tram cars brought the rock to the surface, the cars being pulled by mules. Our guide carried a light and led

us into the darkness for perhaps a quarter of a mile. The rock walls glistened from the reflected light like crystals, and the mine extended for a mile or more with numerous branches at intervals on each side. The mined rock was crushed in mills to a fine powder called gypsum plaster. We used to buy it each year and put it on the corn hills in the belief it was of benefit to the crop. In more recent years that idea is denied by scientific agriculturalists. The plaster is mostly used for wall board and as an ingredient in wall plaster at the present time.

On one cold winter day another student and I went to Reeds Lake and skated for several hours. The skating was fine and we had a good time. As we rode out Wealthy Ave. on the streetcar we passed through several farms and past several farm houses, and remarked that those farms might become a part of the city at some future date. Little did we realize at the time that we would live to travel that area in a self-propelled vehicle, over paved streets, and amidst fine homes, hospitals, schools, and business places, as has been the case for the past 25 or more years.

Art Burr was a great lover of trotting horses as was his father. When the sleighing became good during the first winter in Grand Rapids, we would walk from Van's on an occasional Sunday morning down to Lafayette St., now called Lafayette Boulevard, to view trotting races put on by elite citizens owning good driving horses. They would be hitched to cutters and there were some speedy and fine races. The races started from a point within half of a mile of the downtown district and extended southward to the city limits or beyond, a distance of one to two miles. On Lafayette, not far from Cherry, was a large livery barn. The proprietor had formerly operated a livery business in Lowell and Art knew him quite well.

On one of these mornings Art proposed that we hire a livery team and a double cutter and take a couple of girls for a sleigh-ride that afternoon. We arranged for the team at a cost of $4.00 which seemed rather expensive to me at that time, then set out on foot to find the girls. The ones we had in mind were two from our school who lived some distance out South Division, at different addresses, and with whom we had walked from school on several evenings. One was Kittie Ryan from a town north of Grand Rapids who was in my room as a bookkeeping student; the other was Caroline Probert from Portland who was taking a course in stenography. Art proposed to ask the former and I the other, after which we would meet and compare results. I called At Carrie's boarding place and found she could not go as she was entertaining some of her family for the day. I walked back until I met Art and learned that he had been more successful. Kittie agreed to go although she was entertaining a cousin from her home town and would have to leave her alone while she was away. We decided to go back there and invite the cousin to go with us as my companion. In this we were successful and we called for them in the afternoon. It was a cold day but bright and sunny which made it pleasant to ride. The team was a lively span of driving horses and Art drove them of course as he liked to do. We drove down through the main business streets, across the city to the northwest limits, then out Walker Avenue for several miles and back by a different route. The sleighing was fine and we had a good time. My blind date was Mary Murphy and she proved to be a jolly companion. From their names the reader will readily guess they were of Irish descent and Catholics, but I never had the opportunity of seeing Mary Murphy again. Kittie Ryan was a fine girl and an excellent student. Seven or eight years later I renewed my acquaintance with her when I found her working as bookkeeper at the Pennell Millinery store where we bought millinery supplies when operating that business in Clarksville. Don Pennell, son of the owner, had been a classmate of mine in the busi-

ness college. Kittie was married to Lester Mills another student at the business college who was quite a chum of Art and me, and who secured a position in a railroad office.

One of my friends in the school was Fred H. Locke who became a lawyer, and later was City Manager for several years and also Mayor, for a time, of Grand Rapids. Another acquaintance was Mike Dwyer who was an amateur wrestler while in the school. Later he became a professional wrestler and his name was much in the news throughtout the United States. When we came to Lansing, Art Burr was a traveling auditor for the International Harvester Company. I would occasionally cross paths with him in my travels about the State. He was retired more than a dozen years ago at the age of 60 in accordance with that company's rules, and is still living in Grand Rapids (died Dec. 3, 1948). Many others from that school, whom I knew, have been successful business men.

My chief disappointment in connection with my graduation from that business college was that I did not get my diploma. When I entered there, I was told that graduates would receive a diploma free of charge. When I left, they informed me that they were having some printed and would send mine when it became available. Not receiving it after a lapse of three or four months, I wrote to them about it. They replied that it was ready and they would forward it if I would send them $10. A few days later Father ran across the head of the stenographic department, Mr. Dillingham, in Lowell. When Father took him to task about it, he bluntly replied that they could not afford to give free diplomas. This was probably true in part as I think they were financially embarassed at the time, although the diplomas probably cost them only a few cents each. I believe the school was sold within the year. Either immediately or eventually it was acquired by the McLachlans, and is still being operated as the McLachlan Business University, the leading school of its kind in western Michigan.

The Fate of a Teacher

As previously stated, my teacher was Mr. Gary A. Head. He was practical in his teaching and thoroughly understood all of the commercial subjects. He had a sense of humor, maintained good discipline, and seemed to handle the teaching of this large group of students without worry or effort. He had the qualifications and ability to serve as the chief executive of a large business. However, he did have certain faults. Surreptitiously he chewed tobacco much of the time in school hours. Once or twice during the forenoon and again during the afternoon he would leave the room for periods of 15 or 20 minutes. This caused no comment as he frequently went to the front office to look after business matters. Later I learned from others that the protracted absences were due to his leaving the building to get a drink. During the second winter these absences steadily gained in frequency, and was a contributing cause of the financial failure of the school. When I occasionally heard of his whereabouts it was as a casual employee in some business house, and at a different place with each successive report. Finally, my last report was from one of my former classmates who had seen him emptying cuspidors and serving as a general roustabout in one of the City's numerous saloons. Thus ended the useful career of a rather brilliant and capable man.

A Review of my Formal Education

In Chapters II to IV, inclusive, I have recited in some detail the incidents relating to my years in school. The reader will have noted that it's pattern was of a crazy-quilt nature, and under far different conditions than those prevailing today. It is this last point that I wished most to emphasize. I had never been in a school having a gymnasium, shower, or swimming pool; and the one in Grand Rapids was the only one having electric lights and indoor toilets. None

had a regulation baseball or football field, nor a tennis or basketball court. There were no movies, no radios, and no courses in music or manual training. Drug stores provided no tables for eating ice cream or drinking sodas. All local transportation was by horse power, and local communication was only by word-of-mouth, messenger, or by mail. Outside of cities no telephones were installed in residences and daily mail was not delivered, and comparatively few could have the benefit of a daily paper.

For these reasons, school children spent most evenings at home and were encouraged to study their lessons and to read good books. There was ample time for these as well as for attendance at parties, socials and shows. Home study became a regular habit with me, partly because of necessity but more particularly because I could concentrate more fully. In the solitude of my room, away from all distractions, I could solve difficult problems and master hard lessons more easily than in the school room. I discovered quite early that it was advantageous to work my problems in mathematics from one to four weeks in advance of the class. This gave me plenty of time to find the solutions of the tougher problems, and a chance do demonstrate them in class to those who had only a single evening to attempt a solution that often resulted in failure. Not all problems were easy for me, an occasional one having required repeated trials over periods lasting several weeks. A few of these were only solved through appeals to my subconscious mind, as revealed in dreams. In such cases I would immediately awaken, arise at once, go to my desk and record it on paper to prevent its escape from memory.

This habit of home study, like all habits both good and bad, persisted beyond my years in school. Many courses of home study were undertaken at intervals during the following 40 years. As the most of these were related to and associated with the work I was then doing, or intended to benefit in work I aspired to do later, I will not undertake to discuss them at this point of my story. Instead, they will be mentioned in connection with the particular phase of work to which each was related. Eventually, I hope to show that a sizeable portion of my ultimate education was obtained in this manner, and that, despite my election to forego college training, actually I received in scope and volume its equivalent or more. It was done the hard way--a way that I would not recommend at this later date to any except those who do not have the privilege of an easier one.

EARLY FARM EXPERIENCES--Chapter VII

I have already mentioned, in Chpater I, some of my early chore duties on the farm. Now I will try to relate early experiences that were more closely associated with the business of farming. Before the age of eight there was little, except chores, that was suitable for me to do so that I had plenty of time for play. Of course I went on errands to the neighbors, went to the postoffice for the mail, and did whatever little tasks were assigned to me. In my play I liked to build things. My father built many of the lesser buildings on the farm, and I wanted him to build me a real playhouse. He promised me that he would but he was too busy with more important things and my project was kept in abeyance. Finally, I determined to be my own architect and builder. I gathered odd pieces of board of which there was a good supply and, in due course of time, the building was finally completed. It may not have been a model of art but it supplied my needs and I had much satisfaction in using it. Of course, a few of the boards I had used were special ones my father had laid aside for specific purposes, and when he discovered the use made of them he commented rather emphatically on my selection. One of his saws was somewhat smaller than the others, and I reasoned

it was a boy-sized one and suitable for my use. However, I later learned that it was one he kept expressly for fine work such as cutting tenons for mortices and making furniture that required closefitting parts. Naturally, he kept it very sharp and in the best of condition, so when he found I had used it for sawing boards that were full of nails, his remarks were far sharper than the saw was when I was through with it. That saw is among those on my work bench at the present time.

Our annual requirements of firewood necessitated the cutting of about 40 cords of wood. Father usually hired a couple of men to do this as the cost was only 30 to 40 cents per cord for cutting and piling, which was practically no more than the cost of hiring a man to help him cut it. During the winter Father would haul this wood on sleighs and throw it in a large pile just outside the woodshed. The hired man's employment usually began about April 1, and the splitting of that wood was one of his first jobs to be done on days too cold for any farm work. The chunks, knots, and limb wood were placed in one pile, and the slabs and all that would split readily were split for use in the cookstove and thrown into a cone-shaped pile. This pile would attain a height of seven or eight feet and a diameter of 20 feet or more, after which it was my task to move it into the woodshed and pile it in tiers across one end of the building. For the stove wood that was split there would usually be four or five tiers, each 20 feet in length and about 8 feet high. The upper part of each tier required carrying the wood in armfuls up a stepladder. The chunk wood made as many or more piles of equal length and height. This job did not have to be finished at any given time, but those piles of wood stared me in the face until the last stick vanished into the woodshed sometimes many weeks after the splitting.

The First Gravel Road

Our nearest markets were Lowell, at a distance of seven miles to the northwest, and Saranac which was six miles to the northeast. Both villages, being in the Grand River valley, were approached over hilly and sandy roads. The merchants of Lowell wisely foresaw the commercial value of improved roads and were the first to appropriate funds for the purpose. Their first project was the grading and graveling of two miles in 1881, extending from the upper bridge over Grand River southeast towards South Boston and ending at the point where it crossed the Kent-Ionia County Line. Our nearest neighbor, Sam Tucker, secured the construction contract for which he hired a considerable number of farmers and their teams. My father was one of these who worked during the fall and early winter of that year. As it was five miles from our farm to the nearest end and seven miles to the other end, he would leave home early and return late. My mother undertook to do as many of the chores as she could which was nearly all except milking the cows. Although I was only six at the time, I helped as much as I could and I remember this fact only because of a minor accident. Taking my express wagon with a bushel basket in it to the corn crib, I got the corn for the pigs and hauled it to the pen. There was a rail fence around the pen and I climbed to the top rail to see what the pigs were doing and where to throw the corn. Of course the rail turned and I fell off, striking my face on the sharp corner of the express wagon box. Fortunately, no teeth were broken, but my lip was cut through and a small scar remained for many years afterward.

The building of that road was highly beneficial to Lowell. Although the other five unimproved miles to our place had to be traveled, they were more level and mostly clay. Therefore, Lowell secured the larger share of the South Boston trade. We could haul twice as much per load as we could to Saranac, and the seven miles could be traversed in less time than the six miles to the latter place.

Hence, Lowell's stores grew in size and quality and the population increased materially, while Saranac made little or no improvement.

Putting Up Stoves

In the book Reading and Elocution by Randall is an article with this identical heading. It humorously describes the process so accurately that it is not necessary to repeat it here. At one point it says: "In getting down he will surely step on the cat, and may thank his stars if it is not the baby". In our case it was a small boy, instead. We had a large round heating stove in the dining room and another one in the living room. At spring house-cleaning time these stoves were taken to the store room; the pipes were taken down, cleaned, and stored with the stoves. In the fall they would be set up again. On one occasion Father and the hired man were performing this annual task in the morning just before daylight. Hearing the commotion, I hastily arose from my bed in the next room, got into my underwear and stockings, and proceeded to oversee the job at close range. When all was in place Father stepped backwards to see if the stove and pipe were in proper alignment. I happened to be directly behind him and his 200 punds came down on one of my feet. There was no pain to speak of after the first brief instant as the toes had probably been numbed. I continued to run around the house but finally the stocking seemed to be wet and I made an investigation. It was found that the foot was bleeding but there was very little pain and nothing appeared wrong. Little further attention was paid to it and the incident was all but forgotten within a few days. It was several years later that I noticed one toe was crooked and that I was walking on the end instead of the bottom of it. Closer inspection showed it was dislocated and, having grown in the meantime, it could not be reset. That deformity still exists and now I have a corn on the end of the toe directly beneath the nail. The article referred to above closed with this observation: "Job never put up any stoves. It would have ruined his reputation if he had".

First Lessons in Farming Operations

I began driving a team when I was about seven years old. Hay was unloaded from the wagon into the mow in the barn by means of a horse-drawn hay fork. Father would stay on the wagon and set the fork into the hay. A heavy rope ran over pulleys with one end out-of-doors. The team was hitched to the end of the rope and pulled the large forkful up into the mow. A light trip rope attached to the fork would be held in Father's hand and jerked at the right moment for the load to drop in the particular spot in the mow that he desired. When the load was released the rope would suddenly slacken and the team learned to stop when the pull on them eased. Then the team would be backed up to the barndoor ready for the next load, and the process repeated until the wagon was empty. Mother drove the team until I was big enough. It was comparatively easy to do, and I inherited the job as soon as I was strong enough to pull the rope back. About the same time I was taught to drive a horse on the hay rake. This rake was of the dump type and the only kind in use at that time. The revolving side-delivery rake did not come into use in Michigan until after I had given up farm life. To dump the rake it was necessary to step on a chain each time a windrow was reached. I recall that I could not reach the chain while sitting on the seat, and had to slide off it each time in order to do so for the first year or two.

About the same time I began driving a team on the harrow. Father kept with me until I could drive the team and keep the harrow in a straight line, turn properly at the ends, etc. After that he would do some other work in the field so as to keep an eye on my work. About the second year of that type of work I was permitted to go to the field alone and be on my own for the entire time. It was

then he gave me the first lessons in plowing. He would hold the plow while I held the lines, then we would alternate. When I could plow a reasonably straight furrow then I was given the lines, too. I had trouble in turning at the ends as I could not shift the plow in case I did not guide the team just right. Practice soon remedied this and in a year or two I was strong enough to handle the plow as necessary. When I reached the age of ten, I did more of the plowing and harrowing than either my father or hired man. From that time forward there were many routine operations on the farm in which I carried an equal load with the adults, and when I was 15 I was doing a full man's load in every kind of work.

The Harvesting of Grain Crops

My earliest recollections of grain cutting was my father operating a Royce reaper. As the present generation has never seen one I will try to describe it. The machine slightly resembled the grain binder that came into later use, in that it had a table on the left side with cutting knives at the front edge. The driver of the team sat on the right side which was behind the horses. By means of a lever he could tilt the table so as to regulate the nearness to the ground that the grain was cut. Between the driver and the table was a set of four rakes attached to a revolving disk something like the propeller blades on a helicopter. These rakes revolved counter-clockwise, descending to the table and then rising over the driver's head. When a rake was approaching the table from the front it would pull the standing grain backwards and, as the knives cut it off, push it down to the table. The rake would then turn its flat side to the grain on the table and pass over it, then revert to its vertical position. There was a trip lever, operated by the driver with his foot, by which the teeth on the descending rake could be held in a vertical position and push the sheaf of grain off the back edge onto the ground. The trip was operated as often as the amount of grain on the table was of the proper size for binding into a bundle.

Usually three men were required to bind the grain and keep pace with the machine, although if the crop was heavy, four men might be required. If there were three binders, the stint of each was half way around the field. The first man started at the beginning corner just behind the reaper; the second man at the diagonally opposite corner half way around would start at that point when the machine passed him; and the third man would start at the beginning corner when the machine started its second round. By the time the machine overtook and passed the No. 1 man he should have finished the half-around stint, and be ready to start on the second half when the machine reached him. By this method each man did an equal amount of binding, and if he finished his stint ahead of time he could rest until the machine arrived as there was no cut grain ahead of him. If four men were binding the round was divided into stints of one-third. An extra man was usually employed to set up the grain while the others were binding. The binding was accomplished by taking a handful of the grain, holding it in the left hand just below the heads, splitting the handful into two equal parts with the right hand, giving the two parts a half twist so that the heads interlocked, placing the band around the sheaf, drawing the two butt ends tightly together, giving them a twist, then tucking them under the band. That took much less time than it did to write the sentence describing it. Properly done the bundle could be handled as readily and without coming undone as if tied with twine.

During haying and harvest, Father insisted on having a jug of cold water and sufficient sandwiches for all the men brought to the field each forenoon and afternoon about midway of the working period. As a small boy it was my task to carry the jug and pail of sandwiches. This was quite agreeable as I shared equally with the men in these lunches.

The reaper soon afterward gave way to the self binder. The first one in our neighborhood bound the bundles with a fine wire, but this did not prove desirable. Some of the bands got into the threshing machine, some into the straw and litter and then into the animals' stomachs, and even became scattered over the farm causing trouble with the sharp tools used in various ways. After that, only twine binders were bought although at first only a few farmers could afford them. They cut the grain for non-owners on a per-acre basis which helped pay for their own machines. Father did not buy one until the latter part of the Eighties. That was a heavy machine requiring three horses to handle it adequately. In a very few years, a much lighter two-horse machine appeared and we made an exchange of the first, which was still in good condition, for the newer and better model.

Corn Growing in Michigan

The growing of corn in Michigan has always been primarily for consumption on the farm where it was produced. Although the State's acreage of the crop has nearly doubled during my lifetime, the quantity grown is far short of our livestock needs, and large quantities are shipped into the State annually from the western commercial corn states. For this reason, and because of the smaller fields and large proportion of rolling or hilly land, the use of improved corn-growing machinery lagged behind that in the prairie states. The use of the check-row corn planter, the corn binder, and the corn husker did not come into common use here until some years after the beginning of the twentieth century. There was no silo on our farm until about 1900 and none in the community until the late nineties. The corn for grain was generally planted in hills, the only use of drill rows being for corn planted for use as green fodder.

When I began planting corn it was done with a hoe as there were no hand planters in our vicinity. Father would mark the field with a home-made marker that marked four rows at a time. When the marking was completed in both directions and the field ready for planting, Father, The hired man, myself, and often a neighbor or two would do the planting. Each had a small sack tied to his waist to hold the seed corn from which three or four kernels, whatever number was to be used, was obtained with the left hand while the hoe in the right made the hole for the seed at the intersection of the marks. With experience, the men scarcely paused in their walk while performing the several operations, and they marched side by side across the field, each planting a single row and telling his choicest stories to the others. My first year or two of planting was strenuous because it was difficult for me to keep the pace the others set. As the day progressed the rows seemed to grow in length for me, and for the last hour before dinner or supper they appeared to be many miles long. Hand planters came into use within a few years. These had a small can attached for holding the seed. The planter was carried in one hand and stabbed into the ground at the proper point. There was a plate that kept it from going too deep into the ground, and another plate that touched the ground when the planter was leaned forward and tripped the proper number of kernels. Planting with these machines was considerably faster and easier, as the operator could walk steadily at only a slightly slower pace than a person normally walks. However, the steady walk on the soft ground for a day of ten hours produced some aching muscles and was not exactly considered a picnic.

Much of the cultivating was done with a two-horse cultivator that straddled a row. This was a rather particular piece of work and Father did not let me try it until I was about ten years old. While he was using this riding cultivator, I was allowed to use a one-horse cultivator which required a round trip across the field between each two rows of corn or just one-half as much as the larger

one accomplished. This, too, meant continuous walking for me although handling the cultivator was rather easy. When the field was finished in one direction we would then cross-cultivate at right angles. Several cultivations were made, but after the corn reached a height of about three feet the two-horse cultivator had to be discarded and all of it done with one-horse cultivators.

Practically no corn in Michigan was husked directly from the standing stalks as was commonly done in the commercial corn states, and which is now done on many Michigan farms. The corn was cut by hand and put in shocks, which was rather heavy work. An average sized shock contained 64 hills or 8 hills square. Very heavy corn sometimes contained a smaller number of hills, and more than 64 hills were put into a shock if the corn was unusually light. The shock was located at the exact center of the area from which it was cut so as to reduce the carrying distance to a minimum. To start the shock two hills of corn would be bent towards each other and the tops twisted together. This formed an arch against which the first armfuls were leaned, the balance was then stacked around it until it formed a round shock. A band consisting of two or three of the driest stalks was tied around the top to hold the shock together. Green stalks were brittle and would break easily, hence the drier tougher stalks were necessary for the bands. The two hills of uncut stalks anchored the shock to the ground, and were only cut when the shock later was to be pulled over for husking. The corn was usually ready for cutting from about September 1 to 10, and we aimed to finish the job by or before the end of September in order to escape, if possible, the first hard frosts.

Husking usually began early in October and we tried to complete it during that month. If bad weather caused serious delays the last shocks were sometimes hauled into the barn where they could be husked in greater comfort. Husking in the open field was a pleasant task if the stalks were not too dry and the weather not too cold. Sometimes gloves were used but this slowed the speed somewhat. Each husker had a husking peg strapped to his hand. The sharp point of the peg was used to split the husks at the end of the ear so that they could be stripped off. A good husker used only three motions in husking an ear. The amount that each husked in a day varied widely; some could turn out no more than 20 to 25 baskets; an average man 40 to 50; while we had one man that averaged 125 baskets a day for the season. Two to four shocks would be pulled together and the corn thrown into a single pile. The fodder was tied into bundles and set up in a large shock by each husker. If the weather permitted and the corn was dry, it was picked up each day and hauled to the crib. The sound corn would be picked out of the pile and the soft corn left until another time, as the latter would be stored in a different place and fed first before it became mouldy. The picking up of the corn was usually done by Father and me, late in the afternoon when it was driest. The load usu-ally reached the crib about the time darkness descended, and would be shoveled into the crib by lantern light only after supper and the chores were over.

One of the objectives in handling the corn crop harvest in this manner was to conserve the corn fodder for livestock feeding during the winter. Many farms had a de-ficiency in hay, as clover and timothy were the only kinds grown at that time. During the last 30 years alfalfa was introduced and the acreage has greatly expanded. With its higher yields per acre and greater certainty of a crop, the use of corn fodder other than in silos has greatly declined, being supplanted by this kind of hay,. The scarcity and increased cost of labor also has been a factor in changing the corn harvesting methods and in the adoption of machine harvesting. Many fields are now husked from the standing stalks, after which the

stalks are pastured down. While this is more wasteful of the fodder, time is saved and the fodder is no longer necessary as a feed to any material extent.

FRUIT-GROWING IN SOUTH BOSTON--Chapter VIII

With corn, hay and oats being grown only for consumption on the farm; with no beans, potatoes, nor sugar beets being grown, except enough potatoes for family use; and with only about 10 acres, on the average, of wheat for sale as our principal cash crop; one may well ask what other sources of income were available and utilized. There were no farm cream separators, and cream was either made into butter on the farm by hand methods or hauled and sold to cheese factories and creameries. We aimed to raise, fatten and sell only about a dozen hogs each year. Considerable revenue was derived from a wool crop and from the sale of 40 or 50 fat lambs each fall. Also one or two yearling steers were usually fattened and sold each year. However, these sources collectively would not have paid for the farm, the improvements made, and the building of a bank account. Hence, the answer must include the fruit that was produced, only in a small way at first, but later developing into a major business during the years of my farm experience.

Apples

Directly across the road from our house, on the "North Forty", stood a five-acre apple orchard of fully grown trees at the time of my earliest recollection. My father told me that he helped set that orchard when he was a boy at home before the Civil War, so it must have been about 30 years old when I first knew it. My father pruned these trees thoroughly each year and, when I became large enough to climb through the trees and possessed of sufficient judgement, I helped him with this work each spring. When that was finished we would take the team, hitch them to the sleigh, put the hay rack on the sleigh, and load it with the brush that laid under the trees. The loads were then hauled to an open space and the brush burned. The brush was bulky and many loads would be gathered from this five acres each year, the job requiring our combined labor for three or four days each spring.

No spraying was done in those years as there were no machines, no spray chemicals, and no one with the know-how. Insect pests and fungus diseases were far less prevalent than now, and the quality of the unsprayed fruit averaged as good as that in most fruit orchards today that are regularly sprayed. The orchard was made up entirely of old time varieties such as Northern Spy, Baldwin, Talman Sweet, Golden Sweet, Russet, Greening, Chenango, Pippin, Swaar, King, Maiden Blush, Yellow Harvest, Sweet Bough, and Red Astrachan. The most of these were choice for eating and cooking but many kinds had little commercial value. Nevertheless, the orchard bore well almost every year and we had many apples to sell. Very little of the usable fruit was allowed to go to waste. The crop was always hand-picked and Father always did his own grading. The No.1 grade was sold either in baskets or barrels, the better culls and windfalls were taken to an apple dryer, and the remaining culls from fall and winter varieties went to the cider mill. Drying apples brought from 10 to 20 cents per cwt, while cider apples usually sold for less. The winter fruit packed in barrels usually ranged from $1.00 to $1.50. per barrel of three bushels. When the crop was heavy, prices would be at the bottom of the range, and only the top was reached in years when the crop was light and few apples available for sale. These prices usually included the packing and the barrel, although occasionally dealers would pay those costs when fruit was in good demand. Father always did his own packing which insured more accurate grading and saved the packing cost of 10 cents per barrel.

The barrels usually cost 25 cents each and bushel baskets 10 cents each.

Practically all winter varieties and many fall varieties went into barrels; the balance of the fall kinds and the early summer apples did not. The winter kinds constituted the largest volume and it took many days to pick the crop. The outside of the tree was picked by using long ladders, while one or two men climbed into the tree to pick the inside ones. This resulted in my playing the Tarzan role most of the time, while Father and the hired man used the ladders. We used one-half bushel baskets with drop handles for picking. Attached to each handle was a large iron hook that could be used to hang the basket on ladder rounds or on tree limbs while being filled. When in the tree the filled basket was lowered to the ground with a rope. Someone on the ground would empty it and hook it onto the rope again. As the trees were large it often took three of us a half day to pick one tree. When I climbed and stood on limbs for that length of time, reaching and stretching in all directions 20 feet or more from the ground, assuming all sorts of positions, risking the chance of slipping feet or a breaking branch, I did not need a school gymnasium to get sufficient exercise. The ladders were 18 and 24 feet in length and the apples in an occasional tree could not all be reached with the longer one. In such cases the two ladders were spliced together.

The picked apples were usually placed in a pile on the ground. When these were to be packed, a load of barrels would be taken to the orchard. Kneeling on a folded blanket, we would grade the apples as they were picked up from the pile and put into half-bushel baskets. To prepare a barrel for packing it was first necessary to headline it. While the hoops held the head in place in the grooved chyme, it was necessary to reinforce it with two pieces of head lining. These were about a foot in length and quarter-round in shape which we bought in bundles of 100's. As these pieces had to be bent into the shape of an arc it was necessary to soak them in a pail of water first to make them more pliable and prevent breaking. After tightening the top chyme and quarter hoops and nailing them to the staves, the headlining would be tacked over the ends of the boards making up the head. The barrel would be turned over so that this head was next to the ground and which became the bottom of the barrel. Then the hoops on the other end would be loosened and the head removed. After bending over the points of nails projecting into the barrel when the hoops were nailed, the barrel was ready for filling. The first step was to "face" it. For this, apples of good color and uniform in shape and size were selected. Less scrupulous packers sometimes selected the largest apples for facing, but this practice was unpopular with the trade. In fact, those of medium size packed and looked better when opened. The facing consisted of one layer placed in concentric rings with the stems down, and another layer placed over the openings in the first layer. The barrel was then filled, shaken down, and leveled off so that the top apple layer projected very slightly above the ends of the staves. The head, usually consisting of about three pieces, was laid on top of the apples with the pieces placed in proper relationship with each other. A press was then used to force the head into place. Screw presses were available in the market but our homemade one was faster operating and more satisfactory. It consisted of a block of wood at the top resting on the head to be pressed; to this were attached two flat pieces of iron, one at each end of the block, extending down half way on opposite sides of the barrel. Two similar flat pieces hooked under the bottom edges of the barrel and extended upward half way on opposite sides. These four pieces were riveted to a semicircular horizontal strip of iron that half encircled the barrel at its middle in such a manner as to form a lever. Placing a foot on this semicircular piece the head could be pressed downward and quickly forced into the chyme groove. While

holding it there with the foot, the hoops would be tightened by driving them down with a hammer and afterwards nailing them. Then the headlining would be put in place and nailed securely. The barrel would then be inverted and the variety written on that head with a heavy pencil, which also served to indicate the end to be opened by the purchaser. The packing pressure was sufficient to prevent any rattling and bruising of the apples during handling and shipping, but not enough to break the skins or crush any of the fruit.

Father's reputation for packing was such that no dealer ever took the trouble to open and inspect them after he had handled them for one season. This was due to the fact that the dealer received no complaints from his customers. Many growers were not allowed to pack their crop; in such cases the dealer insisted on sending his own packers to do the job. Father aimed to obtain his living and pay all farm expenses from the cash derived from field crops and livestock, and to apply the entire proceeds from each apple crop to interest and installments on the farm mortgage. These amounted to about $700. annually, and when they were finally completed he told me that the 5-acre apple orchard had paid all of them. In the latter part of the Eighties he set out a young orchard of six acres, consisting almost entirely of leading commercial varieties, just south of the house and barns. I was then old enough to assist in this planting operation, and in the cultivating and pruning of this orchard in the succeeding years. The principal varieties in this orchard were: Northern Spy, Baldwin, Jonathan, and Wealthy.

Cider and Vinegar Making

Each fall, before the apple harvest ended, enough sound cull apples were set aside to make a 50-gallon barrel of cider. Because of the numerous varieties available, it was possible to select apples from among the kinds known to produce the best-tasting cider. Our first choice was the use of equal quantities of Rambos and Talman Sweets and these were usually available each year. When the weather became cool and the season of frosts arrived, the apples and the empty barrel were taken to a local cider mill. There the apples were run through a grinder and then pressed. The press consisted of several wooden frames, each about five feet square and four or five inches deep. A frame would be placed on the bed of the press, then covered with a piece of canvas that extended over the edge on all sides, and the ground apples poured into the frame until it was level full. Then another frame and canvas was added and filled in the same manner, successive frames being added to hold enough apples for at least a barrel of cider. The top of the press, which exactly fitted inside the frames, was let down onto the apples; then pressure was applied by turning a large screw with a long lever. A trough around the bottom of the press caught the cider and conveyed it directly to the barrel. After the cider was completely extracted, the top frame would be lifted off, the canvas picked up by the corners, and the pumice carried out of doors and dumped. Succeeding frames were handled similarly until the press was empty and ready for the next load.

When we arrived home with the fresh cider, the barrel was usually placed on its side on blocks about a foot high and in a shady place outdoors. A pitcher of this sweet cider was drawn whenever desired, which was quite often. When freezing weather came it was necessary to move the barrel into the cellar, where it usually began to "work" because of being slightly too warm. Within a week or two afterward it became too "hard" for temperance people, and Father would stand the barrel on end so that no one could make any further withdrawals from it.

"The Blow Almost Killed Father"

While oil lamps were used for eating our meals and for reading and studying, Mother generally used candles in the kitchen and pantry and for trips about

the house. She had a candle-mold and made the candles herself, always keepng a good supply on hand. One evening I went down cellar to draw a pitcher of cider, carrying the pitcher in one hand and the candle in the other. The barrel was on its side and there was a small plug in the end. A faucet was usually put in this hole, but for some reason it had not been done. In order to get the cider I set the candle down near me, tapped the plug to loosen it, intending to hold it in the hole after loosening so as to direct the stream of cider into the pitcher held in the other hand. I had previously done this on many occasions without mishap, but in this instance the cider had worked some. When I tapped the plug it suddenly shot out of the hole with considerable force and landed some distance back of me. The stream of cider hit the candle and put out the flame and like the boy who saved the dike, I plugged the hole with my thumb. I had no matches to relight the candle and I could not find the plug in the dark, and probably could not have reached it if I had found where it lay. The only alternative was to call for help. Mother answered from the top of the stairway and supplied my request for matches. She lit the candle and found the plug, after which I drew the cider and replaced the plug in the hole. My clothes were soaked but they were only work clothes so, aside from the bother of changing, no harm was done. Father was not around and neither Mother nor I mentioned the circumstance to him.

A few days later, on Sunday evening, some neighbors dropped in for a visit. I was not around and Father decided to serve the visitors some cider, so he went after it himself. The cider of course had "worked" still more and the plug shot out again. He was wearing his best clothes and they were soaked from his shirt front to his shoes, so that he had to change them immediately. He was quite disgusted but I don't know what he said. Evidently mother told him afterwards of my similar experience, for the next day I heard plenty of not too complimentary words from him. Of course I knew that a nailhole should have been made above the cider level to let the gas escape, and it was my failure in attending to it that caused his chief peeve. When the cider became too hard for our temperance temperaments it was transferred to the vinegar barrel where it soon became real vinegar.

Peaches, The Beginning

When Father bought the old home farm there was a peach orchard of between 130 and 150 trees a short distance back of the barns. The trees probably were set around the time of the Civil War, so that they had reached full maturity or beginning to decline at the time of my earliest recollection of them. They stood in an inclosed lot of about two acres which was used as a hog pasture. The hogs rooted over most of the ground which served to cultivate the trees and probably eliminate most of the grubs and worms. At that time there were only three other peach orchards in the vicinity. Ours, of course, had been planted by my grandfather. One of the others was on an adjoining farm owned by Joe Bain, my uncle and Grandfather's son-in-law; one was on the Sam Tucker farm 80 rods north of our house; and the third was on the Peter Sneathen farm one mile north and one mile west of us. Peter was my great-uncle and my grandfather's brother-in-law. Each of these three orchards was about the same size as our own and the trees probably were of about the same age.

Father put fertilizer in the orchard and pruned the trees well, and they responded by producing some very choice fruit. Most of the orchard was made up of three varieties: Early Crawford, Late Crawford, and Hill's Chili. The Crawfords were exceptionally large and about like good-sized oranges. I recall that some of them would not go inside a large tea or coffee cup but set on top of it.

Father took these peaches to surrounding towns and to Ionia where he had to sell them at a very low price. On one occasion he took some to Hastings 16 miles away and could get only 25 cents a bushel for them. The facts were that no one knew anything about peaches or how to use them at that time. However, those who bought gingerly at first wanted more the next year and so did their friends, and the demand and price improved very rapidly.

Father then rigged up a wagon to haul them properly. He put springs under the wagon box on the bolsters, and slate across the top of the wagon box to support a second tier of baskets which were held in place by the top box. The wagon box held just 12 baskets in a tier or 24 baskets in the two tiers. Ionia, the county seat, a town of possibly 3,000, became our best market and the bulk of the crop went there, a haul of 15 miles or 3 to 3 1/2 hours. There were about a half dozen grocery stores in the city and the most of them would buy a few bushels, often taking, collectively, the entire load. Bankers, storekeepers, and other individuals began coming to the wagon as it stood on the street, and buying for their home needs and asking that they be delivered at the house. The grocers objected to this as it reduced their sales and profits. To pacify them, Father established a rule that he would charge individuals enough extra to equal the dealers' profit, usually 15 to 25 cents a bushel, and would sell to them only the surplus over what the dealers took. This fairness won their complete good will and confidence and no further complaints were made.

The other three orchard owners soon learned that Ionia was the best market, and in a year or two the competition between the four growers became quite keen. Father held the slight advantage he had gained because of his selling methods, his rigid fruit grading, and his honesty of pack. Nevertheless, it soon became necessary to resort to peddling a part or all of the load from house to house in the residence districts. I was about seven years old when this stage developed and Father wanted me to go with him to hold the horses while he solicited sales and carried in the fruit. In the height of the picking season it was often necessary to make the trip every day for several days in succession. This was the routine: Mother and the hired help picked, sorted, and packed the fruit. When we reached home late in the afternoon with the team and wagon, the peaches would be loaded onto the wagon and driven into the barn. In the morning, Father would get up at 2 o'clock or shortly after, build the fire in the kitchen stove and feed the horses, also harness them and do any of the chores that were necessary. Mother got the breakfast and I would get up about 3 o'clock and eat with them. We aimed to be started on the road between 3:30 and 4:00 and to reach Ionia by 7 o'clock or as soon after as possible, hoping ours would be the first load in the city. The others followed the same policy and often one or more loads would be ahead of us. In such cases we often had to peddle the entire load, and tried to be through by noon. The team was put into a feed barn and fed, and we got our dinner at a hotel or restaurant. We then would start home after allowing the horses two hours for feed and rest. I would get very sleepy and often laid down on a blanket on the floor of the wagon box and slept most of the way home.

After peddling for a couple of seasons in the residence districts, I think I had been on practically every street and alley in the city. One section of the city was made up of railroad shop workers and other poorly paid workers who could not afford to buy our best grade. When we asked them to come out to the street and see them, they often said they would like some but could not afford to buy. To supply this type of trade we took along our culls, windfalls, and undersized lots that we could sell for around 75 cents a bushel compared with $2.50 to $3.00 for the top grade. Often they would ask if the fruit was as good in the bottom

of the basket as on top. Our answer was "we will show you"; then we would pour a bushel from one basket into another. We were glad to do this because, after the long ride, even with thorough shaking down when the baskets were filled in the orchard, the bushel appeared a little scant in measurement. When it was emptied loosely into another basket the basket would be running over. This pleased the customer and always aided in making a sale. When a load was all of 1st grade I have known Father to take home $72. or more, and we usually averaged around $60. per load. Occasionally, a prominent citizen would hail us on the street, tell us he was having a wedding or other important function at his home, and ask us to bring him the finest bushel of peaches we could get for him regardless of price. Father would tell him flatly that if he selected such a bushel it would cost him considerably more, but this did not scare men of that type. I can recall our getting $5.00, $6.00 and $7.00 for such bushels and never a kick--only thanks instead. The total returns for the season's crop of peaches was comparatively modest because of the smallness of the orchard, but the unit returns were alluring and inevitably led to steps being taken to secure an increased production.

Peaches, Expanding Production

About 1885 Father decided to set out another orchard. I urged him to set at least 1,000 trees but, being conservatively minded, he set only 500. These were spaced 16 1/2 feet apart each way so occupied only about three acres. Sam Tucker set 40 acres diagonally across from our house about the same year, and an additional 20 acres a year or two later. Peter Sneathen and his son Mark set 20 acres or more at the time, and added another 10 or 20 acres later. All of our neighbors having suitable land for peaches set orchards ranging in size from 10 to 40 acres in the same two or three year period. About one mile east, one-half mile south, and one-half mile west of us the land changed from what we called oak openings to heavy beech and maple land which was unsuited for peach growing. But towards the north and northeast the oak land extended some four miles to Grand River and six miles to Saranac. Towards the northwest the same kind of land reached to Lowell and several miles beyond. Thus, the area that soon was growing peaches included roughly the northwest one-half of Boston township, the northeast quarter of Lowell township, and lesser areas in Vergennes township.

These orchards began producing sizeable quantities by 1890, and many of these same growers continued to set additional orchards throughout the Nineties. The earlier settings were in maximum production by 1895 and the volume of peaches grown in that area became enormous. The lake shore district of Southwestern Michigan and Oceana County were looked upon as the two principal commercial peach districts at that time as they are today. However, while studying the 1899 census data a few years ago I was surprised to find that Ionia County outranked Oceana County in number of peach trees when that census was taken.

After setting our first three acres, and the balance of the field of nine acres to apples as already mentioned, Father decided to set peaches among the six acres of apple trees as they would mature and be ready for removal by the time the apple trees would become large enough to need the space. When this was done it gave a distance between the trees of 16 1/2 feet, and a total of three peach trees for each apple tree or about 750 peach trees on the six acres. This second setting had reached bearing age by 1895 and Father decided to make another setting that year. For this he selected a 14-acre field north of the old apple orchard on the north forty. The trees were set 20 feet apart this time so that this field was occupied with about 1,700 trees. Thus the three settings we made totaled a little more than 20 acres and nearly 3,000 trees. The old trees that Grandfather had set were removed, probably soon after 1890, as they had outlived fur-

ther usefulness.

Peaches, Market Outlets

The expanding peach production from the area already described reached such a volume by 1890 that new markets had to be sought. Father visited the villages of Lake Odessa, Sunfield, Mulliken, Grand Ledge, and the City of Lansing, and in each place made arrangements with the grocers to ship peaches to them as ordered. The Pere Marquette Railroad (then called the Detroit. Lansing & Northern) was built from Grand Ledge to Grand Rapids about 1888, and this gave us good shipping facilities from Clarksville to these points. The baskets were packed, tagged, and delivered to the Clarksville station in the early evening. A way freight train picked them up a little later and delivered them to their various destinations during the night so that the addressees had them in time for the opening of their stores the next morning. Lansing was a city of only about 9,000 people at that time but it had at least a dozen good grocery stores and two or three fruit stands. We sold to all of them and it became our principle outlet for three or four years. Early in this period Father formed a partnership with Samuel E. Bevier, a farmer living one mile north and one and one-half miles east of us and a man with some previous business experience. The firm name was Bevier & Church and they began buying and shipping peaches from the Clarksville depot warehouse in considerable volume and soon extended their market to the towns between Lansing and Detroit. As the volume increased they shipped full carloads in refrigerator cars finally reaching a maximum of four and five cars a day at the height of the season. These went to Detroit, Buffalo, other New York State cities, even to New York City, and one car went to Connecticut.

As the distances of shipping increased the relative profits tended to decrease. There were more actual losses in shipping, more claims for losses and adjustments, and more difficulty in collecting accounts. Father became discouraged with this trend and with the heavy amount of work and risk involved, and the partnership was dissolved probably about 1894. During the three or four years that it lasted Father spent the entire season at the warehouse, so that the management of the orchard fell mostly upon me. I hired the needed number of pickers which varied from day to day, supervised the grading and packing, trained the new and inexperienced help, and hauled the fruit to the station each day. We had a wagon that was equipped to accommodate up to 50 bushels per load, and on occasional days it was necessary for me to make two trips, the last one usually after dark. I also had to keep the labor and shipping accounts and attend to orchard sales.

The orchard trade developed into an interesting and important feature of the business. Farm and town people came in buggies and light wagons from southeastern Ionia County, and from Barry, Eaton, Ingham and Clinton Counties. Many brought their families or a few neighbors, their picnic lunches, and feed for their horses. They were allowed to wander through the orchards and eat all the peaches they wanted, but we did not allow them to pick the peaches they were buying because they did not understand how it should be done. They were inclined to skip peaches that were ready to pick, pick some that were too green, pinch them to test their ripeness, and break off limbs. Many of these people became very good friends and came every year for numerous successive seasons. We encouraged this type of trade because it absorbed practically all of the cheaper grades for which there was practically no shipping demand. Such fruit was satisfactory for peach butter and peach pickles. Despite our efforts to prevent, some first class peaches would be too soft to risk shipping. These were highly desired for canning for they were the cream of the crop, had the full tree-ripened flavor, and were

priced considerably lower than the shipping grade. They were snapped up quickly by the wiser buyer, for which we were glad as they could not be held long and were sure to give perfect satisfaction. This type of trade was so heavy on some days that it took all of my time, but it was interesting to meet so many nice people. Silver dollars were plentiful and much used while paper dollars were scarce. Occasionally, I had to make one or two special trips to the house on a single day to unload my pockets of the accumulated silver. An occasional day's sales would amount to $100. or more, as a few buyers would take a small load for their neighbors or larger loads to peddle. Such loads would range from 5 or 10 up to 40 or 50 bushels.

When a spell of hot weather occurred the fruit ripened so rapidly that the shipments sometimes exceeded the orders on hand. In such cases our principal alternative was to ship the surplus to commission houses in Detroit. They sold them to the highest bidder, deducted a commission of 10% for selling and the freight charges they had paid on the shipment, and remitted the balance of the proceeds to us. When available shipments were small and in good demand, we shipped nothing to these houses but when there was a heavy surplus every other shipper flooded them with peaches. On such days the Detroit bids would slump to almost nothing and the shippers received very little net return, occasionally having to send a check to meet deficits if sales returns were less than the freight charges and commissions. This angered shippers and they often charged the commission dealers with dishonesty in reporting sales. This may have been true in the case of a few dealers, but we rarely suspected anyone to whom we shipped. However, there was much resentment in the community against commission dealers as a group.

In 1895 the crop was by far the largest on record to that date, as many additional trees had come into bearing and all, both old and young trees, were loaded. More than a month before harvesting began we hired a considerable gang of pickers to thin the fruit so that the balance could mature properly. We worked constantly up to the time of harvest and there were 100 large trees that we did not have time to thin the fruit on at all. Those trees returned practically nothing as the fruit withered before ripening. Realizing that our marketing problem would be serious, Father went to Detroit and called upon two leading commission houses who had seemed to treat us fairly in the past. He discussed the situation with them and they told him that if he would ship his entire crop to them, both when the demand was good and when it was poor, they would see that it was sold ahead of those who shipped only when they had no market elsewhere. Father agreed to this, and when our neighbors heard that we intended to deal only with commission merchants they gave us the horse laugh. Of course prices were exceptionally low that year. I had a partnership interest in the crop and kept accurate books. When the season ended, the crop, including every bushel sold of whatever grade, netted an average of 60 cents a bushel. The best that any neighbor reported was 40 cents a bushel average, and they could scarcely believe we had done 50% better than anyone else. Our crop that year was slightly more than 1,700 bushels.

Peaches--the Decline and End

The acreage continued to expand as additional trees came into bearing in each successive year throughout the area. The crops varied in volume, being reduced in some years by a heavy killing of buds from late spring freezes, and suffering only slight freezing losses in others. A fairly good crop was harvested in 1898, making a total of 19 years on both a small and large scale that Father had been in the business. During that time scarcely a tree had been lost by winter freezing, and the area seemed almost as immune from that danger as the lake

shore orchards of Western Michigan. But something was to happen soon that completely changed the picture. January, 1899 was an extremely cold month. For a period of about three weeks the temperature remained below zero almost continuously, and the early morning temperatures were more than 20 degrees below zero on several morning. This long spell of extremely cold weather caused the ice in local lakes to reach a thickness of 18 and 20 inches or more. While we expected some injury to our peach trees, there was a heavy snow covering which we thought would mitigate the damage to a large extent. However, for the first time in several decades Lake Michigan froze completely across from shore to shore. This automatically removed all protection that Michigan Peach orchards had received for so many years from the warming influence of its open waters.

Whole blocks of peach trees failed to put forth any leaves in the spring, and had to be rooted out and burned. Other blocks in more favored spots put out their leaves and offered hope of ultimate complete recovery. These were left standing but some succumbed during the following summer, and the remainder showed unmistakable signs of weakness and disease. In a year or two they were either dead or worthless from disease and had to be removed. A very few new orchards were planted but these developed diseases and had to be removed. Thus died an industry that had made a very liberal contribution to the wealth of the community. No further attempt of a concerted nature was made in that locality to revive the industry. Many of the growers, like my father, considered it the logical time for them to retire from farming. They rented their farms and moved into the surrounding towns, thereby leaving no incentive for reviving an industry that depended upon highly skilled management for its success.

THE BUSINESS OF FARMING--Chapter IX

Earned Income of a Farm Boy

The farm boy of the early Eighties had few opportunities for earning money, and my case was no exception. My mother possessed the habits of thrift and saving characteristic of the English people who had migrated to America. She encouraged me to earn and save the few pennies that occasionally could be obtained in sundry ways. The first earnings I can recall were from the gathering and selling of nuts. Scattered over the fields and fence rows of the farm were about 25 shagbark hickory trees, evidently saved to provide shade for livestock in hot weather. These trees produced a considerable quantity of nuts in most years, and after the first heavy fall frosts had brought a large portion of the crop to the ground, I would take a sack, a basket or two and my little express wagon to a tree and spend many hours shucking and gathering these nuts. If the picking was good and the shucking was easy, two or three pecks could be gathered in a day, but when conditions were less favorable the day's harvest would be much less. The nuts would be taken into the attic and spread thinly on newspapers laid on the floor. In about three weeks they would be dry enough to be put in bushel baskets. Friends from town would learn about them and usually bought all we had over our own needs, paying about $1.00 a bushel. While the pay was small the gathering of the nuts on pleasant days was enjoyable. There also were two butternut trees from which I gathered the crops and sold a part. Many farm fence corners had hazel bushes and I picked those nuts, too, but the gathering was slow and the husks were harsh. These small nuts were highly prized but there were seldom more than we could eat ourselves.

My mother offered to give a sum of money if I would read the Bible from beginning to the end. This I did and received the promised sum. I am not quite

certain as to the amount but believe it was $1.00.

English sparrows began rapidly increasing in numbers about that time, and were consuming much threshed grain as well as pecking the grain from the heads of standing wheat and after it was in the shock. Father made war on them with his muzzle-loading shotgun and allowed me to shoot all I could. Soon afterward the county offered a bounty of three cents per head for sparrows killed and the heads delivered to township clerks. I was a fairly good marksman but the ammunition used reduced the returns considerably. Also, it took several weeks to accumulate sufficient heads to make it worth while to claim the bounty. After being kept for some time in warm weather they would become quite odorous--what might be termed an offal smell. In such cases the town clerk did not take the trouble to count them, but simply took my word for the number and disposed of them as quickly as possible. I was able to get a considerable number quite easily by watching the nests and taking the young birds just before they were ready to fly. While at home on a wintry Saturday from the Saranac school, I went to the hog house and found a large flock of sparrows feeding in the pens. The only open doors were two small ones used by the hogs, so I ran around the building and closed them. Then I went inside and began knocking them down with a lath as they flew back and forth. The building was two stories high and when I was on one floor the birds went to the other, so I went to the house and asked sister Lena to help me. We had to stop for dinner with some birds still there, so came back and finished them later. There was heavy snow on the ground and this was about the only place the birds could get feed, so others kept coming and were caught in the same way. When I sent nearly 200 heads to the town clerk in one lot, it created some talk as that was the largest lot he had ever received. There was a story about it printed in the Saranac Local, and a few days later one of the boys in my class brought me a clipping he had taken from the Detroit Free Press which told in elaborate detail the story of my sparrow catching methods. The only money I had earned during my first 17 years of life was in these small ways and the total was very small.

My First Entry Into Business

During my first winter in Grand Rapids I realized that the time had arrived when I should make the important decision regarding my future. Father wanted and needed my help on the farm, and promised me a share of the proceeds if I would remain with him. Students were finishing their courses at the business college and, one by one, taking stenographic or bookkeeping positions with leading business firms. I felt confident that, when my business course was finished, I could make good as an accountant and it would be a type of work that I really liked. Yet, I hesitated because I was not a good penman and because writing with a pen would never be easy for me. Also, I was timid about taking on responsibility in some business that I knew nothing about and with people who would be strange to me. Of course, my South Boston friends urged me to stay on the farm, considered it a duty I owed to my father, and deemed it a good opportunity. I had very little liking for either general or livestock farming, but did enjoy the fruit-growing business. I felt, too, that I could make use of my commercial training by keeping a regular set of books for the proposed partnership farm business. After carefully weighing the matter from all angles I decided to accept my Father's proposition.

Accordingly, in the spring of 1893, I went home to the farm to be fully on my own thereafter. The name of the partnership was E.E. Church & Son, and a supply of letter-heads and envelopes with that caption was ordered from a printer. My services were to offset those of my father, and the cost of all additio-

nal labor was to be shared equally between us. I was to receive one-fourth of the returns from sales of crops and livestock, with necessary adjustments for maintaining the farm herds at the same level as at the time of beginning. We immediately made an inventory of the livestock, grain and hay on hand, and I opened a set of books according to standard bookkeeping principles as learned in business college and in accepted use at that time.

The World's Columbian Exposition

The only previous fair of national scope was the Centennial Exposition of 1875 held in Philadelphia, celebrating the 100th birthday anniversary of the United States. I remember my grandfather telling me that he attended it and how wonderful the exhibits seemed to him. As early as 1890, perhaps earlier, Chicago began promoting a World's Fair to be held in that city in 1892. All nations were invited to participate and plans were pushed rapidly. Despite the early start, the preparations could not be completed in time to celebrate the 400th anniversary of the discovery of America that year. Many of the buildings were only partly completed and some were not yet started, so it did not open until the summer of 1893. Only two or three buildings were of permanent construction, the vast majority being a skeleton structure on a steel frame with a stucco coating on the outside. The site was in the present Jackson Park on the shore of Lake Michigan, a beautiful setting with its numerous ponds and lagoons. There was continuous publicity in the papers and magazines about it, but not much enthusiasm was aroused in our neighborhood. I did not expect to see it and Father's most important comment simply was that he would like to see it.

Mr. and Mrs. James English (Early English's parents), who were great friends of my father and mother, begged my parents to go with them to the Fair in June which they did. The farm was left in my care, with a month hand and one man hired by the day to help me. During the two weeks they were away I helped with the field work and the chores and prepared the meals for the two men and myself. Cooking and housekeeping was an entirely new experience for me, and I was glad when the ordeal was over. I know the hired men were, too, although they considerately refrained from complaining of my cooking.

When Father left he asked that I write soon and let him know how things were going with us. I sat down one evening at my desk to write the promised letter. When the first two lines had been written on the sheet I noticed that, accidentally, the last words rhymed. This inspired me to continue in like manner, and the letter was finished that evening. The folks made no mention of my poetic effort in their reply, but when I received the next issue of the Saranac Local and saw my letter in verse form, I nearly fell over with surprise. This is the unworthy result of the effort just described.

"Ode on Going to the World's Fair"

In Chicago you did arrive all safe
Of which I am very glad;
If you get good meals at a 25 cent cafe
It will not be extremely bad;
And it surely will not seal your doom,
If a dollar and a quarter you must pay,
To secure a decent room
Along the Chicago elevated tramway.

Much work in three days has been wrought,
And as the weather is very warm,

We have many a serious thought
Of an approaching storm.
The potatoes are bugged,
The plowing is all done,
The corn has been slugged
And will be harrowed at the set of another sun.

One morn Old Fred I did curry,
And shortly after gave him his grain;
And through his own great hurry
A touch of the colic he had was very plain.
But a dose I gave him of P. P.
Which cured him in a hurry.
Every such thing we can stop in a breath,
So don't you ever worry.

Now for once do take my advice
And stay where you are;
Do not flee from bedbugs or lice
Until you are ready for the car.
See all you can, have lots of fun,
Drink plenty of pepper-sauce and beer;
And be sure not to come home
Until you're ready to stay a year.

At the insistence of my parents after their return, I decided to attend the fair. Accompanied by Ernest Collar, a schoolmate, the trip was made in August. Although 18 years of age, I had never been outside of Michigan nor more than 50 miles from home. Hence the train trip and 10-day stay in a large city was a novel experience for me. We roomed and boarded at the same private home that Father and Mother had utilized, and spent every day at the Fair except one. On that day I went down to the Loop district and visited the Panorama of Andersonville Prison. Immense paintings portrayed the layout of that famous prison, and a soldier who had been confined there escorted and gave us a minute description of his own experiences and those of the others who had suffered so severely in that horrible place.

We also went down to the Loop one evening to see the famous play of "America" at the Auditorium. That was the greatest spectacle of its kind I have ever seen. We got a seat in the 7th gallery (there were more galleries above us) and it seemed as if we were a quarter of a mile from the stage. There were more than a thousand actors and 400 beautiful horses on the stage at one time. Our seats seemed rather expensive for those days as they cost, if I remember correctly, $2.00 each.

At the fair I carried a notebook and made many notes, but the book was lost many years ago and my memory retains very little of what we saw at that wonderful show. It was there I saw the first horseless vehicle. It was a bus propelled by steam as gasoline engines were not in use yet. At the dock I saw replicas of the three boats Columbus used when he discovered America, and we were allowed to go on one of them and inspect it. We remained on the grounds one evening to witness the most wonderful fire-works I have ever seen. They were fired from rafts on Lake Michigan and formed pictures portraying important events in the history of America. The other evenings were spent at the rooming house, where we were glad

to rest after nine or ten hours of constant walking and standing each day. The Art Building, which was one of the few permanent buildings, later became the Field Museum which we visited one or more times while living in Chicago in 1905.

The Financial Depression

The economic depression that reached its low point in 1893 was felt more severely than any other during my life time. It was explained as being a scarcity of money, and that probably was as logical a definition as any other. It can be said truly that money was scarce with most individuals and very little to be obtained from any source. Industry was much less and agriculture relatively much more important than is the case today. Prices of commodities and wage rates of labor were very low. There was no Santa Claus in Washington then to put non-workers on the dole or pay subsidies to farmers or anyone else. Prices of all farm products fell to an all-time low. Wheat sold at forty cents a bushel, oats at ten cents, and corn at fifteen cents per 56 lb. bushel (two baskets). Good breeding ewes were a slow sale at $1.00 per head, and live hogs brought less than $3.00 per hundred pounds. All other products were on nearly the same low level.

To make matters still worse there was practically no rain during July and August, and the corn and other spring-planted crops were light. Also, the fruit crops were the smallest in several years. With little to sell and with prices very low, the farm returns for 1893 were disappointingly small. Our bill for hired labor was not reduced in proportion because the orchard pruning and planting operations were no less than in other years. As I had to pay one-half of the labor expense from my one-fourth share of the income, my share of the net remaining was very small in this first year. Despite my supposed ability as a trained accoutant, I could make my share of the net gain only $60. for the year. I did an equal amount of all kinds of work as the hired man, during the six or seven months that he was employed; and in addition, I often did some work in the evening as well as working a month before he began and two months after his services ended. Yet, he was paid about $120., as agreed, for the crop season. Of the $60. I received, $35. was used for the World's Fair trip, and the remaining $25. was spent at one time for a suit of clothes and other needed articles of clothing. Thus my bank account stood the same as at the beginning of the year, and I had to draw upon it for expenses while completing my commercial course at Grand Rapids.

The Chautauqua Literary and Scientific Circle

I had heard that there was a reading circle of some sort in South Boston. I knew nothing about it except that Mrs. Ida English was a member, so I asked her about it. I learned that the few members had nearly finished the four years' course, but she urged me to take it up and carry it through alone as it was primarily individual reading anyway. The exact time that I enrolled is forgotten, but it probably was soon after I finished by business course at Grand Rapids, which was early in 1894. The headquarters of the Circle was at Chautauqua, N.Y., and the course consisted of reading five prescribed books each year for four years; also reading The Chautauquan, a monthly magazine, during the same period of time. One year's reading was devoted to the Roman period; another to the Greek era; another to England and Modern Europe; and the fourth to America. The five books included, in general, one each on literature, art and history, one on some related subject or country, and one on a science. The sciences included in the course were: Geology, Astronomy, Anthropology, Psychology, and Economics. The scope of the course, therefore, went far towards equalling that required for a college degree in liberal arts. No examinations were required but members were urged to take them. As an inducement, a seal of a certain color would be attached

to the diploma for each subject passed, and one of another color for each year completed. I elected to write all of the examinations, and succeeded in passing every one of the twenty subjects. The course was completed a few months after my marriage. The books are in my library, and I have always considered the course of reading as time very well spent.

Incidental to the above, the book on the subject of Economics was written by Dr. Richard T. Ely of the University of Wisconsin. When in Washington in 1928, I spent the Washington's Birthday holiday at the aristocratic Commons Club as the guest of Nat C. Murray, a former assistant chief of our Bureau. While there we ran across Dr. Ely and Mr. Murray introduced me to him. He then was nearly 80 years of age but well preserved. When he was past 80 I read an account that he had married; later, when he was 83 a child was born of that marriage. He died two or three years after the latter event.

The Season of 1894

This year proved to be even drier than the previous one. The spring rainfall was less than normal and, from the first week in June until September, scarcely a drop of rain fell. Corn made slow growth and seemed so nearly a failure that another field was planted around the fourth of July, hopeful of getting, at least some fodder from it. The hay crop from 30 acres was only eight very small loads, being so short it was impossible to build a load on the hay rack. Some of it had to be raked by hand because it was so short that it slipped through the horserake. This bit of hay had to be rationed to the horses, during the following winter, at the rate of one small forkful a day. The rest of their feed consisted of straw and cornfodder which are not considered good feeds for horses when used in such large quantities. The cattle and sheep had to subsist entirely on these during that winter.

However, there was a fairly good quantity of fruit that year. It was our custom to plow the orchards each spring and to keep them clean of weeds during the summer by using a spring-tooth harrow. Because of the extreme dryness we kept the harrow going almost constantly, also the cultivators in the corn fields, in an effort to conserve as much moisture as possible. In addition, we made a trench around each tree and put in pails of water that we hauled in barrels. We managed to bring most of the fruit to maturity and, while prices were low, the returns gave us a somewhat larger income than in the preceding year.

My First Top Buggy

For a number of years I had urged Father to buy a top carriage, but one excuse or another always cropped up to delay the purchase. Many of the other boys in the neighborhood had one and were taking girls to parties continuously. I hated to ask any girl to ride in our old open run-about as it offered no protection from storms or cold weather, and compared with a carriage about as an old battered jeep would with a shiny new automobile today. Now that I had some money of my own, I determined to buy one and put myself on a par with the other boys. No one since has ever had more pride in a new automobile than I did in acquiring that carriage. I resolved not to mention it to any of the girls, but when I would meet one they usually greeted me with the remark that they had heard I had a new carriage. The first one making such a remark was promptly asked if it meant that she would accept an invitation to ride in it. Her quick reply was: "Try me and see". I tried and I saw. While the $75. paid for the carriage was, relatively, as great an outlay as the spending of $1,000. for an automobile today, I still think it was the most satisfactory investment I ever made.

Experience as a Lumber-Jack

We had 15 acres of original-growth woods on the farm which Father often had

said he intended to keep permanently. The wood we cut each year was from fallen trees and from those that were decaying and dying. Father noted that the trees were beginning to die at an increasing rate, so he determined to salvage the remainder by cutting the large trees and leaving the young ones to gow and eventually take their place. The timber consisted mainly of oak, ash, elm, hickory, and a few other species. The oak was by far the most predominent and he began looking around for a market. The Grand Rapids furniture factories used much red oak but ours was mostly white oak. They would take only the choicest trees and the price they offered was unsatisfactory. Oak was in demand for railroad ties, so he contacted the Pere Marquette Railroad officials. They offered a good price and would accept delivery on their right-of-way at our nearest point which was only three-fourths of a mile from the woods. The ties were to be sawed about 5 X 8 inches and 8 feet long, and the Company would take anything that was sound oak timber. Father then arranged for a portable sawmill to be set up in the woods late in the winter when we would have most of the logs ready.

Father hired a couple of men with previous experience in wood sawing and they went to work early in November to cut the trees, saw them into 8-foot lengths, and to trim and pile the brush. I worked with them and thus gained some experience in the art. There was no snow and the woods were nice and dry, but this was not so good for getting the logs out of them and onto the skid pile where the mill was to be set. After waiting a while for some snow, which did not arrive, Father told me on the morning of Thanksgiving Day to take the team and start skidding logs of which a considerable quantity had already been cut. For this I used what we called a "toad". There is an official and better sounding name for it but I cannot recall what it is, so we will let it go at that. It consisted of two plank runners, each about six inches wide, and about three feet apart. Each was turned up at the nose and a cross-piece of plank was bolted to the two noses. A square wooden bunk across the middle supported the logs, the rear ends of which were allowed to drag along the ground. The bunk being only a few inches above the ground it was comparatively easy to roll small logs onto it with a canthook over a couple of small round skids placed with one end resting on the runners. When it came to the medium and large-sized logs, it was necessary to roll them on with horse power. Both the horses and I were awkward as we had never done this kind of work before, nor had I ever seen it done. Father almost lost patience with me when he found that I did not know even how to hitch the chain to roll the logs properly or to hold them in place after loading. However, he showed me and I soon learned the procedure. At first, the horses would roll the logs too far or not far enough but they soon learned, too. After that I began to enjoy the work and continued at it throughout the winter. The snow finally arrived about the 1st of February, and I took advantage of it to get the largest and heaviest logs to the skids.

In the meantime, the saw mill had moved in and was sawing the timber into ties. Father hired men and teams to haul the ties to the railroad, and also hired George Gross and his team to help me finish the skidding in time for the mill. He and I enjoyed working together and we became the best of friends. During the log cutting operations, Father had selected some of the best logs for use as lumber and timbers in rebuilding our main barn. These were sawed by the same mill and used during the following summer for the intended purpose. When a settlement for the time was reached with the railroad company, Father received a check for over $1,000. As this was connected in no way with our farm partnership, Father paid me the standard wages for the labor I had done on this job.

The Busy Year of 1895

We had raised a pair of colts and, at the beginning of this year, they were old enough to be broken. Father started that task but he had only a little experience, did not particularly like it, and we were still busy with the logging operations. He decided it would be best to employ someone to give full time to it and get the colts ready for farm work in the spring, and succeeded in hiring Lew Pratt to handle the colts. He liked that kind of work, and had previous experience in breaking colts on their own farm. About a year before this, after having worked steadily for some time in a hardware store in Ionia, he had been called home by the illness of his mother. Her trouble, I believe, proved to be tuberculosis, and she succumbed after a lingering illness of six months or more. Business was dull and Lew could not get his old job back again and, also, he felt the need of staying near his father, so he was glad to have this job. When it was about finished it was then time to start pruning orchards and get ready for the season's farm work. We made a deal with him to work for us by the month for the entire season, so, for the first time, we had the opportunity of working together for almost a year. It proved to be my busiest season of any spent on a farm. In addition to the work already described, there was the regular routine of crop production; the harvesting and marketing of an enormous crop of both apples and peaches, the largest in our entire fruit growing experience; and the extra work of moving and rebuilding our barn.

In A Runaway Accident

On a rather cold Sunday morning in the spring, Lew's father came over to spend the day with him. We decided to hitch up the colts and drive over and make a brief call on the English's, primarily to give the colts some exercise. On the way home from this call as we were a short distance south of the Grange Hall, one of the colts playfully kicked up his heels and came down a-straddle of the buggy tongue. This frightened him and his foot striking the other colt scared that one, too. They began to run and it was difficult to guide them. Lew was driving and the wheels on his side veered into the ditch, so that he rolled out taking the lines with him. I was in the front seat with him and decided to roll out too, as did his father. That left Father sitting in the back seat alone and we yelled to him to jump. This he did and landed safely on a grassy bank. Down the road quite a distance ahead was a family with a horse and buggy jogging sedately along the narrow road on their way to church, and unaware of the oncoming team. Mr. Pratt yelled as loud as he could and the man heard and looked around. He quickly took to the ditch as our team dashed by. About a half mile farther ahead, a man in the road succeeded in stopping the runaways and holding them until we arrived. None of us were injured and the buggy was damaged only a little.

Remodeling the Barn

As soon as the early spring planting was completed we started work on the barn. The first task was to move it back about 50 feet as the ground was practically level. A professional mover was employed and we hauled the necessary cribbing from town, to be used in supporting the building while the supporting wall was being built. The building was moved on rollers by means of a rope wound around a capstan, and the capstan turned by a team of horses. It was my job to sit under the capstan and hold the end of the rope after it was wound several times around the capstan. By holding it tight, the rope gripped the capstan and the building moved as the team travelled in a circle around it. When a stop was ordered I simply released the rope and allowed it to slip until the horses could be stopped. The moving was completed in a very few days and the barn rested on the piles of cribbing.

Then a crew of four or five stone masons came and went to work on the wall.

The front wall was 70 feet long and 8 feet high; the back and end walls totaled 150 feet in length and about 3 feet in height. All of the walls were two feet thick. The facing on both sides of the wall were to be flat surfaces, hence had to be obtained by breaking large rocks. Many fence corners on the farm were full of both large and small stones; also there were about 60 large stone piles scattered over the fields accumulated over many years as the stones had been removed from the plowed ground. Father wanted to get rid of these stone piles, so planned to use as many as possible on this job. The stones were known as hard-heads and were very hard to break. A man would often have to work on one with a stone hammer for two or three hours just to split it and get one flat surface. Occasionally a very large stone could be split only by chiseling a groove around it, then building a fire on top of the groove. Not all of these hard-heads could be broken smoothly, but the masons could usually tell in advance by the nature of the grain whether it could be used. They went about the farm and put chalk marks on the ones they thought they could use, so that we did not have to move any needlessly. A lot of small stones could be used for filling, so Father told Lew and I to take the two teams and haul stone. The colts were to be hitched to the wagon and haul the small stone, and the old team was to haul the big stone on a stone boat. Lew promptly said he would haul the small stone, and I was secretly pleased with the arrangement.

The colts were not experienced in pulling heavy loads but they could handle a loaded wagon much easier than a stoneboat which slid on the ground. Both my team and I had received good training for this work by having done the logging in the woods during the previous winter. Many of the large stone I handled were three to four feet in diameter and extremely heavy, and one such was all that the team could pull. I would go to the field and place the boat beside one of the marked stones, wrap the chain around the stone in a roll-hitch, and the team would roll it onto the boat. Then I would drive to the barn and roll it off with the team in the same manner. As the loading and unloading usually requires only a few minutes each, I was merely traveling to and from the field the greater part of the time. I seldom had to do any lifting or handle the stone with my hands. On the other hand, all the stone that Lew hauled had to be lifted onto the wagon with his hands, and the most of them had to be unloaded in the same way. These ranged in size from stones as large as he could lift readily down to ones no larger than a base ball. Within three or four days the skin on his hands had worn through, after which he could work only with leather gloves and those had to be renewed every few days. We worked steadily at this job for a month or more. A driveway had to be built in front of the barn so that teams could be driven onto the barn floor which was now eight feet above the ground. A retaining wall seven feet high at the back, and two side walls seven feet high at one end and sloping down to the ground level at the other had to be built. This driveway probably was 25 feet wide and the whole interior was filled with the smaller stones. Lew and I worked together with a team and wagon for many days to fill this big space. We cleaned up several stone piles in this way, and more than a dozen large stone piles were used in this barn job during the season. The driveway was then covered with a layer of dirt which we also hauled.

After the barn wall was finished, the barn was let down onto it. The original barn was 52 feet in length, and we built an additional bent of 18 feet, making a total of 70 feet. Then new siding and a new roof were put on, and the building painted. Two carpenters had the contract for this work and the job was finished early in the fall. Then we put in about 2,000 square feet of cement floor, doing the work ourselves. All of the cement was mixed by hand with shovels

and hauled on a wheelbarrow. We also laid an underground water pipe into the basement and attached it to a tank, as a supply of drinking water for the stock. Then we built stalls, mangers, and partitions for five horses and a dozen cattle.

Sleeping in the Barn

All of the workmen on the new barn and most of the extra help hired to keep the farm work going had to be provided with sleeping quarters and their meals. As there were about 10 of us working most of the time, it imposed a heavy load of work upon my mother. The workmen surely realized this and, as soon as the new crop of hay was stored in the old barn, they proposed to sleep in the barn on the hay. Lew and I elected to do likewise as it provided cooler sleeping than in the second story of the house, and saved some work for Mother.

One evening, as the last daily item of chores, I led the four work horses down the road to a pasture field south of the orchard where they were turned loose for the night. In the gathering darkness I saw two girls coming along the road from the opposite direction. By the time I had rid myself of the horses the girls had reached the gate, and I discovered that one was Cora Bonnard who worked for the Stannards three-fourths of a mile west, and the other was Lizzie Hughson who lived about the same distance to the south and east of us. Cora had been visiting Lizzie that afternoon and Lizzie was walking part way home with her. We stood and chatted together for awhile until it became quite dark. I told them I would walk home with one if they could agree as to which it should be. As Cora lived on the main open highway while Lizzie lived on a by-road that ran past our woods, they decided that I should escort the latter. I hung the halters on the gate post, picking them up on the way home somewhat later in the evening. When I reached the barn I found the men in bed but awake. They told me that my father was looking for me and that I had better report to him. I went to the house and, although, past his bedtime he was sitting in the dark waiting for me. It developed that, when I had not returned promptly, he became fearful I had met with some accident. He had gone to the pasture where he found the horses peacefully grazing and the halters at the gate, then he had returned to the barn to see if I had returned thus informing the men about my mysterious absence. I received a sharp reprimand from him for failing to previously inform anyone of my wanderings, and plenty of razzing from the men during the remainder of the summer. Thus was my intended gallantry rewarded. The "accident" I had encountered actually was not as serious a one as he had feared.

Disappointing Returns from Apples

The peach crop that year was the largest one harvested up to that time, and has already been described. While low prices prevailed the total returns represented a sizeable amount in that depression period. However, the marketing of the season's crop of apples provided quite a different story. The crop, particularly of the winter varieties, was an extremely large one. In advance preparation for the harvest we had bought and stored a full carload of barrels. Now that we had a nice, roomy basement in the rebuilt barn, we hauled each day's pick of apples into it and placed the fruit on piles of clean straw. Here they could be kept dry, sorted, and packed regardless of the kind of weather prevailing outside.

When the picking was completed a shipper came to buy them. After looking them over he made an offer of $1.00. per barrel, the packing to be done and the barrels furnished by us. As the usual allowance for packing was 10 cents and for the barrel, 25 cents, the offer represented 65 cents for three bushels of high-grade apples. This seemed a very low price and, too, he wanted the apples packed and delivered immediately. I argued for acceptance of the offer but Father thought we should husk our corn and get it under cover while the weather was good

and leave the apples to be packed afterward. His idea was followed but, when the packing was finished several weeks later, it was found that the dealers had closed up for the season and would not buy them. About the first or second week in December we induced the one who had made the original offer to consider them. He offered then only 90 cents a barrel as the market was very weak but wanted to see how they had been keeping in the barrels. When we opened a few of them we found many of the apples had small specks of rot, evidently the result of being too warm in the basement where the livestock were housed. To make them fit for sale would necessitate the unpacking of every barrel, sorting, and repacking such as were still fit. This would have been a big job and a loss of perhaps a third of the apples. Father went to Clarksville and consulted the owner of the apple dryer there. He agreed to reopen his dryer after the holidays and take the apples at 15 cents a barrel. I hauled them to the dryer in the barrels, opened them there, and took the empty barrels back home. The heads were put back in these empty barrels, which by the way is not easy to do, and then stored them away for use in another season. Thus we still had our investment tied up in the barrels, an amount considerably in excess of that received for the apples, and no compensation for the many days of labor performed by ourselves and hired men. This heavy loss was naturally discouraging to me, but the income I received that year from the heavy peach crop and other sources exceeded the total I had obtained in the preceding two years under the partnership arrangement.

Father and Mother Go To Florida

My father's income in 1895, being larger in the same proportion as my own and three times greater in amount, netted him a very respectable sum. In addition, he had received more than $1,300. from the Pere Marquette Railroad Company for the railroad ties delivered to it in the spring. This amount really represented a bonus to him as it was nonrecurring in character and from a source outside of the usual farm operation. Because of this fact and his desire to travel and visit several old friends then living in southern states, he announced that he and Mother would journey southward and spend a considerable portion of the winter in Florida. The building operations in addition to the work involved in harvesting the large crops of both peaches and apples made the season a strenuous one, and I did not blame them for wanting a vacation. My only concern was how I could handle both the outdoor and household duties during the cold winter months. But Father hired my cousin, Warren Britten and his family, living near Laingsburg, to come and stay with me during the winter while he and Mother were spending the winter in Florida. Warren helped with the chores, wood cutting and hauling, and any other work to be done, while Florence attended to the housework and meals. Warren was a very fine fellow and we had a good time working together, and particularly enjoyed the comfort of the warm basement barn while doing the chores. Father spent most of his stay in Florida at Bradentown, where an old army comrade by the name of Frank Scarr had a fine orange grove. He had formerly lived in South Boston but left there before I was old enough to remember him. Father had kept up an occasional correspondence with him, so their reunion in Florida was a happy one for both. He had one son in the Weather Bureau at that time, who later worked up to the position of official in charge of the New York City office where he remained for many years until his death. His name was Dr. James H. Scarr and, although he was in the Service throughout the years of my Weather Bureau experience, I never had the opportunity of meeting him.

Another Winter of Logging

The owner of the mill that had sawed our timber during the previous winter kept the mill in our woods for a time after finishing our job. He bought timber

from surrounding farms, hauled it to the mill, cut it into ties, and sold it to the railroad. Then he moved the mill to a point, about three-fourths of a mile west of Clarksville, which was close to the railroad. He continued to buy and saw timber from farms in the vicinity, one of his purchases being the timber on the Chapman farm one-half mile east of us. It consisted of 20 acres or more and was bought on the stump. He put a gang of men at work cutting the timber and the job was finished around the holiday season. Then he sought someone to haul the logs under contract. George Gross, who had helped me skid the last of our logs and who lived just east of the Chapman woods, and I took the contract. Each of us had sleighs but neither one a set of logging trucks, so we expected to move the logs when there was snow enough for sleighing.

It was unseasonably warm during the holidays and there was rain instead of snow. All we could do was to skid logs out to the edge of the woods and pile them up to await the arrival of snow which did not come until about the middle of January. When it came there was nearly two feet of it; but it was so light, dry and fluffy that it would not pack. The sleighs cut through it to the ground and loads could not be hauled with them. We were anxious to get started as it was getting to the middle of the winter season, so each of us built a toad about four feet in width that would carry a larger load than our old ones. We began hauling logs to the mill with these and they gradually packed the snow. It worked quite well at first but when a steep hill became slippery, the load would run forward onto the horses heels because there was no tongue to hold it back. We rode the rear end of the logs dragging on the ground as a brake to slow the loads, and speeded the horses up in a fast trot in an effort to keep them out of the way. This was dangerous business and we soon substituted the sleighs. We then made good progress for a time, but the snow began melting and bare spots appeared in the road. This made hard work for the horses and we had to reduce the size of the loads. Before the middle of February we were virtually hauling on bare ground, and decided we must give it up. We hired a man and team with a set of logging trucks, and he hauled the rest of the logs on wheels.

During the time we were engaged with this job, we would reach the woods before daylight and occasionally had to wait until it was light enough to load up. The last load at night was usually loaded in partial darkness and the trip to the saw mill made after total darkness, a distance of 2 1/2 miles. Then after unloading, the trip home was three miles. Thus we were away from home from 6 a.m. to 7 p.m., except for an hour at noon. Because of the delays and difficulties, and the expense of hiring the logging truck, the entire job netted us considerably less than ordinary day wages with no earnings for the teams. That was my first and also my last contract as a logging operator.

FIRST GLIMPSES OF FUTURE DESTINY--Chapter X

One day I was engaged in the perennial task of hauling manure from the barnyard out to the fields. Perched erect on a load of this odoriferous material I drove from the barnyard onto the highway and headed westward past the house. As I approached the front of the house, a young lady drove up with a horse and buggy and stopped at the hitching post near the front gate. I did not recognize the driver although I may have suspected her identity, nor was I anxious for making any new female acquaintance at that particular moment and in the special garb I was wearing. What attracted my attention was her method of alighting from the buggy. Instead of stepping out backwards in the usual way, she stood up in the buggy, put one foot on the top of the front wheel, and jumped to the ground.

She landed rather lightly as she was only slightly more than five feet tall and weighed no more than 100 pounds, but such an athletic maneuver was comparatively rare among young ladies in those days. I thought I would like to meet her whenever circumstances were more auspicious. Later in the day I learned that her name was Cora Harker and that she was to give weekly music lessons to my sister, Lena, and before many weeks elapsed I arranged, conveniently, to be at the house on the occasion of one of her visits. This may have been as early as 1894 or as late as 1896, as I now have no means of fixing the date more accurately. Probably I had seen her before at one or more social functions, but believe this was our first acquaintance.

On July 4, 1896, our Congregational sunday school held a picnic in the grove on the north side of Morrison Lake. I took my sister Lena to this picnic, using my own single buggy. While standing at the boat landing after dinner, I saw Cora standing nearby and invited her to take a boat-ride with me. She accepted but wanted to do the rowing and, of course, I humbly submitted. We pulled across the lake and for a distance along the south shore, then started back across the lake as a thunderstorm was threatening and we had nothing to protect us in case of rain. By the time we were in mid-lake the wind suddenly rose to a gale from the northeast. It was almost impossible to make headway against the wind, so I took the oars. I had never been on a lake under such conditions and neither of us could swim so I decided to turn about and go with the wind to the south shore. The waves drove us rapidly forward and onto the beach with considerable force, where we sat on a log to wait for more favorable weather. Fortunately, only a few drops of rain fell and the storm soon passed. We then returned to the picnic grounds, and I suggested that we stay until evening. When the gathering broke up in the late afternoon I sent Lena home with a neighbor; and we remained for a time, taking supper at the Lake Hotel, and taking Cora to her home afterward. I felt it had been a very pleasant day for me, but I doubt that either of us anticipated any future follow-up of this chance meeting at that time.

It was the custom of the Pere Marquette R.R. to run cheap excursions on Sundays to various points. One of these places was Ottawa Beach on Lake Michigan near Holland, and the round trip rate was $1.00 per person. I had never been there and had a longing to see the place. When such an excursion was announced for a Sunday early in August, I thought it an opportune time but had given no thought about a final decision or what girl, if any, that I might take with me. The hired man and I were mowing weeds one afternoon along the roadside some distance south of the house. It was an extremely hot day and I became very thirsty. I went to the house, got a drink, and returned to my job. While at the house I noted that Cora's horse was at the hitching post and that she probably was inside giving the weekly music lesson. After working a little while and thinking about the excursion, I told the hired man that I did not feel very well and was going to the house to rest. I reached there as she was about to leave and asked her to accompany me on the excursion trip. She agreed and we went on the scheduled date. Arriving at Ottawa Beach we found only a few buildings and but little development there, so ferried across the Black River which connected Black Lake with Lake Michigan to Macatawa Park on the south shore. There were a few houses on the wooded slopes of the sand dunes but many less than there are now. We ate the lunch that Cora had prepared and brought with her, and spent the afternoon viewing the lake, wandering over the dunes, and playing in the sand. We had no bathing suits so we neither hung our clothes on a hickory limb nor went into the water. We arrived home in the evening after having this second pleasant time together.

Attempted Purchase of a Farm

Adjoining the middle portion of Father's farm, on the east side, was a farm of 55 acres bounded on the other three sides by highways. There was a large 10-room house, a barn, granary, and a few other small buildings. Also there was an old apple orchard of about five acres, 1200 2-year old peach trees, and 800 peach trees of bearing age, or about 25 acres of fruit in all. The owner, Henry Nelson, was understood to be in difficult financial circumstances and probably would have to sell it. He was an extremely conscientious and religious man, a member and deacon of our church, and superintetendent of the sunday school. He was a poor financial manager and had offered the farm for sale several times, but would always back out of each deal before it could be completed by the buyer. It was the old Nelson homestead and he hated to let it go because of sentimental reasons. About mid-summer of 1896 I heard that he would be forced to lose it soon, and I suggested to Father that I would like to buy it. He raised no important objection and when, one day, Henry and I were working in adjoining fields we stopped to chat a few minutes. I casually asked him if he had any idea of what he wanted for it and learned it was $3,600 dollars, but I said I did not think I could consider it at that figure and gave little further thought to it.

On a Saturday morning very late in the fall, he came into our barn at an early hour while we were still doing chores and asked me if I would buy the farm if the price was reduced. I called Father and the three of us went to the house to talk it over. He said he had to raise some money that day or lose the farm, and offered it for $3,300. Father and I had previously agreed that the value was about $3,000., so we told him that was our judgement. He acted very disappointed and downhearted so I finally told him that I would take it at $3,100. but no more. He asked me how soon I could get him some money as his interest was due that day. I told him as soon as I could drive to Clarksville and back, and he accepted my offer. I lost no time in getting a few hundred dollars from my savings account and into his hands that forenoon. We agreed that the local justice of peace was the nearest available man to prepare the papers, and I told him I would drive immediately to his house and try to arrange for a meeting that afternoon. When I got there I found he had gone to town and would not be back until night, so arranged with his wife for an evening meeting at 7:30. The justice was Wesley Gilley and Father and I reached his place at the appointed time. After waiting more than an hour, Wesley said Henry was probably backing out and would not show up that evening. We continued to wait and finally Henry and his wife arrived somewhat after nine o'clock, and undecided what he should do. Wesley pointed out that a sale was about the only thing he could do and succeeded in getting the papers signed.

On the following Monday morning, Henry and his entire family drove into our yard immediately after breakfast. He thought he had made a mistake in selling, wanted the farm back, and would pay us for our expense and trouble. We had already sent out letters calling in money loaned out which we would use in paying for the farm, and could not estimate how much loss that would mean to us. I felt sympathetic and told him I would let him have it back if he could outline to me how he could successfully finance it. Of course, he had no plan and admitted it, so he finally became reconciled to allowing me to keep it and went back home. Many friends asked me afterward how I managed to close the deal before he backed out, and considered I had accomplished almost the impossible. Father and I together raised a total of $2,000. in cash, and I secured a mortgage loan for the balance of the purchase price.

"Music Hath Charms", etc.

A statistician once said that a good statistician could never be a good public speaker. I fully agree with him, and also believe that he cannot be a good musician either. My own experience lends credence to both of these theories. My musical education is noteworthy only for its lack of results. It began when I was no more than seven years old. I had a severe attack of the measles and was in bed for two weeks or more. My eyes hurt so much that the shutters to my room had to be kept closed, and I lived in semidarkness during the entire time. My folks felt very sorry for me and when I was about over the disease, Father came in and wanted to know if there was anything he could bring me from town that day. I told him I would like to have a mouth-organ, and that night he brought it to me. I did not know a tune of any kind at that time, but one of the men working for us by the day was taking lessons on a clarinet. He practiced each noon and night in the barn and, while his music was almost hopeless, he made some progress. I got him to play some old tunes over and over until I memorized at least a part of some of them, then I would play them on the mouth-organ. When I reached the stage where Mother could recognize some of them, I felt I was making progress. I also learned others from the boys in school.

When I was about 13 years old, our folks bought the organ that Lena still has in her possession. It was bought at R.D. Stocking's music store in Lowell, and he taught music in his store. My folks arranged for me to take a term of lessons from him, and I made the trip each Saturday to Lowell. It was not very satisfactory because he had to wait on customers while giving the lesson, and I did not like playing to a continuous audience of strangers. The following summer, Blanche Watkins of near Lake Odessa taught a class and I took a term of lessons with her. She was a good teacher but was married in the fall and gave up her class. The next year a Mrs. Knight appeared on the scene and taught in South Boston and Clarksville, and I took another term with her. At its end she gave a recital in the Clarksville Academy, and insisted that I must take part in the program. Many of the young people in the audience had been my classmates at the Academy the year before, so they knew me well. I knew they would razz me thoroughly if I failed to deliver the goods, so I was disturbed mainly for that reason. However, I acquitted myself fairly well and no demonstration took place, but because of my dislike for performing before the public I lost interest in that type of music.

Then I bought an old violin and soon found it was of rather poor quality and sub-standard size, also not easy to play. I traded it for a guitar and picked up a few chords on that. While in school at Saranac I took some lessons from a man who taught piano, mandolin, guitar, and banjo. He wrote a number of pieces from memory and I learned these quite readily, and played them for a long time afterward, although that guitar was disposed of not long after I took the lessons. In the fall of 1896 I decided to buy a violin and take some lessons. Cora was playing violin solos on programs at social gatherings, and her work was popular and in considerable demand. I asked her to go with me to Grand Rapids and help select a good instrument, and suggested that we could arrange the time so as to include a visit to the West Michigan State Fair held there. To do this would require a two-day stay, so we drove to the station at Elmdale where I arranged with the store-keeper to look after the horse until we returned. We selected and purchased the violin at a large music store and did some other shopping during the afternoon. I spent the night with some friends who I wanted to visit, and Cora staid at a hotel where, in the morning, I found her pacing up and down a hallway. Inquiring the reason for so doing she explained that her room was too thickly populated with a certain kind of insects for either sleeping or occupy-

ing. After spending the day at the fair we returned home at night. The violin remained in my possession until Verna took it to Maine following her marriage. I took a few lessons from Cora but even her good teaching ability could not make a musician of me. After our marriage I bought another guitar which I kept for my amusement unti we disposed of all our goods when we moved east from Salt Lake City to Indianapolis. After our marriage I borrowed a cornet from a friend and was able to play easy tunes on it when I had to return it. This was not lost effort because the experience with this instrument enabled me to join the Clarksville Band, where I played alto horn up to the time we moved away from Clarksville.

Member of Male Campaign Quartette

The presidential campaign in the summer and fall of 1896 was one of the livliest in the history of the country. The depression of 1893 had produced an unusual amount of bankruptcy in the field of business, a great amount of unemployment, and extremely low wages and low prices. Conditions had improved very little since 1893, and the disgruntled public was inclined to place their troubles at the feet of President Grover Cleveland and the Democratic administration. The main issue in the campaign was between the gold standard and bi-metallism. Cleveland was an adherent of the gold standard and McKInley, the republican candidate, was also. William Jennings Bryan became the democratic candidate by espousing the bi-metallic theory. People wanted a change, and farmers in our locality were swayed by the dynamic oratory of Bryan and the arguments for a change in financial policy to the extent that many republicans went over to the dem-ocratic side. For me and my chums it was to be the first opportunity to cast a ballot for presidential candidates, so we were particularly interested in the progress of the campaign and determined to hear as many speeches as possible.

Four of us organized a male quartette for the purpose of singing at political meetings. Will Minty was to lead by singing the air, Charlie Burr the tenor, Ernest Collar the baritone, and myself the bass. We obtained several books of campaign songs which were to be sung to old familiar tunes and, after a few practice sessions, began singing at the democratic meetings as three of us favored that side. Our efforts went over well at every meeting and we had one or two calls every week until election time. The republicans were a little peeved at our popularity as they had no comparable attraction. Finally, they made bold to ask us to sing for one of their meetings. As one member of our team was a republican and had made no complaint against singing democratic songs, we decided we should accept the invitation through deference to him. In selecting the songs for the occasion we carefully chose those condemning the Cleveland administration rather than those lauding McKinley. Some of our democratic friends who sensed our trick had many good laughs over it, but the republicans were rather shy with their compliments and we only sung once or twice for them.

We became very enthusiastic about the prospect of voting as the day approached and talked much about it but, when Will Minty told us he was not a citizen, we were dismayed. He had been born in Canada and had not taken the final steps to citizenship in Michigan. We begged him to do so at once so that he could vote with us, and we agreed to meet at the polling place so as to vote together. We told Will not to mention the obtaining of his papers and we would have some fun. In the inclosure sat the usual two challengers, one for the democrats and one for the republicans, whose duty was to challenge any voter for the opposite party whose eligibility was uncertain. We went into the booths, prepared our ballots, and cast them on the way out. Will was the last one as we had planned, and when he handed in his ballot the challenger for the republicans said, in a loud voice,

"I challenge this vote, this man is not a citizen of the United States". The voting supervisor turned to Will and asked him if he was a citizen of the United States. Upon being answered in the affirmative, he asked Will if he had any evidence by which he could prove it. Will pulled the engraved paper from his pocket and slowly unfolded it, then held it up for all to see. Everyone in the room laughed loudly except the challenger.

At the time of these events, Will Minty was working as a hired man for Earl English and had been with him in that capacity for two or three years. Later Will married May Freeman, went away to school and became a minister. He preached in various places and finally became pastor of the Pilgrim Congregational church on South Pennsylvania Avenue in Lansing near the time that we moved to that city. I believe the present church was built during his pastorate there. He afterward returned to a Western state where he had previously held pastorates for some years before coming to Lansing, and died there a considerable number of years ago.

The Harker Family Orchestra

All members of the Harker family were musicians and when I began visiting their home, they often were practicing music together. Melvin, Robert and Fred were members of the Saranac band and like to play all kinds of music in the home. Cora played either the piano or violin with them, and I enjoyed their entertainment. During the fall of 1896 the annual convention of the West Michigan Band Association was held in Ionia, and the Harker boys were to attend as members of their band. I invited Cora to go with me and we spent the day and evening listening to the music and watching the parade of bands.

Hattie Fletcher also was a frequent visitor at the Harker home that fall, as Fred and she were beginning to go together, and she was a piano player. So it was proposed that the family orchestra be enlarged to include her. Cora was the leader and director and played the violin, Hattie the piano, Melvin the clarinet, Robert the baritone, and Fred played various instruments at different times, these being clarinet, bass viol, mandolin, snare drum, or the bones. Cora took the music of current popular marches, two-steps, and other appropriate kinds, and wrote separate parts for each player. Then they would get together and practice. In order that I should not be left out I was given the part of second violin, as I was taking lessons from Cora at the time. The orchestra began playing for public entertainments and soon had invitations to play at nearly all the principal entertainments held in that vicinity. The Orchestra became locally well known and continued to lend its services to the public until the end of my stay on the farm. While living on our farm after our marriage, some of the orchestra practices were held in our home. On one such occasion I induced Ernest Collar, who owned a graphophone, to bring it to our meeting. We played some of our music and he made recordings of it with his machine, then played the records back to us. The transcriptions were relatively good considering they were his first attempts and, as far as I know, the first ever made in that locality. I do not know what became of those recordings, but often have wished that we had them now and available equipment for playing them.

The Climax of That Eventful Year

I had been a member of the South Boston Grange for at least two years and attended nearly all of the meetings. Cora had joined during this year and I took her home after each meeting, which, with our frequent orchestra practices, and my Sunday and mid-week visits, gave me the opportunity of being with her very often. Shortly before the Christmas Holiday, I asked her to become my life partner. Her tentative answer was "yes" but conditioned upon the approval of her par-

ents. The following days were full of apprehension but when I next saw her I received the unqualified assurance for which I had hoped. Thus the first step towards the future pattern our lives were to assume had been taken. My only regret at the time was the lack of enough money to purchase a suitable engagement ring. All my money had been invested in the newly-purchased farm, and the ring had to be limited to a cost of $10. During the previous fall she had made a trip to Minneapolis to visit her brother, Jesse, and to meet Edna Cobban to whom he was engaged. She also visited her old home town of Argyle, Wisconsin on the same trip. After our engagement I accused her of making the trip in a last effort to persuade some former sweetheart to rescue her from the impending fate that awaited her. Not being successful in so doing, she apparently became reconciled to the taking of the desperate chance. Now, almost fifty years later, she still insists the charge was unfounded. With a farm and a home of my own, and the promise of a helpmeet, future planning took on a more active and somewhat different character--that of a farmer in my own right.

LIFE AS A FARM OWNER--Chapter XI

As we were not to be married until the fall of 1897, the partnership with my father was to continue during that year. The outlook at the opening of spring was quite discouraging. Fruit prospects were for an almost complete failure of the crop. Father insisted that we could not afford to hire a regular hired man, and that we must do the work ourselves except for occasional day labor. In no other year had he been without a hired man and now we had two farms to work instead of one. It meant that both of us had to work more hours per day than ever before and, before the end of the season, more day labor had been required than usual in order to get the work done in season. When the crops had all been taken care of, Father asked me to do some fall plowing. It was a large field and the weather was stormy much of the time, sometimes rain and sometimes snow, but I wanted to finish it before the ground froze and before our wedding day, so kept at the job and only finished it on the day preceding the wedding. At the same time my evenings were spent with Cora planning for the big event and for our new home.

Jesse Harker had been married early in October and he and Edna spent their honeymoon in New York City, Boston, and other eastern cities. They returned by way of Michigan arriving about a week before the wedding. They brought their wedding gift to us with them--a set of solid silver tableware purchased at Tiffany's in New York City. This was my first meeting with them and they were found to be cordial and congenial friends, despite the wide difference in our respective financial conditions. I had to take a day off to get the marriage license in Ionia, and invited them to go with us. I took our team and double buggy and spent the entire day. I had visited the State Prison several times on previous occasions, and asked them if they cared to see it. They seemed glad of the opportunity and we went through it during the afternoon. The guide showed us some craft work done by the prisoners, among which was a beautiful center table. Jesse wanted this table and when he was given the price he immediately accepted it and gave orders for shipment. When the guide returned he reported that the table had been sold and that we could not have it. Jesse was greatly disappointed and told me he would have given as much as $75. for it if necessary.

I had been so busy that I had not engaged a minister to perform the ceremony, and, when it was only a week away, I decided I must see him that very evening. We had decided upon Rev. A.B. Johnson, the minister at the Methodist church,

who had been in the community only a short time, and with whom I had not become acquainted. He was a middle-aged man and we thought we would prefer such a one rather than any others we knew, all of whom happened to be quite young. I drove a mile and a half to his house but found he was not at home. Realizing it was Wednesday evening, I suspected he might be at the church attending prayer meeting, so, heading in that direction, I had gone about a mile when out of the darkness just in front of me loomed a horse and buggy. There were no houses along this particular road and the night was very dark, so I could not see who was in the other buggy. I asked if he were the Reverend Johnson and he replied he was, so I got out of my buggy and walked over to his, where I still was unable to see his features. There in complete darkness I stated my errand, gave him the needed information, and secured his promise to officiate.

Our Wedding Day

The morning of November 10, 1897 was crisp and cool as the relatives, the only ones invited, gathered at the Harker home. As the day advanced, the sky became overcast, the temperature warmer, and the weather threatening. The house was decorated with autumn leaves and flowers, and the guests comfortably filled the house. Fred Harker was best man and Hattie Fletcher the bridesmaid. As the wedding march was played we marched down the stairs and into the parlor. The ceremony was at 12 o'clock and was followed by the usual congratulations. Jesse took some snapshots of the wedding party, and one of the pictures is in our scrapbook. A fine dinner was then served and the minister asked me how we decided on him, a comparative stranger, to officiate. I told him the ministers that we knew were quite young, that we preferred an older man, sufficiently experienced to tie the knot securely. He laughed, and then admitted that this was his first wedding ceremony. It seems that he had turned to the ministerial profession only a short time before coming to South Boston.

About four o'clock Fred and Hattie drove us to Elmdale where we were to take the train for Grand Rapids. It was then I discovered a pair of old shoes tied to the rear axle of the buggy. I quickly disposed of them and don't believe anyone had seen them, and neither had there been any showers of rice. We boarded the train and thought our going was uneventful, but as we walked down the aisle Fred and Hattie had followed, unseen by us. Coming up, each poured a sack of rice all over us, and our clothing shed rice kernels for many weeks afterward. There was no one on the train who knew us so we were not seriously embarassed.

The Honeymoon at Grandfather's

During the fall I had bought a team of horses, a wagon, harnesses, a few needed tools, stoves, and various utensils for the house. As a result, I had practically no money left and our honeymoon had to be an inexpensive one. We went to Grand Rapids, attended a theatre in the evening, and spent the night at a hotel. The next morning we took a train for Muskegon where we arrived about noon. I had written to Uncle Dayton Church to meet me at that time, but had not told him I was being married. He was at the station and greatly surprised that I had a wife with me. However, the joke was on me as he had brought some grain to be ground at a mill and had only one seat on his rig. I had to ride on the bags which would not have been uncomfortable, but it began snowing and the wind was of gale force and cold. The farm where he and his wife and my grandparents lived was five miles northwest of the city. We had to cross the river at the east end of Muskegon Lake, travel along its north shore for some distance, and only a couple of miles from Lake Michigan, so that the wind was damp and penetrating. By the time we reached the farm I was nearly frozen.

My grandfather suffered severely from sciatic rheumatism and had to use two

crutches to get about, but was a very patient and cheerful man. He had visited at our house during the previous summer and had met Cora. He liked to have her play music for him and I knew he would appreciate our visit with him. Uncle Dayton, who was operating the farm, was best known for his aversion to hard work. He had been cutting wood and, of course, could not make much progress with no one to pull one end of the cross-cut saw. The next morning after our arrival he suggested that I could help him with the wood-sawing, and we went off to the woods and worked all day. Our stay was limited to five or six days, and when he continued to take me to the woods with him each day it became a little monotonous. After about the fourth day, his wife called a halt on the wood-cutting and tried to shame him for monopolizing my vacation, so that I had one or two days of ease and a chance to visit with the others.

A Reception at Father's and its Aftermath

Because none of our friends had been invited to the wedding, it was fitting that a reception should be held. My father and mother issued invitations for it to be held at their home on November 17th, just one week after the wedding. The house was well filled with our friends and the evening was enlivened by a poem written and rendered by Mrs. Ida English which was very humorous and applicable to the occasion. Strange as it may seem there were no presents but we were not too much concerned because the giving of presents on such occasions was not as universal as in these modern days, particularly in rural communities.

Lew Pratt and May Burr attended our reception and, just a week later on the 24th, their wedding took place. Just a week after their marriage a reception was given them by a man and his wife who were good friends. We were invited to that reception but were surprised when we were asked to contribute towards a gift of a bedroom suite for Lew and May. It was a fine gesture and I was glad to share in it, but wondered why these people, who had attended our reception were openly showing such distinct partiality. Their subsequent demeanor, and a certain chain of events over the next few years, led me to the conclusion that they were extremely jealous of Cora's musical ability and popularity, were opposed to our marriage, and adopted that means to show their contempt.

Our First Home

Following the festivities just described we began work on our house to make it livable, such as washing woodwork, papering, painting, etc. It was a roomy two-story structure, solid and substantial, and we only had furniture for about half of the rooms. The others were used only for storage as needed. I had a team of horses and, in settling up the partnership with Father, I received one cow. He very generously gave me a guernsey that was the best cow in his herd. Cora owned a horse but as we did not need it, she exchanged it for one of her father's jersey cows. I also had a start in pigs. After two years of doing chores in Father's comfortable basement barn, it was a real let-down to go back to an old and very cold barn. The water had to be pumped by hand, and there was no way to fully protect the pumps from freezing, so they often had to be thawed out each day during the cold spells. With no salable farm products on hand, we had almost no source of income during that first winter. We made some butter and our hens produced some eggs, but both were so cheap and plentiful that the grocers would pay no cash for them, and would only take them in exchange for groceries. By the end of January we had spent the last cent either of us had in our pocket-books, and throughout the month of February and into March we could not buy a postage stamp or even a postal card.

There was no timber on my farm and I immediately began inquiring for a source of wood supply. A neighbor living across the road from us had about 20

acres of woods, and he wanted someone to cut a part of the tract on shares. Fred Lewis, who was married to May Britten a cousin of mine, lived about 3 1/2 miles north of us and had no wood on his fruit farm. We decided to cut that piece of timber and get our supply of wood in that way. The owner's share was to be one-third, so each of us also had a third of what we cut. The timber was mostly hickory which makes good wood and a very hot fire, but was very hard to saw or chop. Our tools had to be sharpened nearly every day. Fred had been our hired man for three years when I was a young boy and I was used to working with him. He was a good worker and while we were cutting wood he would arrive at our place just after daylight, then we would work in the woods until darkness came at night. My chores had to be done by lantern light on all days that we were cutting wood and, of course, he had to do likewise in addition to driving to and from his home.

Towards spring the second finger of my left hand became very sore, due to chafing from the axe-helve while chopping wood. Despite poultices and other remedies it steadily grew worse. On a Saturday evening we attended a Grange meeting, and my hand pained me almost unbearably. I could not sleep that night because of the continuous intense pain and walked the floor most of the night. On the following Sunday morning, I did the chores early, got my breakfast, and immediately started for a doctor's office in Saranac. He pronounced it a felon, as I already knew from a similar experience ten years earlier, and lanced it down to the bone. The pain was relieved and the wound gradually healed without further trouble. My worst problem during the weeks of that trouble was in milking, as it had to be done entirely with one hand. It not only took twice as long but the usable hand became very tired before the operation was finished.

The Spanish-American War

On the night of February 15, the battleship Maine was sunk in Havana Harbor, where it had been stationed to guard our interests during the war between the Cubans and the Spanish which had been going on for two or three years. Although there were no rural telephones the news spread swiftly, and I believe we heard of it on the following day. It was a terrific shock to everyone and there was much excitement because of the loss of 266 of our sailors without a word of warning and without provocation. We felt it surely meant war and young men began volunteering for enlistment. The Government inquiry resulted in a report that the explosion had been caused by an underwater mine, and considered Spanish officials responsible for it. This report was issued in April and Congress immediately declared war on Spain. There was talk that a draft might be necessary and, as I was then 22, it was possible that I might be called in that event. Admiral Dewey's brilliant victory in Manila Bay on May 1, when he destroyed 10 war-vessels comprising all of the Spanish fleet in those waters, without the loss of a single life, eased the tension in the United States somewhat. The main Spanish fleet was moved into Santiago Harbor and it was thought to be planning an attack on our Atlantic coast. Lieutenant Hobson and seven other men tried to sink the collier Merrimac crosswise in the narrow entrance of the Harbor one dark night in an effort to bottle up the fleet inside. A shot from the fleet destroyed the rudder on the Merrimac and he managed only to sink it lengthwise along one side of the channel, not completely blocking the channel. Our fleet was stationed a short distance outside, and on the morning of July 3rd the Spanish fleet made a dash to escape, with the result that the entire fleet of six vessels was destroyed with only one American killed. The war ended several weeks later with the surrender of Cuba and Porto Rico, without our Government having to invoke the drafting of soldiers.

The First Telephone in South Boston

In the spring after being fully settled in our new home, I found it necessary to communicate with my father almost daily..It was planned that he would do the machine work on my farm in exchange for an equivalent amount of my assistance on his farm. We did a lot of running back and forth merely in planning our work from day to day. I proposed that we build a telephone line between our houses, a distance of 3/8 of a mile. A new telephone system had just been installed in Saranac, and we were able to buy two new wall telephones, batteries, insulators, and brackets from that company. We strung a single wire using roadside trees and a few poles to which the brackets were attached. Although it was a ground circuit system, it worked perfectly. Words from the receiver could be heard anywhere in the room, so all who were present heard the conversations from both ends. It was an innovation in our neighborhood and saved us many times its cost in time and shoe leather.

Experience as a Sleuth

I was fearful that the supports to the floor in my barn were too weak and rotten to bear the weight of a threshing machine, so decided to stack the grain outside. Father did the cutting of the grain with his binder, and did the stacking of the wheat as I was unexperienced in building a stack. When it came time to haul the oats, he was not available and I built my first stack. I miscalculated the size needed and made it too large at the base. When all my oats were in the stack it still needed at least another load to make a proper top that would prevent rains from running into the grain. To remedy the deficiency I borrowed a large piece of canvas from Father and covered the stack with it. It was one that had been made for use in covering the large loads of peaches that we hauled on a peach rack, to keep out rain and dust. Loops had been sewed at intervals on the four sides and pieces of string dangled from these loops for tying it down securely over the load. By tying stakes to these strings I made the canvas secure from blowing off the stack.

While doing the chores one morning I noticed that the canvas was missing from the stack although I was certain I had seen it on the stack the previous evening. I thought perhaps Father might have needed the canvas and had taken it during the evening while Cora and I were working in our garden some distance down the lane, and from which we did not return until after dark. When I went to the house for breakfast I telephoned to Father to ask him about it, and was told that he had not taken the canvas. We concluded it had been stolen and he said he would come down after breakfast and help me look for evidence. We found no suspicious tracks in front of the house, but did find a few oat straws scattered across the barnyard. Following this clue to the opposite side and over the fence into a pasture field, we traced it across the pasture to the by-road along the east side of the farm. There we found where someone had camped during the night and where they had fed a team with bundles of my oats. A light shower had occurred around two o'clock in the morning and this had laid the dust in the road. As there had been no travel on this side-road after the rain except the camper's rig, the tracks of their horses and buggy showed very plainly. We followed the tracks along this by-road for a mile where it intersected a main road. From the tracks we concluded it was a pair of small ponies, and we noted the style of shoes they wore. One of the ponies had the peculiar habit of traveling outside the wheel-track which tended to swerve the buggy from the beaten tracks, and we found it possible to follow the tracks even where there had been other travel that morning. Father told me to go back home and get my horse and buggy and follow until I overtook him. That took some little time and he was nearly to Clarksville when I caught up with him. In Clarksville, we contacted the deputy sheriff who lived

there and he and Father took my horse and buggy, leaving me to return home on foot. They found the tracks on the east edge of Clarksville and also found a farmer's wife who had seen a team of ponies pass their place just after daylight, headed eastward. They soon lost the trail because of accumulating tracks of other vehicles and the drying up of the shower, but suspected that the rig had proceeded to Lake Odessa as this was the main road to that town.

They stopped for dinner in Lake Odessa, put the horse in a barn for feeding, and contacted another deputy sheriff living there. That deputy suspected a man by the name of Shafer who lived near Sunfield, and suggested that he and father drive to the farm with the deputy's horse. When they neared the farm, the deputy decided it was best for him to go alone and had Father stay hidden in a cornfield until he returned. The deputy was a noted horse trader so when he got to the farm he asked Shafer to trade horses with him. This gave him an excuse to go into the barn, look the ponies over carefully, pick up their feet and examine the shoes, and even to peek into the buggy for the canvas which he hoped to find but did not. After parlaying over a trade for a short time, he told Shafer he would be back again in a few days for further talk of a trade, and left. He picked Father up and they returned to Lake Odessa, where he promised to keep tab on Shafer and notify Father if he uncovered any evidence. Father and the Clarksville deputy then returned home, not fully certain that the other deputy was on the square or would do anything further about the case.

Several days later he telephoned to the Clarksville deputy that he wanted Father to come to Lake Odessa, and the word was messaged out to us. When he reached Lake Odessa he learned that the deputy had been out to Shafer's again, and found he had put a wooden framework on a wagon which he had covered with a piece of canvas presumed to be the one we had lost. From a justice they got an arrest warrant and also a search warrant before going to the farm. On arriving there they found the canvas had been trimmed down to smaller size, and, the pieces where Father's name was stenciled along the edges were missing. They searched the house and other buildings for these pieces but could not find them. However, near the wagon, Father found some of the loops in the grass and these still had binder twine, just as we knew them to be. With this evidence in his possession, Father ordered the warrant served and Shafer was arrested by the deputy and taken to town where he was allowed his freedom on bail. The warrant having been issued in the name of the State, the case was then up to the County prosecutor, with the defendant having the privilege of selecting the place for the trial.

Experiences in a Justice Court

Lake Odessa had been named as the place of trial, and Father, Mother, Cora and I drove to that town on the morning of the opening day. Several of our neighbors also attended as a moral influence on the jury as to our integrity and reputation. Father and I were the principal prosecution witnesses, but Shafer had a considerable defense list. He had a woman housekeeper and he contended that he and she went to a huckleberry swamp several miles west of us to pick huckleberries, stopped at his sister's, who lived three miles east of us, for supper; then drove to the home of some friends living near Ionia and remained over night with them. His sister, whose husband was well known to us as an honest and reputable farmer, corroborated the statement about the supper at her home and that he left there for Ionia that evening. About four or five of the Ionia friends swore that the couple had attended a party at their home in the evening and staid all night with them. It looked like a very good alibi, but the prosecutor happened to know the Ionia group and something of their past history, and he shot questions at them during the cross-examination that tended to show they were a disreputable

lot, and that they had tangled with the law in liquor offenses, operating a house of prostitution, etc. The woman living with Shafer was not put on the witness stand but attended the court sessions.

Just after the noon recess on the second day of the trial, and while the court was in session, a man walked up the aisle from the rear to where this woman was sitting. He whispered something to her and she shook her head negatively. He spoke to her again and she finally arose and followed him out of the court room. Afterwards we learned the man was an officer from Ionia, had arrested her for having robbed a man in an Ionia dive a few nights before, and had taken her to Ionia. As a result, Shafer and some of his relatives drove to Ionia after that day's trial in order to bail her out of jail, and were thus occupied much of that night. On the third and last day of the trial, the prosecutor had my mother take the stand to testify that the sewing, on the loops found in Shafer's yard, was her handiwork. The case was then summed up and given to the six-man jury, after which we returned home. The jury finally brought in a verdict of guilty, and Shafer was assessed a fine of $15. and the cost of the suit, or 75 days confinement in jail; a rather expensive piece of canvas for him. We learned that he attended county fairs each fall operating some kind of a peep show, and he had rigged up the covered wagon to serve as a place for his fake show and, probably, for sleeping.

Other 1898 Events

During the early months of the year I was taking an occasional lesson in stenography. These lessons were started in the previous summer, and were taught by Walter Gunnison who had a class of several students in the neighborhood. I had no particular motive for doing this other than the possibility that it might prove useful at some future time. I succeeded in reaching the stage of taking dictation at relatively slow speeds, and only needing steady practice to make the course of practical value. Walter gave up teaching in the spring and I did no further practicing for several years.

We attended the Grange regularly and its meetings were interesting and helpful. I served as its secretary for two years and Cora was lecturer for at least one year, but I am not sure as to the years that we held these offices, except that 1897 was one of them.

Our fruit crop proved to be not more than a fourth of a full one on the bearing portion of our peach orchard. Because of the short crop, there was a good demand and I sold all of it to a shipper at Saranac. I would reach Saranac with a load around 6 o'clock in the afternoon, and would find a line of teams from one to two blocks long ahead of me waiting their turn to unload at the depot platform. In some cases I did not get unloaded until 9 o'clock which was about two hours after dark. The return trip of six miles, the milking yet to be done, and a supper to eat, added up to a rather long day. But the light crop made the season shorter than usual, and we did not mind it too much as there was some cash being brought home each night. At the end of the season we paid the year's interest on the mortgage and $100. on the principal, which left a debt balance of $1,000. We felt quite optimistic for the future, as our younger trees would be old enough to bear the next year and, if the crop should prove to be a good one, we would be able to pay off the mortgage in full. Alas, like many others, that dream failed to come true.

The Fateful Year of 1899

The weather conditions that prevailed during the early months of the year and their effect on the peach industry have already been described on previous pages. At pruning time in the spring, only one block of about 800 peach trees of

a hardy variety showed any signs of life. The other 1000 were immediately removed and burned. It was a dark outlook for us to lose our principal source of future income and wait at least six years to plant and bring a substitute orchard up to bearing. Father decided to give up farming and retire, and I began a search for a business venture which might give greater promise of a living income. Father rented his farm and moved to Clarksville that spring as his orchards suffered a fate similar to ours.

Father Gets a Pension

After many Civil War veterans had enjoyed a pension for several years, Father decided he was as fully entitled to one as many of his buddies. His application was filed in 1887 or 1888 but Government red tape and inefficiency forestalled any favorable action on it. After six or eight years had passed, he sought the aid of his congressman who personally interceded in his behalf. After several attempts the latter succeeded in having the application resurrected from the files, investigated, and acted upon. Around the beginning of 1899 Father received a notice that his claim had been allowed, and a check for the retroactive amount was inclosed. His pension was set at $8. a month and, as about 11 1/2 years had elapsed since his application, the check was for more than $1100. Father, Mother and Lena spent the following winter in California on a portion of the proceeds.

LIFE AS A NEWSPAPER EDITOR--Chapter XII

My first newspaper work began when I was about 12 years old, when I was appointed by the editor of the Lowell Ledger to act as his news correspondent for South Boston. His paper was the best weekly in our part of the State, and I did my best to write interestingly, accurately, and creditably. Although the editor was extremely critical of all writers and editors in general, he always seemed highly satisfied with my work. I served in this capacity for about two years, and gave it up only when I entered Saranac High School and was no longer in touch with South Boston events. My literary work in high school rated near the top of that done in my class, which lent encouragement to the possibility of doing some writing in the future.

Reflecting upon these successful small experiences, the newspaper then available in Clarksville began to assume a favorable position in my thoughts. On the last Saturday in June, while attending to some business in Clarksville, I went to the Clarksville Record office to investigate the situation. I found that the editor had already purchased a paper in a larger town in Iowa, and was eager to sell this one as soon as possible. The paper had been started four years before by himself and a partner. The latter had left two years before to become the editor of a paper in Bloomington, Illinois, and now this one was likewise going to a larger field. These moves indicated that a certain amount of prosperity had been achieved by each of these men, a seemingly favorable omen.

The editor showed me the invoices of the equipment originally purchased, a total of more than $400. which included a news press, a job press, type, typecases, a marble make-up table and stand, desk, and the many small tools used. He showed me his cash book and day book, also his subscription list. In addition there was some paper stock for job printing work, signed contracts with foreign advertisers, and a list of back subscription accounts. Everything was included at a price of $525. His wife was the village milliner and if we would take her stock, too, it could be had for $100. additional. Cora and I talked the matter over while at dinner and decided that I would make him an offer of $525. for both businesses, or $100. less than his asking price. By late afternoon we had the

necessary papers completed and payment arranged. Then I asked him when he wanted me to take over, and he said Monday morning. That was rather sudden but there seemed no alternative so I agreed. On Sunday I arranged with Father's renter to look after my livestock until I could hold a sale. He also agreed to take care of the growing crops and to harvest them at the proper time. On Monday morning we drove to town prepared to remain at Father's house until we could get possession of the quarters being vacated by the editor.

Trials of an Amateur Editor and Printer

Upon entering the office the editor took me over to the type cases and pointed out where each letter and punctuation mark was located which, of course, I could not memorize all at once. He then took a "stick" and set a line or two of type in it, then handed it to me and had me set a few lines under his direction. Then he showed me how to remove the type from the stick and set it in the galley. There were a few news items on the copy book, and he said they would keep me busy until he returned. He did not come back until after dinner and then staid only long enough to put a few more items on the hook. He promised to get a boy who had worked for him and have him help me out. I continued the slow business of setting type for the rest of the day, and at suppertime I had one galley full, equivalent to a column in the paper. As nothing else had been done on that week's issue, which was due to go to press on Wednesday, I felt the need of working again after supper. While handling the galley I managed to "pi" the type that I had set, and I worked until midnight to get it back into place again. I went home greatly discouraged and certainly did not sleep much that night. Fortunately, the young man showed up for work the next morning and told me to hustle the news and advertising copy for him, and he would do his best to get the paper out on time.

It was with some trepidation that I faced the different merchants on my rounds that day. None had their copy ready but some kindly told me to carry the same advertisement as used the previous week which would save resetting the type. I told the others to get the copy in that day if they wanted a change, but the most of them did not, so we let the old ones stand. I rounded up the news without great effort, but we were unable to go to press until after supper Wednesday evening. By the time the papers were printed, folded, wrapped, and addressed--all done by hand--it was nearly midnight and long after the postoffice had closed, so they did not get out until the next morning. The merchants knew me only as a local farm boy and had seldom ever seen me dressed in other than dirty overalls, and I'm sure they were very skeptical about the paper's future in my hands.

We immediately started work on the next issue. My helper proved thoroughly reliable and a good man. He was able to do all the type-setting, type-distributing, ad setting, and job printing work, which enabled me to give my time to collecting news, getting acquainted with the people, organizing the business, soliciting advertising, and studying the problems of the business. The newsprint paper was shipped to me each week from the Western Newspaper Union in Detroit. Six pages were ready printed and two blank pages left for our use. While running off the second issue on the press I said to my helper that, as soon as we could handle it, I wanted to print four pages of local news, instead of two. He said: "Let's start it next week", but I was a little skeptical. However, he said if I could get the material he would guarantee to handle the printing, so we changed our standing order for print paper to the new basis. The third issue contained double the amount of news and came out at the scheduled time, and no future issue contained less than four pages of home print.

One of my early innovations was to give a historical write-up of one of the local merchants each week, in the belief that it would be of interest to the rea-

ders and stimulate the merchant to increase his advertising. This idea was original with me and it increased my prestige in the town. New subscribers were added to our list, several new rural correspondents were induced to take up reporting for their localities, and the paper began to change from one of run down appearance to one on a par with those in surrounding towns. There were 9 or 10 other weeklies within a radius of 15 miles which created very keen competition. These were all on my exchange list together with 20 or 30 others in more distant towns, and I scanned these exchanges each week for new ideas to improve my own paper. The Lowell Ledger was very critical of the shortcomings of other papers, and lambasted any whose ethics were not to his liking. After I had been in business less than a year, the editor of that paper told Father that mine was the best paper of its size in that part of the State. I greatly appreciated such a statement from so profound a critic.

"Advertising Is The Life Of Trade"

That saying is particularly true for newspapers that have space to sell. I soon learned that advertising was the most profitable branch of the newspaper business, and I tried various means to build it up. Several merchants bought space in every issue but some others were quite irregular. I could sell space to other towns but some merchants objected to competitive advertising of this kind. I bought clothing in Lowell and the dealer took his pay in advertising. We bought a refrigerator and other house furnishings in Lake Odessa in exchange for advertising, and various other needed items were obtained in the same way from surrounding towns. While I used as much discretion as possible in avoiding conflicts, there were a few who continued to complain about this outside advertising. I succeeded in getting a little business from distant firms who were selling specialties, receiving cash in some instances and merchandise in others. The large dictionary and a few other books in my library were obtained in this way.

The Pere Marquette Railroad Company carried some advertising in every issue which they paid for only in transportation. Upon my request they would issue mileage books at any time up to the amount of my account, so that I always had at least one book on hand in my name and one in Cora's name. That enabled us to travel anywhere on the Company's system without cash outlay, and we took advantage of it as much as possible but seldom were able to use up all the mileage earned. We went to Grand Rapids almost every week, where we bought Cora's millinery goods and my printing supplies, and we made occasional trips elsewhere for mere pleasure or on business.

Late in the fall of that same year my printer, Thad Valentine, asked me what I knew about Civil Service and schools that prepared people for examinations. He had received some circulars from such a school and, when I told him that I knew nothing about them or their existance, he brought them to the office for me to see. The school was located in Washington, D.C. and offered to train people for any Civil Service position for a cash payment of $10. and two percent of the first year's salary if a position was obtained. Being slightly interested myself and believing that Thad was also, I wrote to the School and offered to enroll for a course if it would accept the advance fee of $10. in advertising. They countered with $10. in advertising and $5. in cash, which I accepted. In the long list of positions, the school indicated which offered good chances of appointment and which ones they considered the chances to be poor. It further agreed to continue the instruction until the student actually passed the examination. If the school had refused to accept any part of it's fee in advertising, it is probable that I would not have enrolled; in which event my future life-work would have been very different.

Selling the Farm and Equipment

As soon as possible after taking over the newspaper, I printed and distributed handbills and carried ads in the paper announcing an auction sale of my livestock, grain, hay, and tools at the farm. The auction took place near the middle of August and everything was sold.

Several weeks later a stranger, living some distance west of Clarksville, came to my office and asked the price of my farm. I told him it was $3,100. (the price I had paid for it). He had already looked over the place and told me he would give $3,000. and no more. I asked for time to think it over and he said he would come back for my answer in a week. I hated to lose any part of my original investment but, having lost the peach orchard which represented many hundreds of dollars, realized that his price represented all or more than the farm was worth without the orchard. When I told Father about the offer, he advised me to take it without delay as it was unlikely that I would ever get a better price. When the man returned I told him I had decided to accept his offer, and we closed the deal at once. He paid the entire amount in cash which enabled me to pay up the mortgage, and deposit the remaining $2,000 in the bank.

I Became an Oddfellow

During the same fall I was invited by some of my friends to join the local lodge of Independent Order of Oddfellows, and I did so. It was the principal lodge in the town and was made up of a fine group of fellows. I enjoyed the good fellowship there and took an active interest in its meetings. When a new set of officers were elected at the end of the year, I was elected to the office of Secretary. They seemed to appreciate the quality of my service and, at the next annual election, I was reelected to the same position. After having served two years in this position, I begged to be relieved of that work as it involved considerable time and labor. Then they elected me to the office of Vice-Grand, the next to highest office in the lodge, and the logical stepping stone to the highest, that of Noble Grand. Unfortunately, I was able to hold that office only a few weeks due to my leaving Clarksville in February.

Taking My First Civil Service Examination

When I enrolled with the correspondence school mentioned previously, I was attracted to the position of Weather Observer listed in the printed matter. The only logical reason I can assign for the choice was the fact that, while studying physical geography in high school, I had had a chapter or two on the subject of meteorology. I was intrigued by the phenomena of association between changes in barometric air pressure and the movements of storms. After leaving school and returning to the farm, I had watched the movements of storms and found that they coincided with the principles I had learned in school. It enabled me to better predict the weather from day to day, as every farmer tries to do in planning his work.

I wrote to the school about this position and was advised that it offered good chances for appointment as only a limited number applied for it. They immediately sent me a set of examination blanks such as the Civil Service used, and questions covering all subjects in the examinations for that position. With the exception of meteorology, I had studied all of the subjects in school. I wrote the examination and sent it in to the school. I made a passing grade in all subjects except meteorology. My rating in that was only a very few percent, and the school told me to concentrate my study on that one subject. They gave the name of a textbook, the price, and where it was published. I sent for the book and, years later, found it was the standard textbook on the subject in every Weather Bureau library. The delay caused by the preliminary correspondence and waiting

for the book to arrive held up the start of my study until about the middle of February. Hastily reading the book, I took another school examination which showed some improvement in the major subject of meteorology. I continued reading and taking examinations. In March I saw a published announcement of a regular Civil Service examination to be held in April. I did not feel ready for this examination but asked the school about taking it. They urged me to take it and said it would be good experience2 even if I did not pass it, in which event I could continue to study until another was held. I made formal application to the U.S. Civil Service Commission for the examination and, in the meantime, did as much studying as possible. Because of unusual distractions at the time not much study was accomplished.

In addition to my daily newspaper work, Jessie dropped in on March 24 for a protracted stay. Both she and her mother required considerable attention, and I only wrote four or five school examinations up to the time of the Civil Service examinations in none of which did I get a passing grade in meteorology, the subject of greatest weight.

The official examination was held at Grand Rapids on April 17, and on July 6, I received the following report of standings

Subject	Weight	Grade	
Spelling	2	95	
Meteorology	6	64	
Penmanship	1	75	
English Composition	5	70	
Arithmetic	2	93	
Copying from Rough Draft	1	96	
Algebra	1	100	
	Weighted Average		78.15

While I considered this a rather poor showing I made no further attempt to improve it by taking a later test which I might have done. My low standing in the two most important subjects, with 55% of the total weighting, accounted for the low average which, in itself, was well over the required passing grade of 70. In looking over the grades of many applicants for positions, in later years, I acquired a more wholesome respect for my own grade. I learned that grades above 80 were far less common than those below it.

Experience in the Millinery Business

It was the dull season when the business was taken over in mid-summer. It began picking up in the fall and was expected to increase until after the holiday season. We decided to employ a professional trimmer to help during that period, and secured the services of a lady whose experience had extended over many years. She proved very capable in fashioning a variety of hats and in making sales at profitable prices. When the busy season was over, we decided to continue her employment because of the prospective addition to our family in a few months. This relieved Cora of much of the responsibility and work in the store, and provided for the care of the business during the weeks that Cora would be incapacitated. Her steady salary during the period of light sales was a heavy drain on the profits and, after the short period of improved spring business and the restoration of Cora's strength and energy, we dispensed with her assistance. We had found that a large number of the well-to-do people preferred to buy their hats in the large Grand Rapids stores, where they could obtain a wider selection and more distinctive styles. This deprived us of the more profitable segment and largely

limited our sales to the low-priced items with a narrower margin of profit. This fact, together with the added care of a baby in the house, led to the logical conclusion that we should dispose of the business. We began advertising special sales at cut prices and succeeded in materially reducing the stock, after which we sold the equipment, supplies, and remaining stock to a lady from Saranac. She moved it to another store and continued the business. On the whole, we had made a modest profit on the investment but not fully commensurate with the time and energy expended in conducting the business.

Adventures in the Study of Pharmacy

While still a boy on the home farm I conceived a desire to study pharmacy and become a druggist, and went so far as to borrow a copy of the United States Pharmacopoeia from a druggist friend in Lowell. After reading and studying the book for a while I realized I could make little progress without some personal instruction and returned the book to the owner. He strongly advised against my taking up the profession and, while still retaining my interest in the subject, I decided to take no further action at that time.

When we moved to Clarksville, the town's one drug store was directly across the street from my office. The store was in a brick building and the owner was a good businessman. He handled the business with the help of his wife, and used advertising space in my paper every week. Several weeks later he had some trouble with his wife which resulted in his divorcing her for scandalous conduct. He conducted the business for some months afterward, but had to hire help to do it. In the meantime, another drug store had been opened in the space directly under my office by the owner of the building. While this new store was operated primarily for the sale of booze, enough drugs were sold to effect the business of the older store, and the owner decided to sell it.

The new proprietor was Robert H. Goodfellow who had previously been in business in Genesee County. I immediately sought his acquaintance for the practical purpose of securing his advertising patronage. He proved to be very congenial and we soon became good friends. I went to the store often as I found it a good place to obtain news from the many people coming in to buy. He was running the store alone and when he was very busy I sometimes sold candy, cigars or other items of which I knew the price to help him. He soon availed himself of my help when he went after his mail or wanted to step out on other business. After a short while, I mentioned to him my original desire and attempt to study pharmacy, and he promptly invited me to study under his direction in exchange for such little help as I could give him in the store. This was an opportunity I had not sought but decided to take advantage of it. The newspaper business had become so well organized that I could easily be away for an hour or two during the day and on most evenings.

In addition to my study of pharmacy, I became acquainted with the stock and useful in helping out with selling. I subscribed for a magazine called the Pharmaceutical Era which was helpful in my study. It also offered a correspondence course in pharmacy for which I enrolled, and which was of special help in the technical subjects like chemistry. While Goodfellow understood the chemical reactions of drugs quite well, he could neither write nor explain formulas. After I had worked with him for a few months, we discussed the possibility of entering into partnership but decided it should not be done while the competing drug store remained in operation. The owner of it was one of the leading men in the locality and he often came into our store. His talk indicated that he was disappointed in the returns from his drug store, and we told him if he decided at any time to sell it we would like to be given the opportunity of buying it.

Early in the summer Thad Valentine had resigned his position with me, and I em-ployed a boy by the name of Shaw who was the only one available in the town. He had less experience, less ability, and less initiative than Thad, and I had to exercise more supervision of his work. I had increased the subscription list, during my ownership of the paper, from about 250 to around 500. This was the maximum number for practical printing on a hand press, hence a further increase involved a considerable outlay for a power press and an engine. More advertising was difficult to obtain unless the subscription list could be materially increased. In view of these circumstances and the probability that I would eventually become a druggist, I felt I should not invest more money in the paper.

Becoming a Druggist

On a certain day in the fall, Cora and I made a trip to Ionia, going and returning via Grand Ledge in order to make use of our mileage over the P.M.R.R. It was nearly midnight when we reached home and we were surprised to find my father sitting on our porch waiting for us. When I asked the reason for his late hours, I was informed that he was anxious to tell me that I was half-owner of a drug business. On that day the owner of the other drug store had an opportunity to lease his store for a clothing business, and his acceptance of the offer hinged on the sale of the drug store. He put the matter up to Goodfellow and he, in turn, contacted Father who told him to make the deal as he knew I would approve it. The clothing merchant, who was Allen Godfrey, rented the entire building which was to be remodeled so that he could live in the rooms above the store. The Clarksville Record had occupied these rooms ever since the paper had been started, and now it was necessary to vacate them. I moved the plant into the front part of the building where we lived, and into the rooms we had used for the millinery business. This building was the 3-story one originally used as the Academy dormitory and which was mentioned earlier in this history.

The Unsolved Mystery of Dan Kerwin

Two or three times during the first year that I owned the paper, a man by the name of Dan Kerwin dropped in at the office. It was accidental that I was away from the office on each of those visits, but he would grab a type-stick and set type for a couple of hours at whirlwind speed and then leave. All my assistants could tell me about him was that he staid at intervals with a family unknown to me living several miles south of town, and that he appeared and disappeared from there every few months with no one knowing his whereabouts when away. I suspected him to be a roving tramp printer although, contrary to the usual type of such, no one had ever seen him take a drink. In the spring of 1900 he came to Clarksville, secured employment, and apparently setled down to normal living. He conducted himself properly and proved to be a good worker. In a few months he joined the church and, a little later, the Oddfellows Lodge. The suspicion and prejudice of the people mostly subsided when they could find no flaw in his behavior or mode of living.

As soon as I acquired the interest in the drug store, I made an effort to sell the newspaper so that I could give full time to the new business. After a few weeks, without succeeding in selling the paper, Dan Kerwin came to me and asked the privilege of leasing it. I was reluctant to place so much trust in him, but was under the necessity of accepting the lesser of two evils, so made an arrangement with him whereby he was to continue only as long as his management of the business was satisfactory to me, to give me one-half the net income at the end of each month, and one-half the railroad mileage earned. He worked hard on the paper, both in the office and outside solicitation, and he maintained the income at about the same level as in the past. He settled promptly with me at the

end of each month and the returns I received were completely satisfactory. Shortly after he took over the operation of the paper, we moved from the rooms at the rear of the office into a 6-room house on another street.

The Transues, who had a small printing plant at the Academy, were the only other people in town with any knowledge of printing. When young Shaw decided to leave Clarksville, Dan employed Nora Transue as his helper. She worked for him steadily and, in the following spring, they were married and moved into the rooms we had vacated a few months before. The business went along smoothly and I became more assured of its permanence and success because of his marriage.

On a Monday morning in mid-summer, probably the latter part of June, Charles Transue came into the drug store and asked me if I knew anything about Dan or his whereabouts. He had recently bought a bicycle and had left the office on Saturday morning with it, saying he was going to Hastings to collect an advertising account and to solicit other accounts, but had not returned. Not much work had been done on that week's issue and Charlie suggested that I might help them get out the paper, as he had some other work to be done that day, and could only give a little assistance. I immediately went to the office, quite certain in my belief that Dan had probably reverted to his former habits, where I found Nora crying and believing that some terrible accident had befallen him. She was of little help that day but the three of us managed to get the paper out on time. At first, I was deeply concerned about the condition of his accounts, and began looking over the books at once. To my relief, I found everything in order and nothing missing from the files. Evidently, he left town with only a few dollars in his pocket. In any event, I never heard anything about him afterward, and am under the impression that no others ever learned any fact regarding his disappearance or subsequent whereabouts.

Selling the Clarksville Record

With a full time job at the drug store, the unexpected and added responsibility of the newspaper, and the fact that the employing of the two Transues to do the printing proved very expensive, it was imperative that I dispose of the paper as quickly as possible. A friend in Grand Rapids, who had a sideline business as a broker in printing equipment and machinery, took me to a man by the name of Winchester who was having a desperate time of making a living for his family in a small job office. He had a wife and several children, a job press, and a very limited amount of printing equipment. The family lived in one large room on the second floor of an old store building, and the printing work was done in the same room. He could handle only the cheaper grades of printing in which the margin of profit was very small. He was reluctant to consider my paper but finally consented to come down and look it over. He had no cash for a down payment, but offered me his job press in lieu of it, and agreed to make a cash payment of $10. each month. I accepted the offer and turned the job press over to the broker who managed to sell it for enough to equal the commission I was to pay him for selling the paper. I even had to advance the freight charges on his household goods in order that he might move immediately.

He did very well with the paper and continued to handle some of his Grand Rapids job work in addition. Within a short time he invested in a power press and engine, but made his payments regularly each month to me as agreed. These continued during the remainder of our stay in Clarksville and were not cleared until some time after my entry into Government service.

When the competing drug store was purchased, a partnership under the name of Goodfellow & Church was immediately formed. I was to furnish one-half the capital investment. Goodfellow was to receive $5. a week for being a pharmacist and my instructor, after which the profits were to be divided equally. Goods and equipment from the purchased store were removed and merged with the Goodfellow stock. Many people were on hand to witness the moving of the goods across the street. Quite a sensation was created when we lined up a large number of partly filled bottles of drugs along the edge of the sidewalk in front of the store, and the number of onlookers increased. There was further astonishment when we picked up these bottles and began pouring the contents into the gutter. People asked the privilege of buying them but we refused all offers, explaining that we refused to sell any drugs whose potency or quality were in doubt. Of course, these drugs were ones of low cost and ones that deteriorated rapidly, so the loss to us was far less than apparent to the crowd. On the other hand it served as a good advertising stunt, by showing our intention of safeguarding our customers' health regardless of the cost to us.

In addition to a complete line of drugs and patent medicines, we carried a large assortment of good candies, cigars, tobaccos, paints, oils, wall papers, cameras, brushes, spray materials, and many others. Our cigars and tobaccos were kept in a large showcase equipped with a humidifier which kept the stock in good condition. As it was the only one in town, we soon captured the bulk of the tobacco trade. In most of the lines our stock represented a better assortment than that in any of the other stores. Everyone in the village and in the rural districts for many miles distant patronized our store to a greater or less extent. This gave us a wide acquaintance and an insight into all types of human nature.

This was my first and only experience in store selling, and, after the first few months, I gained a proper measure of self confidence and thoroughly enjoyed the work. The majority of people were friendly, liked to visit with us, and sought our advice on many different matters. My partner was abrupt and quick in his speech, and some people formed the impression that he was grouchy and unfriendly. A few refused to deal with him and always came to me instead for their purchases. They wondered how I could get along with him, but we never had any trouble as we fully understood each other. Neither of us had any arguments with customers except the few who were unreasonable in their expectations.

Perhaps my most disconcerting experience, although comparatively trivial, occur-red late one afternoon when the young son of another merchant came into the store to buy a pound of blue vitriol for use in a battery he had for operating a telegraph key. I weighed the chemical, tied up the package, and charged him the usual 10 cents for it. Within a very few minutes his father came into the store with the package and said he wanted me to know that he did not own the United States mint, and that he did not propose to stand for any Jesse James tactics. I told him that was the regular price but if he did not feel satisfied I would gladly refund the money. When I gave him the money, he told me he could buy it at a grocery across the street for 5 cents a pound, so I told him it was alright with me. He had always been a good friend of mine and his unusual attitude rather surprised me. I was little disturbed over his complaint about the price, but his talk rankled. While eating my supper I determined I would go over and tell him a few things, too. I knew that grocery stores could legally sell a few common drugs, and that this one in particular had a number of items that he sold at cut rates just as he did some grocery items to draw trade away from others. When I got to the store I looked over our drug catalogue and found the wholesale quotation on blue vitriol was 12 cents for a single pound, and about 8 cents for lar-

ger amounts up to 100 pounds. I took the catalogue and went over to see my friend, showed him the prices and asked him if he really wanted us to try and make a living by selling each item of our goods at less than cost. After venting my feelings as strongly as he had earlier done, I returned to the store satisfied that I had taken the proper course. I refrained from telling him that we bought our blue vitriol in barrels at a price of two or three cents a pound, and that the groceryman probably had done likewise. We bought many items in bulk that way, thereby saving materially in the cost but, with our investment tied up for a long time, saw no reason to sell cheaper than other druggists who generally bought in small quantities.

Amusing Incidents in the Drug Business

An old Frenchman, living in the town, occasionally came into the store and bought some little item ranging from 5 cents to 25 cents and always had it charged. He was intimate with no one and his life was a mystery to everyone. We were suspicious of his credit and when his account in a few months was approaching a dollar, we dunned him for it sometimes two or three times before receiving payment. On the same visit that he settled the account, he would always make a small purchase and have it charged. This became tiresome to us and we hoped that he would quit us as a customer. Among the items he regularly purchased about once a month was alcohol. For that he brought a whiskey flask called a half-pint size, but actually holding little more than six ounces. As the standard price for alcohol was 60 cents a pint, a half-pint would be 30 cents, and we filled these undersized flasks for 25 cents. Each time he purchased it or any other item he always complained about the price. One evening he brought in his flask and began by asking how much we charged to fill it. I told him 25 cents and he began his complaint, saying he could get it filled in another town for 15 cents. I was very disgusted with him and told him that no one could afford to fill it with pure alcohol for 15 cents. He continued to argue the matter and, assuming that he bought it to drink, I told him I would fill it this time for 15 cents. I put in 15 cents worth behind the prescription case and filled it up with water. This was contrary to our ethics but I felt the circumstances warranted the treatment, and that he would need less water when he drank it. The next time he came for alcohol he handed me the flask and told me to fill it, without saying anything about the price. When I wrapped it up he asked the price. I told him 25 cents and, to my surprise, he promptly paid for it in cash. After it was in his pocket he said: "You know, the last time I bought it the alcohol seemed different. I use it to heat a vapor bath cabinet, and when the tank was only about half empty I could not get it to burn". I immediately asked him what he paid for it and, when he said 15 cents, I remarked that only the best alcohol would burn well in those cabinets.

My partner became a great fishing fan and often spent a day at the sport. From the beginning of my drug experience it had been impressed upon me that I should sell no drug with which I was unacquainted as to its properties or action. On one of the days that I was alone in the store, two ladies came in and asked for some carbonate of ammonia. It so happened that I had never sold this drug nor discussed it with anyone, so I looked it up in my textbooks and found that the dose was only three to five grains. At that rate an ounce would make about 100 maximum doses, and these ladies wanted a number of ounces, probably a half pound or more. I asked them what use they intended to make of it and was told it was to be put into cakes before baking to make them light. On the basis of the medical dose, there would be enough in a single cake to kill 100 people or at least make them very sick. I asked them if they had ever used it before and they said

they had used it regularly for years. I was in a quandry what to do under the circumstances, because I could not understand the problem yet felt that it must be harmless. I told them frankly the situation I was in and that I inwardly felt there was nothing wrong involved. They lived 8 or 10 miles away and were greatly disappointed, so that I felt very sorry for them and my own ignorance. When Goodfellow returned and I told him about it he roared with laughter. He told me I had done just right in refusing to take a chance, but that the application of heat drove off the ammonium gas, which produced the raising effect in the cake, and that the remaining substance was absolutely inert and harmless.

On one summer holiday, probably July 4th, a celebration was held in the town and there was an enormous crowd on the streets. There was a saloon on one side of the main street and a bar in the hotel across the street from our store. It was illegal to sell liquor on a holiday and the front doors to those places were locked, but we saw evidence that indicated the back door of the hotel bar was not. We had a Government license that permitted us to sell liquor, but we never sold any to persons who were intoxicated or were known to become intoxicated, nor to suspicious strangers. We did not approve of it on general principles although we were on safe legal grounds if we assumed the buyer was intending it as a medicine. This interpretation was rather broad but, for the sake of our own reputation and that of the store, we did not wish to assume any risks. If a buyer were to meet with an accident and injury because of drinking liquor purchased from us, it would reflect severely upon our business. Therefore, on a holiday we proposed to be doubly careful. During the forenoon a stranger came into the store and tried to buy some liquor from my partner. Already he was half intoxicated to say the least, and Goodfellow refused him saying the hotel and saloon were the only ones in that business. The fellow said they wouldn't let him have any, undoubtedly because of his condition and it being a holiday. He went out and Goodfellow told me about it and said we would not let him have any under any circumstances. Within a half hour he came back when he saw that I was in the front part of the store. He lurched up to and leaned heavily on the showcase and asked me for some liquor, and seemed greatly disappointed when I emphatically refused him. He stood there weaving back and forth and casting his bleary eyes around the store and at me, then haltingly said: "Got any Peruna?" I replied in the affirmative, and said he: "Give me bottle Peruna". I wrapped it up and he left the store. My last sight of him was when he ambled in the direction of the rear of the store. I suspect he downed the entire bottle which would be no funeral of ours. Some years later I learned that Peruna contained 80% whiskey, which probably accounted for its popularity as a patent medicine.

Successful But Unorthodox Methods

When the partnership was under discussion, I told Goodfellow that I was not successful in collecting accounts. He told me his trouble was in keeping books and, that if I would be responsible for them, he would assume the collections. Fortunately, the number of very bad accounts was extremely small. To those few Goodfellow sent regular monthly statements. After three or four months, if no payment or arrangement to pay was made, he would send them a statement for a much larger amount. In most cases this brought the individual to the store with a demand for an explanation of the larger bill. Often he would say he wanted to settle his account for what he owed. If he did not make such an offer he would be asked if he was ready to pay which usually brought an affirmative response or at least a definite promise. Then the books were brought out and his account checked, and a "mistake" was found, which placed him on his honor to pay and embarassed him for accusing us of cheating. I recall only one or two cases where

this procedure failed to bring results.

An occasional customer wanting only a small quantity of a drug would come in and ask for one, two, or three cents worth of it. My partner rightfully considered this unethical because it involved the same responsibility as a larger sale, sack or wrapping paper, twine, time, technical knowledge, and difficulty in weighing such an extremely small amount. This practice was discouraged by putting up a small quantity of the drug and refusing to accept any pay for it, calmly saying we never sold less than 5 cents worth of any drug. This embarassed the buyer and many would offer to pay the 5 cents which we always refused, but it seldom failed to break this petty habit. The local barber sent his little girl to the store one day with 2 cents to buy something he used in his business. We gave the girl the package and returned the 2 cents, telling her to inform her father that we sold nothing in the drug line less than 5 cents. He was a good friend and a fishing pal of ours, but he came into the store flushed with anger. He said: "I want you guys to know I am no object of charity" and threw down 5 cents on the counter. We laughed at and kidded him but could not make him take his money back. However, it cured him of the 2 cents habit and our relationship of friendliness was soon restored.

My partner was a good buyer and I was willing he should assume the most of that responsibility. He had a habit of badgering the salesmen until they became very sore at him and, when they gave up hope of making a sale and became upset, he managed to get various concessions in prices, prepayment of freight, discounts, etc. We wanted to add a line of fishing tackle and when a young man made a call on us for the first time with such a line we were deeply interested. The usual tactics so confused the young fellow that he could not give us the same price twice on a certain article. He had a splendid line and after he had lost hope of making a sale my partner placed a large order with him. He came regularly after that and we became good friends. Many months later we reminded him of that first sale and his confusion over it. He then told us that was his first day on the road and his first sale of consequence. Some years after I left Clarksville I inquired about him, and Goodfellow told me he was still buying goods from him and that he had become the finest salesman that he knew.

Patent Medicine Advertising

When I bought the newspaper there was a considerable number of advertising contracts with patent medicine companies. These contained varying specifications as to position in the paper, size of type, frequency of copy change, etc. They ranged in length of space required from one or two inches up to as much as a half column, and some required a change of copy every week. A copy of the paper had to be mailed to them each week and if the company found any violation of the specifications it deducted the pay for that issue. These contracts had been taken at an average price of about $10. per year, which was far below any other form of advertising and only a fraction of the rates charged local advertisers. The returns no more than covered the cost of setting the type, leaving nothing for the space used nor the copy of paper sent each week. I was disgusted with them and vowed that, when each annual contract expired, it would be either cancelled or the rate materially increased. A very few granted the increase I asked but the most of them refused and were dropped. While still operating the paper and after I began to work in the drug store, I learned that much of that type of advertising was inspired by patent medicine salesmen. In their efforts to get a large order for their line they often offered the inducement of carrying an advertisement in the local paper.

I informed Goodfellow of my experience with that kind of advertising, and

he readily agreed to help me rectify it. In order to get a special price on any popular patent medicine, he would often buy a gross at a time instead of a single dozen. This pleased the agent and when he was told that the order hinged on his carrying an advertisement in the paper, he usually agreed to do so. I would be tipped off in advance and when he came to see me, the price quoted by me was one that I considered in line with its real worth. This put him in a tight spot and resulted in our doing some collective bargaining. If an agreement was reached it was much more to my advantage than any contract I could have secured from the company by mail. On one occasion, I was working in the store when an agent came in and began talking to Goodfellow. I kept at the rear of the store and out of sight as much as possible. When their conversation indicated that a deal was in the making and that some advertising was to be included, I slipped out the back door and hurried to the newspaper office. He soon came in and made me a proposition that was uninteresting. I countered with one for at least three times as much, which was reasonable and as cheap as I dared to accept. He said his company would never stand for such a price, but I told him that I did not care for the business on any other basis. The big order was back in his mind, and finally, he agreed very reluctantly. Before he left he asked me if he had not seen me in the drug store that morning. I told him I was there earlier in the day and that I worked there some of the time. He began to grin and said he now understood the situation and that he had been made the victim of collusion. He accepted it as a good joke on him, but I suspected that the price he had to pay over the company's regular rate would be deducted from his commission.

Buying and Selling Holiday Goods

When our partnership was formed and the business reached the point of running smoothly, Goodfellow told me that we would put in a stock of holiday goods as he had always done in the past. He went to Detroit and Toledo and ordered a rather extensive line of that type of merchandise. One of the items was a quantity of crockery in fancy patterns which I questioned as to its propriety and possibilities in a drug store. He insisted it would sell well and at a very good profit. When the goods arrived he marked nearly all of the crockery and many other items at twice their wholesale cost. We put a row of tables down the middle of the store and loaded them as well as every other available space in the store with these new goods. No other store in town had anything to compare with the variety and quality of our line, and we did a rushing business throughout the month of December, with very little left to be carried over.

When the next fall arrived, that of 1901, he told me that I was to do the buying that year. I was a little hesitant but he insisted that I could do it. Cora and I went to Toledo where we spent two full days at the wholesale house, where we selected and ordered goods totaling, as nearly as I can recall, as much as $1,000. The salesman took us to dinner that evening and furnished us with choice seats at the leading theatre. This buying experience was new to us, but proved interesting and quite successful. The line we purchased on that enjoyable trip proved equally as good and sold as readily as that of the previous year.

As partners we agreed to take turns in opening the store in the morning. One would go to the store soon after 6 in the morning, sweep the floors, build a fire when needed, straighten and arrange the stock, and do more or less dusting and cleaning. At night he would go home around 9 o'clock unless there was an unusual amount of trade at the time. The other would come to the store around 7:30 in the morning and close the store at night about 11 o'clock. On one rather cold winter morning during the holiday season, when it was my turn to open the store, I swept the floor as usual but just before I finished, a young man came

in and selected several Christmas gifts. Before he left others came in to look and buy and I was kept very busy. My partner arrived a little later and we both were kept very busy. About 10 o'clock Father dropped in and, seeing the crowd, asked if there was anything he could do to help. I said: "Yes, for Heaven's sake build a fire". We had a big round oak stove and always aimed to have a good fire for the comfort of those who had driven in from the country on cold mornings, but that morning we were too busy and they had to shiver. The holiday season greatly augmented our sales and, while we had to work very hard, we enjoyed giving our best service towards making our customers happy.

Toilet sets were very popular at the time and we carried a rather heavy stock of them for the holiday trade. When I left home to buy the stock, my partner gave me specific instructions to buy one toilet set that would be far above the others in quality and price. I suppose he thought there might be one customer who would want and be able to pay for something much better than the average run of such goods. The popular priced ones sold from $3.00 to about $6.00, but the special one I ordered would have to sell for at least $25.00. When my partner saw it he immediately said it would be impossible to sell it at such a price, and suggested we might give it as a prize in a drawing, thus using it as an incentive for increased purchases of other goods. This seemed a good idea and we had a quantity of numbered tickets printed which were given with each purchase of a certain amount. It was well advertised in the paper and was kept on display during the holiday season. It was an aid to our sales as many tried to accumulate a large number of tickets, and we sincerely hoped it would be drawn by one of our best regular customers. The drawing was announced for the afternoon of the day before Christmas, and a large crowd assembled to witness it. The tickets were thoroughly shuffled and a young girl was picked to make the drawing. The winning ticket, to our dismay, went to a lady from a city in Wisconsin who happened to be in Clarksville for a few days visiting her brother, the owner of the local bank. She had been in the store only once and had only the one ticket; and was wealthy enough to have bought such a toilet case. Thus our good intentions were somewhat diappointing.

The Clarksville Band

During the summer of 1900 the Clarksville Band was revived and began practicing. A cornet player was hired as leader and trainer, and I was asked to become a member. The Harker brothers, Melvin, Robert, and Fred transferred their membership from the Saranac Band, and I was glad of the chance to be with them and with the other members. I bought an alto horn and, as I had previously practiced on a cornet, I was able to handle this minor part. As soon as we were able to appear in public, we played each Saturday evening on the streets which increased the number of Saturday night shoppers. The merchants paid us a few dollars for each program, and, besides playing on the main corners, we would play in front of one or two stores each week. The owners would then give us a box of cigars or other treats for this special service to them.

That was the year of a National campaign, McKinley versus Bryan, and our band was in considerable demand to play for rallies. On one occasion, William Alden Smith of Grand Rapids was slated to give an address in Clarksville. He was our Republican Representative in Congress and later became a Senator. Our band was to meet him at the depot, and we marched the half mile to the station. We formed a circle close to the point where he would step from the train, and were playing as the train came to a stop. My position happened to be such that the train was behind me and I could not see him. Fred Harker was our snare drummer, and suddenly I heard that snare drum break into double time and going at a fur-

ious pace. Some of the other players began looking in that direction so I turned to see what had happened. William Alden had grabbed the drum and was playing with us like a veteran player which he was. We played numerous times in Saranac, not only for campaign rallies, but for Decoration Day, the Harvest Picnic, and other occasions.

In the summer of 1901 the Band Convention was held in Lansing, and our band was one of 26 that met together on that day. We marched to the City Park where all bands were to assemble for the big parade scheduled for 11 o'clock. It took so long to get them all together and organized that it was nearly 1 o'clock before the parade started. The route encircled the business section on both sides of the river and was several miles long. When it was over we made a dash to get something to eat but, as it was then about 3 o'clock, there was not much left for us. Cora and Mrs. Goodfellow were with me for the remainder of the day, and we spent the time in and around the Capitol. I had a new camera and took a few pictures, which are now quite interesting, as they show the horses and buggies tied along the streets, and the different appearance of the Capitol grounds at that time. In the evening all the bands assembled at the corner of Washington and Michigan and played together. The music consisted of patriotic and popular tunes that all could play without the music, and with 26 base drums massed together, 26 snare drums, and as many of each of the other instruments, it was rather trying on the ear drums. Some of the outfits had absorbed sufficient liquid refreshments during the day to give them much more than their normal power in producing volume of sound, and the results must have been audible for several miles in each direction.

DEVELOPMENT OF THE TELEPHONE BUSINESS--Chapter XIV

When Goodfellow bought the drug business from his predecessor there was a wall telephone in the store, property of the Citizens' Telephone Company of Grand Rapids, for toll service only. Several of the local merchants desired telephones in their stores and homes and the telephone company was induced to install such a local service. They put a switchboard in the back end of the store, installed a dozen or more telephones in the town, and appointed Goodfellow as local manager. About that time the Bell Telephone Company installed a toll service in another store, but installed only one local telephone for a subscriber who wanted it primarily for long distance business. When I began working in the store a few hours each day, I tended this small switchboard a part of the time as I could study my pharmacy books between calls. I was anxious to have telephone connection with Cora's folks on the farm, which was about four miles north of town, and began talking a rural line in that direction. I learned from the Company that it would install rural lines, at an annual rate of $12. per subscriber, if there were five subscribers on one line within a distance of four miles. A less number of subscribers within that distance or a longer line involved a much higher rental rate. I induced Father Harker and Robert Harker each to take a contract for a phone, and secured two other farmers living between the Harker farm and town to sign contracts. There was some difficulty in getting the fifth signer but I finally succeeded with the help of the other four.

Service as a Trouble Shooter

When this rural line was completed it was necessary to have a larger switchboard, and a telephone engineer came out from Grand Rapids to install it. I had applied for the position of trouble shooter, so he took pains to instruct me in the mechanism of the switchboard, and made a record for my guidance in con-

necting additional phones and making switch-overs when necessary. We then went out together and installed the five telephones in the farm houses of the subscribers. I told him I would like to have a telephone in our home and that I thought the Company should install one rent-free. He said they would not do that but suggested that I might furnish my own phone, attach it to the switchboard, and use it without making an official report of it. Goodfellow lived on the same street that we did, and he wanted a phone too, Poles had been set on our street to carry the wires for village phones, and when those wires were strung we had them put on an extra wire. After they had finished and left the town, Goodfellow installed an old discarded telephone in his home and I put up the one I had used on the farm, so we had our own 2-party line connected with the switchboard.

As soon as the first rural line was completed, people began inquiring about lines in other directions from town. We told them the terms and requirements and asked them to canvass their neighborhoods for subscribers, and we would help solicit those who came to the store. Very soon there were enough subscribers for another line, and before that could be completed others were ready. I believe there were five lines completed before I left Clarksville, and others had been discussed. It was my job to install the telephones on these lines and, as it was necessary to use a horse and buggy to reach these homes, I hired Fred Harker to help me, and to furnish the means of transportation. We enjoyed this work as well as the fine dinners some of the thrifty German farmers provided for us.

When I began the telephone trouble work I requisitioned a pair of climbers, and the engineer instructed me in their use. He had me practice with them under his instruction and warned that it was much more difficult to descend a pole than to climb it. The livery barn was being remodeled and the entrance to it was to be changed to a point directly behind a telephone pole. Before I had a chance to gain much climbing experience, the livery owner asked me to attach some ropes to the top of the pole and disconnect the wires so that it could be moved while being kept in an upright position with the guy ropes. It was a tall pole and I did not relish the job, but there was no one else available to do it. I had no safety belt, such as linemen invariably use, but climbed the pole carrying the heavy ropes with me. I attached the ropes securely, then cut the tie wires that held the main line wires to the insulators. This took some little time and my ankles became very weak and tired. With one arm around the pole and the other hand holding one of the ropes, I started to descend. One ankle gave way and the hook on that foot slipped out of the wood. The sudden throwing of my entire weight onto the other ankle, caused that one to do likewise, leaving my one hand on the rope as my only support. I immediately grasped the rope with both hands and, thanks to some experience in climbing and descending a rope, I managed to get down to the ground without seriously burning my hands. As a result of that narrow escape from a disastrous fall, I decided to leave future pole climbing to those who were professionally skilled in that art.

On a morning during a very cold spell in winter, a farmer came into the store and asked if I knew the line was down in his neighborhood. I told him I did not, nor could I believe it was so because I had just been talking over it. He assured me that he had seen both ends hanging down to the ground, so I went to the switchboard and called a subscriber living some distance beyond the break. I got a prompt answer which left my informant and myself mystified. Later in the day others came into the store and reported the break, so I informed some linemen who happened to be working in the town and sent them out to investigate. They found the break and that both ends of the wire had accidentally fallen across a barbed wire fence, which fact caused a workable connection to be maintained.

Night Service for Rural Subscribers

The most serious defect of our exchange was the lack of service to subscribers during the hours that the store was closed. Solely for that reason we kept the store open for the same number of hours on Sunday as on week days, alternating that duty between the two of us. But from 11 at night until 6 o'clock in the morning, there was no service. In order to give some measure of emergency protection to our rural subscribers, we plugged in two lines to my house phone, two others to Goodfellow's, and the fifth to a residence of one of the local doctors who volunteered his help, upon closing the store at night. Then we notified all rural subscribers of the arrangement that calls of extreme emergency would be taken, which made them feel more secure. Such calls proved to be very rare and caused us very little inconvenience or loss of sleep.

However, there was one call that saved a man's life. It came in on the Doctor's line, and he immediately drove to the Burr farm, a distance of 5 1/4 miles, before daylight. A.P. Burr, the father of Art, Charlie, May Pratt, and several other children, had become desperately worried over financial troubles and had taken a heavy dose of laudanum, apparently with suicidal intent. The doctor was unable to revive him by ordinary means, and succeeded only after burning his feet severely with a hot flat-iron. He lived for many years afterward, although occasionally having brief mental troubles. After his wife's death, he spent his last years with his son, Charlie, at his home in Pontiac, during which he was mentally ill all or nearly all the time. He died, I believe, some years after we moved to East Lansing. He was a fine man, and the life of most of the parties in South Boston during my younger days, and his mental unbalance seemed unusually pathetic to all his friends.

Experience As a Telephone Manager

The owner of the store, where the Bell Telephone toll line and its one local subscriber was first located, resigned as its manager. The Company then moved it to the Allen Godfrey clothing store. Allen remained in business there only about a year, and when he was about to leave he notified the Company. No one came to take care of its removal, so Allen begged us to take it. We placed the booth in the front end of the store so as not to conflict with the booth and switchboard of the independent company in the back part of the store. As Goodfellow was manager of the latter, it was agreed that the managership of the Bell line should be in my name. The Bell was a metallic circuit, hence gave the better long distance service especially to other states. The Citizens' line was a ground circuit and operated only in Western Michigan, although they gave long distance service through connections with other independent companies.

The Citizens' Company, with its network of local and rural phones, naturally received all of the local business and most of the toll business to Grand Rapids and other nearby towns. From both systems we received 15% commission on outgoing toll business, and a messenger fee on incoming calls to non-subscribers of 10 cents per message. As the Bell Company refused to recognize even the existance of a competing company, we were justified in charging a messenger fee on all its incoming calls, even though we merely stepped to the switchboard and notified the person over the independent competing line. Incoming calls on the Citizens', being mostly for subscribers, resulted in very few messenger fees. This peculiar setup resulted in my monthly statements showing almost as much earned in messenger fees as the amount due the company for charges on outgoing calls, and the Bell Company sent a representative once or twice to investigate the reason for it.

The climax finally came when I sent a monthly statement showing that I owed

the Company only six cents and inclosing the amount in postage stamps. They immediately sent another representative who came into the store and, seeing both phones in the same store, asked me what right we had to represent both companies. I explained the situation to him but he was not satisfied and accused us of being partial to the other Company. To that I stated that we got the same commissions and messenger allowances from both companies, and that we always asked each person which phone they wanted to use so we were not guilty of his charge. He refused to be appeased and said the phone would be removed at once. He left the store to arrange for transferring it to another location. A few hours later he called me by long distance from another town and said he would leave it with me until he could make suitable arrangements with someone else. I learned afterward he was unable to get anyone in Clarksville to accept it, so it was still in our store when I left the town, and I understand it remained there for several years.

With the addition of the rural lines, the exchange had 40 or more subscribers. This necessitated one of us to be within sight or hearing of the switchboard at all times, and we soon came to recognize the voices of many local patrons and some of the long-distance operators. Bits of interesting gossip often were heard and important news from the outside world sometimes first reached us over the wires. About mid-afternoon on September 6, 1901, a call came in while I was sitting at the switchboard. It was from the long-distance operator at Grand Rapids who told me that she had just received word that President McKinley had been shot by an assassin while attending the Pan-American Exposition at Buffalo, New York. She did not know whether it was a fatal wound or not, but he died on September 14th. He had just begun his second term that year, and the world was shocked by the news. I told the news to those who came into the store and they passed the word to others on the street. Very soon people flocked into the store for further details. I repeatedly called Grand Rapids for further facts but none were available. The assassin was later convicted and hanged.

PRELIMINARIES TO NEW ADVENTURES--Chapter XV

By the end of 1901 I had mastered much of the subject of Pharmacy. I had memor-ized most of the more than 1000 formulae in the National Pharmacopoeia, done some work in qualitative analysis and identification of drugs, and was filling most of the prescriptions without help or instruction. I had studied two different quiz books on pharmacy, these being questions and answers similar to those used by the State Boards of Pharmacy in examining applicants. I would have completed two years of study under a registered pharmacist by the time the Michigan State Board's next examination would be held in May, 1902, which would make me eligible to try for a Registered Assistant's diploma, and I intended to take that test.

While our store did a good busines, the net income was not fully adequate to satisfy our ambitions. We felt the need of moving to a larger town and began laying plans to that end. Goodfellow had worked for a time in the State of Washington and had a pharmacist's diploma from that state which he kept in force by paying the regular annual fee. He decided to relocate there when a change was to be made, and he wanted me to go with him. It was arranged that if I succeeded in getting an Assistant's diploma in the following May, I would immediately go to the State of Washington where the diploma would probably be recognized, secure employment in various drug stores until I became familiar with the general conditions, and decided upon a suitable location. Goodfellow would then sell the Clarksville business and join me.

Although we kept this plan strictly to ourselves, Lew Todd, a young farmer and fellow member of the Clarksville Band, came into the store one December evening and asked me if there was any chance of his buying my interest in the drug store. I told him that I expected to take the examination in the following May, and if I succeeded in passing it I would be willing to sell so that I could go into business elsewhere. I suggested he wait until that time and he agreed to do so. This was a fortunate circumstance and one of the determinants of my future course as will be seen.

Uncle Sam Makes an Offer

The notice that I received informing me that I had successfully passed the Civil Service examination, stated that my eligibility for appointment was for a period of one year. When the year expired in July, 1901 I had received no offers of appointment, and decided I would make no further attempt to continue my eligibility by taking another examination. This, of course, was due to the fact that I was thoroughly entrenched in the drug business and was making satisfactory progress in the study of pharmacy. However, a month after the expiration, I was notified that my period of eligibility had been extended for another year. It interested me very little as I doubted my chances for appointment would prove any better in the second than in the first year, or that I would accept if offered the opportunity.

On a day in January, 1902, I received a letter from the Weather Bureau in Washington stating that my name had been certified for appointment as Observer. I was to be assigned to duty at Kansas City, Mo. for the customary probationary period of six months, and the salary was to be $840. per annum. A reply by wire was requested. I immediately showed the letter to Goodfellow and, to my surprise, he advised that I accept it. He suggested that I could continue my study of pharmacy, and if the appointment proved unsatisfactory, I could still take the pharmacy examination and return to our original plan of seeking a new location for our business. After consulting Cora and my parents, all of whom reacted favorably, I wired my acceptance. On the same or the following day I received a wire saying that my assignment had been changed to Columbia, S.C., and asking whether I would accept. To this I also wired my acceptance with a statement that I needed at least ten days in which to close up my business affairs.

In the meantime, I had telephoned to Lew Todd and told him if he was still interested in buying my interest in the drug store to come down and talk it over. He came on the same evening and the deal was made. He was to pay cash for my one-half interest, the drugs to be inventoried at current wholesale prices, and the fixtures and equipment at original cost with certain exceptions. On the following morning we began taking inventory and, when my ten days had expired, we had succeeded in counting and recording the entire stock. The individual items still had to be priced and the values computed, which would require another week or ten days of time. As I felt obligated to leave at the end of the ten days I had requested, I employed Lena to assist with the pricing and computing in my stead.

A Farewell Party For Us

We had made many friends during our two-and-a-half-year stay in Clarksville, I had been an active member in the Oddfellows' lodge, its secretary for two years and had just been elected to the office of Vice-Grand. Cora had been a member of the Rebekahs and active in its affairs for nearly the same length of time. These two lodges deemed it fitting that a farewell party be given in our honor. It was held at Nash's Hall, the village's main public hall, and a fine banquet was prepared and served. The affair was highly appreciated by us and thoroughly enjoyed, except for a painful accident that happened.

During the meal, Jessie, then 22 months old, sat on my lap. Near the end of the meal, while busily talking with a friend sitting at my side, a second cup of hot tea or coffee was brought and set down at the side of my plate. I did not notice this being done for a moment or two, but Jessie did. Quick as a flash she grabbed the edge of the cup sticking four fingers deep into the hot liquid. We dried her fingers with a napkin and, as she continued to cry loudly, took her to the ante-room. As soon as I realized it was an extremely severe burn, I dashed to the drug store, and Goodfellow prepared for me the standard mixture--an alkali and a bland oil--commonly used for burns at that time. This relieved the burning pain somewhat but not entirely, and we soon decided to take her home as we could no longer enjoy the party under the circumstances. It proved to be a very severe burn and the soreness continued for the next two or three days. Some days later the skin began to peel from all of the fingers, but I did not see them at their worst stage because I was then many miles away.

In view of the fact that the new position involved uncertainties as to duration, desirability, living conditions, etc., it was decided that I should make the long trip alone, leaving my little family to await the outcome of the venture. The local railroad agent was a friend with whom I had transacted much business during the years of our fruit-shipping business. After consulting with him on the cheapest method of travel, I purchased a 2nd-class ticket which did not permit, supposedly, occupation of pullman cars, although a sleeping berth could be bought if not taken by 1st-class passengers. Our finances, past and prospective, were such as to inspire the exercise of this economy on my part. It actually resulted in no hardship whatever, as I travelled all of the way with those having first-class tickets without complaint from any conductor. Thus I saved one-half the regular train fare to that distant city in the sunny south.

Incidents During Trip to Southland

It was on the morning of February 10, 1902 that I reluctantly bid farewell to my family for an unknown period of time. The weather was cold, the ground frozen and covered with snow, and the temperature well down towards zero. Leaving my family to shift for themselves under such conditions, to embark upon a new career that might prove unsuccessful as well as wasteful of our small financial accumulations, and having deliberately severed the source of a steady, though rather small, income; it all seemed fantastically foolhardy. As I rode past the snowy, level fields and substantial farm buildings of southern Michigan, my spirits fell to an all-time low and the pastures I was seeking beyond the horizon, somehow, lost their fancied greenness in my imagination. Had it been as easy to turn back as it was to proceed, my natural persistence might have failed me in this particular instance. However, I continued my journey to Toledo where I changed to a train bound for Cincinnati, arriving at the latter point late in the evening some two or three hours behind schedule. Upon inquiry, I learned that my connecting train had already left and that I could not get another until morning.

I walked through the depot and out onto a street of this unfamiliar city. I stood on the sidewalk for a few minutes to get my bearings and decide what my next move should be. Down the street were several electric signs bearing the names of hotels, and I wondered which ones might be respectable yet within my limited means. Near me stood a man who inquired whether I was a stranger or acquainted with the town. It developed that he had come in on the same train and had missed the same train as I, and that neither of us knew anything about the hotels. We walked along together and agreed that we would make inquiry of the first policeman that we met. We were directed to a nearby hotel and entered it

together. After registering, the clerk informed us that he had a good room with two beds at a lower rate than if we occupied single rooms. I was dubious about this arrangement and I think the other man was also, but each had unbuttoned his overcoat and we quickly recognized an Oddfellow's emblem button on each other's coat lapel. With this mutual assurance, we accepted the double room and, as it was late, immediately retired. When we took the same train in the morning, he told me he had a Pullman berth reserved and invited me to share his seat with him which I did. The conductor noted that I had only a 2nd-class ticket but said I could remain there for awhile. We rode together throughout the day and arrived in Knoxville early in the evening, where we found our next train did not leave until 11 p.m. We had supper together and roamed around the town to see as much as we could of it.

Both of us secured berths from there to Asheville, N.C. which, incidentally, was my first experience in a sleeper berth. Asheville was situated on the east side of the mountains, so our night was spent in traveling through the mountains. My fellow-traveler, whose name was Koehrman, was a retail shoe merchant in Toledo, and on his way to Asheville, where he had spent a few weeks of vacation in some previous winters. Before reaching his destination and leaving me, he gave me his business card and asked that I write to him and report upon my success in my new job. This I did in due course of time and received in return a nice letter from him in which he cordially invited me to call on him at any time I was in Toledo.

From Asheville I proceeded alone. The scenery was beautiful, as the train wound through the mountains all the way until after crossing the line into South Carolina. Even at the considerable altitude of the tracks, there was only a hard frost that morning and an occasional icicle hanging from projecting rocks. There was no snow in sight and the sun shone warm and bright, which helped to dispel my homesickness. Arriving in Columbia about the middle of the afternoon, I went immediately to the Weather Bureau Office. I learned that the official in charge, Jacob Bauer, was ill at home in bed with pneumonia where he had been for a week or more. The observer, whom I was to succeed, had left Columbia some weeks earlier, leaving only two boys in the office. One was Thos. H. Clay, messenger, and the other, George B. Adams, student assistant. They described the work that I would do and that of the office in general, then suggested that I see Mr. Bauer for further instructions; and take the oath of office that day so that my salary would start on that date, which was the 12th, Lincoln's birthday, although strangely not mentioned down there. When I called on Mr. Bauer, he suggested that I could get board and room with a private family living only two doors away, and to pick up as much as I could about my duties until he was able to return to duty. Thus the preliminaries were executed that day, and I had a place to eat and sleep without going to a hotel that first night. My boarding place was within a mile of the office, an easy walking distance.

LIFE IN COLUMBIA, SOUTH CAROLINA--Chapter XVI

During the first week only the two boys were in the office with me. They took the two daily observations and kept the records but did very little other work. The weather reports were not exchanged with other stations, no maps were issued, nor were any state weekly weather reports issued at that season of the year. As this office was in the eastern time zone, the observations were taken as of 8 o'clock. Therefore, no one needed to be at the office until 7:30 a.m. I watched the taking of the observations, and received instructions from the boys

as to keeping the records, otherwise we spent the time in visiting, getting acquainted, and I absorbed their chatter about office matters, the city, and the south in general. It was a very easy week for me and quite in contrast to the long hours and constant activity in the store I had left behind me.

Clay, the messenger, was a Mississippi boy, not very ambitious in his duties, or too particular in adhering to the truth at all times. Adams was an honest easy-going boy from a backward rural district known as Edgefield. He was a distant relative of U.S. Senator Ben Tillman, and owed his appointment to him. He was a student at the University of South Carolina, and he worked in the office three hours a day for $20. a month. On my first Sunday I walked to the city park, and sat on a bench for a couple of hours without an overcoat. The sun was bright and warm which, also, was in marked contrast to the Michigan climate on the previous Sunday.

Mr. Bauer returned to duty the second week, and immediately I began taking one observation and recording it each day, as well as receiving training in the varied routine work of the office. Mr. Bauer, as well as his wife, were natives of New York City. He was a rather small, quiet and pleasant man. He had been stationed in Columbia for a considerable number of years, had a wide acquaintance, and was well liked. Our relations proved to be pleasant, the work was not strenuous, and I enjoyed the office work throughout my stay there. Mr. Bauer, like all of my early years Weather Bureau bosses, had been a telegraph operator in the Army Signal Corps. At one time he had been stationed alone on Block Island, which is some distance off the Massachusetts coast, and a very lonely assignment. He also had been stationed for two years on the summit of Mt. Washington, where he and a fellow-observer were completely cutoff from access with other human beings for six months each year. They had a cabin on the extreme high point which was fastened down with cables to keep it from blowing away. Blizzards raged much of the time during the winter, and wind velocities sometimes exceeded 100 miles per hour. In one of these the chimney blew down and they had to get out and fix it to prevent being smoked out. They laid in a large store of provisions for the long winter, and did their own cooking. In good weather they did considerable hunting and each became an expert marksman. Their only communication with the outside was with the telegraph operator at Boston, and they often visited during the evening by wire.

He told me of his experience in one severe blizzard. While taking the night observation, which of course was after dark, he prepared to go outdoors to measure the snowfall in the snow gauge. His partner urged him not to go but he was determined to go anyway. As a precaution he set a lamp in the window and instructed his companion to fire his rifle in case he did not return in due time. He stepped out the door, got his bearings as to the direction of the gauge and, knowing the number of paces, he was able to travel the 30 paces and found the gauge without difficulty. After getting his measurements he turned around and traveled the 30 paces but found no cabin. He kept traveling in absolute blackness, hearing or seeing nothing. Knowing that the ground sloped downward from the cabin in all directions, he aimed to continually seek higher ground. After a considerable time he hit the side of the cabin and made his way inside. His partner had fired round after round of ammunition but no shots had been heard, neither had the light in the window been seen.

In summertime, tourists often attempted to ascend the mountain. Some became lost and some few were caught in snow slides. He helped to find some of those near the top, one or two of whom were dead when located. His stories were interesting and emphasized the rigorous quality of the winter climate on Mt. Washing-

ton.

Living With the Gardiners

The Gardiners operated a "5 & 10" Store. Business had been none too good and they were glad to rent a room to me and furnish board, as a means of helping out their finances. He was from New York City but his wife was a South Carolina girl. They had two children; a boy named Prince Albert, and a girl named St. Lawrence. There also was Nancy the colored cook, and her little black son who spent the daytimes there with her. We have a kodak picture of the family in our scrap book. The Gardiners were a jovial couple and I enjoyed their company, although Mrs. Gardiner's southern accent was almost beyond me at first. Many of the food dishes were entirely strange to me and when she would ask me if I would have this or that dish, I was embarassed because I could not understand her words or what she called it. Mr. Gardiner soon sensed my predicament and took pains to pronounce it in English and follow up with an explanation of its contents, for which I was very thankful. As I became better acquainted and felt free to discuss her unfamiliar accent, she insisted that she talked no different than I. Once she proposed we pronounce the same word and asked me to name one. I said "father" and she said "fawthah", and then insisted that they were exactly alike, so I gave up. I told her the main difference was that she failed to sound her "R"s but she was sure she did sound them.

Cora and Jessie arrived the latter part of March, having stored our household goods in Father's house on the farm, and we continued to live with the Gardiner's. Sweet potatoes was one of the staple food items, and in the south, were called "potatoes". In the place of our white potatoes they served "grits", which is a coarse meal made from white corn and eaten with meat gravy on it. It seemed rather flat tasting to me and I began to eat it rather sparingly. Mrs. Gardiner noticed and spoke about it, and I made bold to tell her that if I were permitted to eat it in my own way I thought I would like it. She assured me I might eat it in any way I saw fit, and Mr. Gardiner urged me to do it. Instead of using the meat gravy, I put milk and sugar on it and ate it like a warm cereal. I thought Mrs. Gardiner would never stop laughing about it, because she would no more think of using sugar on it than we would on potatoes. However, it was good as I had anticipated it would be, and after we were keeping house, we continued to use grits as our regular breakfast cereal. We continued to buy them after we came north but the quality and flavor were not as good, and we changed over to other cereals.

Their chief pie material was sweet potatoes. It resembled our pumpkin pies somewhat, but was much drier. The filling in all their pies was very scant in amount, being scarcely thicker than a sheet of heavy cardboard. Shortly after Cora arrived a lemon pie was served, and Mr. Gardiner made fun of the thinness of the filling. He remarked that: "He bet Mrs. Church could make a <u>real</u> lemon pie". Mrs. Gardiner promptly asked her if she would, and she accepted. It was customary in the south to keep all food ingredients locked in a cupboard, and the housewife would deal out the exact amounts needed for a cake, pie, or other bit of cookery, then relock the cupboard. When Cora was ready to make the lemon pie, and specified the number of eggs, lemons, etc. that she usually used, Mrs. Gardiner nearly collapsed with astonishment because of the greater quantities needed. The pie was made and Mr. Gardiner's remark was: "That lemon pie is what I call a real lemon pie". Their only bread was hot bread, a form of biscuits, prepared for each individual meal. Mr. Gardiner asked Cora to make some regular bread, and Mrs. Gardiner wanted to learn how it was done. While watching the various operations, she was very surprised as to why each step was necessary and finally

concluded it was too much work and bother for her to learn the art.

Living At The Turnbulls

The expense for board and room for the three of us cut heavily into our salary of $70. per month, and we decided to rent furnished rooms and provide our own living. We rented rooms on the second floor of a large house occupied by the Turnbull family. These were English people who formerly had lived in Philadelphia. Mr. Turnbull was a master plumber and had come to Columbia the previous year. He obtained work at his trade, rented this large two-story house, and sent for his family. He intended to sublet rooms for light housekeeping or furnish room and board and, in preparation for so doing, bought a considerable quantity, on the installment plan, of furniture. Soon afterward he got into trouble with the labor union, and, with characteristic stubbornness of the English, defied the union rules. This resulted in the loss of his job and prevention of obtaining work. The rent that we and one or two other tenants paid, constituted the only income he had. Installments on the furniture remained unpaid and the Company threatened to take it away. He then locked the house and gave us keys to use in going and coming. We knew this situation could not continue long and we began to look elsewhere for living quarters.

The Turnbulls were nice people and we felt sorry for them. While living there, the youngest of their three daughters had typhoid fever, which was very prevalent in the city. Methods of treatment seemed very crude to us. When her fever rose to a high temperature, the doctor ordered her placed in a bath tub of ice water. She was only seven or eight years old, and her screams from such treatment was almost more than I could stand. Finally I decided to make a protest, telling her father that I had never heard of such cruel treatment for that disease, and that I certainly would not permit it being done with my children. I believe he agreed with me and the treatment was stopped. The girl recovered a short time afterward.

It was customary for groups of colored people to frequently appear at the front gate and serenade us with music in the evening. Mr. Turnbull was a fine singer and a lover of music, and he encouraged these serenades by giving them a small tip. On one occasion, a group of four came with their instruments and all were exceptionally good musicians. Mr. Turnbull proposed that they be invited into the house for a longer concert and I seconded it. Such action would not have been tolerated at a southern home, but we were northerners and did not choose to copy southern ethics in this instance. We seated them in the front hall which was fully 12 feet wide, and they played for at least two hours. The instruments were; violin, mandolin, guitar, and bass viol, and the four would frequently change instruments. One was a teacher of music, and one who lived next door to us was a coachman. I took a flashlight picture of them and it is somewhere among our possessions.

An Attack of Malaria

The southern people did not believe in the use of door and window screens. Flies and mosquitoes were abundant in the homes and a constant menace to health. There was no sewer system in this city of 35,000 people, although one was installed in a part of the business district during our stay. With a single outdoor privy for this large house, conditions during the long and hot summers were anything but sanitary. That is why typhoid and malaria were common and more or less taken for granted. In a little more than three months after my arrival in the city, I was taken ill with malaria and confined to my bed for 10 days or two weeks. I was still weak from its effects when I returned to work. This malarial condition as well as an attack of dysentery persisted throughout the remainder

of my stay in the south. On some days I was too weak to walk to work and was forced to ride on the streetcar. When I left Columbia I weighed only 128 pounds compared with a normal for my height and age of 188 pounds. The symptoms of malaria frequently recurred and did not entirely disappear until four years afterward. The southern people slept under a canopy of mosquito netting at night, and we copied the idea but not until after my malaria attack. We also put mosquito netting in our windows to keep out as many insects as possible.

Attending The Cotton States Exposition

Immediately after my arrival in Columbia I began attending the meetings of the Oddfellows Lodge. Through this means I made a number of acquaintances within a short time. Early in May, 1902, the members organized an excursion trip to the Cotton States Exposition being held at Charleston, and we decided it was a good opportunity for us to do some sight-seeing. Leaving Jessie in Columbia, Cora and I joined the crowd at the station, and took the train about 3 a.m. This early train enabled us to reach Charleston early in the forenoon, giving us almost the entire day at the exposition grounds. Arrangements had previously been made for our party to be quartered at the same hotel, and we continued with it to the big show. We soon found that those leading the party were more interested in visiting the sideshows than the exhibits. We soon tired of this and slipped away from them, spending the balance of the day viewing the interesting displays by ourselves. It having been an extremely long day and many hours of walking and standing, we were very tired at night. On the following morning we still were tired and decided to do some sight-seeing instead of going to the exposition. We boarded a small steamer that took us across the Bay, past historic Fort Sumter and Fort Moultrie, to the Isle of Palms. This was a resort and bathing beach directly on the Atlantic Ocean, and we spent the most of the day sitting on the benches and watching the waves roll in on the sandy beaches. As it was our first sight of the Ocean, and as the day was nice and warm, we thoroughly enjoyed it. There was a considerable number of bathers but, as the costumes were far more prosy and less alluring than those of today, I paid very little attention to them. Toward evening we returned to our hotel feeling that the day had been well spent and much less tiresome than the previous one.

On the third day we visited the Exposition again, and took the train late in the afternoon for home. We had little opportunity to see much of the city of Charleston, other than a few of the business streets. These were paved with cobblestones and most of them were very narrow. The sidewalk in front of the stores was only wide enough for two to walk abreast, some permitted only travel in single file, and some had no sidewalk at all. While out for a stroll with some of the party that knew the streets, we turned into a narrow alley as I supposed it to be. When I asked why we were going through this alley, they laughed and said it was a street. It was only wide enough for one vehicle, had no sidewalk, and you stepped directly from it into the stores. Most of the buildings were very old, some probably 200 years, and a few possibly much more than that in age.

Decoration Days

Decoration Day in the south is celebrated on May 10, and occurred shortly after our return from Charleston. We wanted to see how it was conducted there, so went to the cemetery arriving somewhat in advance of the scheduled time for the program. We walked through the cemetery and noted the many small Confederate flags at the soldiers' graves, similar to the American flags used in northern cemeteries. In one section of the cemetery we saw an area inclosed with a weatherbeaten picket fence, and went over to inspect it. In it were the graves of Union soldiers, possibly 25 or 30, but without flags of any kind. The exercises

by school children took place on a platform in the cemetery, after which they marched through the cemetery and placed flowers on each Confederate soldier's grave. They passed the graves of the Union soldiers on both sides but not a single flower was left on them. This disturbed me greatly because, at the time, the Womens' Relief Corps in the north had announced arrangements for decorating Confederate graves in northern cemeteries, and this friendly gesture had been lauded by the southern press. On our return home I vowed that, on May 30, I would try to procure enough flowers and decorate those Union graves myself and endeavor to have the fact mentioned in the local paper. However, on May 30 I was very ill in bed with malaria, and could not carry out my resolve.

Within two blocks of the Turnbulls' was the fine, old southern colonial home of General Wade Hampton, one of the greatest Confederate generals. In passing the house I occasionally saw him on the porch, and also a few times when he rode out in his carriage. He had a distinct military bearing and closely resembled the pictures of him in our history books. He died on April 11 of our first year there, and I passed the house while the funeral was being held. He had been Governor of the State, U.S. Senator, commissioner of Railroads, and opposed secession in the State Legislature in 1861. He commanded the cavalry under General Lee. He was universally recognized as a really great statesman.

I Was Made a Mason

While in the drug store at Clarksville, my father and Goodfellow attended the Masonic Lodge at Saranac where they were members. They wanted me to join and I intended to do so, but put it off for a more opportune time. When I arrived in Columbia I found that Mr. Bauer was a member of all or nearly all of the Masonic orders, and I regretted that I had procrastinated in taking this step because membership would have been helpful to me in this new environment. He suggested that I apply at once to my Saranac Lodge, which would have jurisdiction for one year, and if accepted the degrees could be conferred in Columbia. This I did and, in due time, received the degrees. These, because of the red tape involved, were not completed until April, 1903. When I took the first degree the Mayor of Columbia was the Master of the Lodge; and when I received the third degree in the following year, the City treasurer was the master. The degrees as conferred there, while essentially the same, were different in many details from those in the north as I later learned.

I was informed that the Royal Arch and Commandery degree could be obtained more cheaply there than in the north, so made application for them as soon as I was eligible for each. I received the Royal Arch degrees, and had been elected to receive the Commandry degrees but was transferred to Toledo before obtaining them.

Attending Southern Barbecues

The annual Masonic Barbecue was held early in the summer after my arrival in Columbia. I was invited to attend because my application for membership was under way although I had received no degrees at that time. It was held in a large wooded park outside the city and it was my first taste of barbecued meat. The cueist, as he was called, was an old man who had served in that capacity for 25 years or more and who was rated an expert in the art. A long trench was dug in the ground, and a fire was built in it 24 hours before the dinner. Sides of beef, veal, pork, and mutton were placed on iron bars over the fire, and were turned at intervals so that they would be thoroughly cooked and browned on all sides. The meat was highly seasoned with salt, pepper, and other substances which gave it a tangy flavor. Each person was served with the kind or kinds he preferred and he could have all he wanted. There also was a choice of drinks, coffee, beer, or

lemonade. It was a fine meal and, being a new experience, was particularly interesting to me.

Later in the season, the Oddfellows had a barbecue which Cora and I attended together. It was held inside a large, barnlike building where the large crowd was seated at long tables. The meats were similar in kind and flavor to those served by the Masons. In addition, there were multitudes of flies, mosquitoes, and many other insects that swarmed around us and over the food. Coffee was served and we had to keep the cup covered with one hand throughout the meal to keep the insects from committing suicide in it. Before the meal was finished it became dark enough for the lights to be turned on. When this was done, large bats began flying back and forth. They seemed to be engaged in a contest of which one could fly closest to our heads without touching us. They were very swift on the wing and present in large numbers. Some of the people, including ourselves, were quite disturbed by them but they actually did no particular harm. We returned home without much enthusiasm for a repetition of that evening's experience.

Adventures With The Alstons

When the Turnbull family decided to surrender their furniture to the installment house and return to Philadelphia, we secured furnished rooms with Mr. and Mrs. Charles J. Alston. We had two rooms on one side of the central hall that extends from the front to the rear of practically every southern home. A southern family rented the two front rooms on the opposite side of the hall and the Alstons lived in the back portion of the house. They had come from England some years before and had lived in Asheville, N.C. for a time. Mr. Alston had been a salesman for the Lipton Tea Co. in England and also for a wholesale liquor house there. In Asheville he had tried various businesses such as dealing in junk, bottles, soft drinks, etc., but became a complete slave of the liquor habit and unable to continue the profitable operation of a business. He came to Columbia, rented this house, and attended the Keeley Institute for alcoholics. When he had completed the treatments at that institution he sought employment in Columbia. He secured work with a fertilizer manufacturing company. Within a year or less he contracted typhoid fever and was just recovering from the attack when we moved into the rooms subleased to us. After his illness he was too weak to resume heavy manual work at the fertilizer factory, yet felt the need of doing something immediately to recoup his finances. He was certain that if he had a small loan of funds, he could establish a soft drink business that would be profitable, and asked me for such a loan. I was in no position to help anyone as my snall earnings were barely sufficient to meet our needs, but I asked him how much he needed. To my surprise he said $5.00 would buy enough chemicals to make up some samples which he could use to obtain orders. I felt I could gamble that amount and told him I would purchase the chemicals.

Engaging in the Soft Drink Business

Because of the possibility that I might want to return to the drug business I had previously visited the local wholesale drug house and made the acquaintance of some of the officials and of the chief chemist. I bought the few chemicals that Alston wanted and we experimented that evening in concocting a palatable soft drink. When I returned home from the office on the following evening, he showed me $25. worth of orders he had obtained that day, and we set about making up the needed amounts to fill them. On the following day he made the deliveries, secured the cash for them, and brought home more orders to be filled. I had to buy more supplies of chemicals, a set of apothecary's scales, glassware, etc. The business grew from day to day and our hopes continued to rise. Our success was due in part to his good ability as a salesman, and in part to the fact that there

were many small stores operated by Negroes, Greeks, and so-called "poor white trash". These small stores had goose-neck soda dispensers attached to a counter, and could afford to buy only in small quantities. The regular wholesalers demanded larger orders than they could buy, whereas we offered to sell in lots of one gallon or more provided they pay cash. We branched out into the making of soda fountain sirups and this proved even more successful, as these small stores could not buy less than 12 gallons of that many different flavors at a time of anyone else.

There was also found to be a demand for vinegar and Alston told me to try my hand at making it. I obtained a standard formula from the chemist at the drug house and the necessary chemicals. The product proved to be as good or better than that on the regular market, and we sold it in 50-gallon casks and in 10-gallon kegs at about 20 cents a gallon. The regular wholesale houses obtained their vinegar from the north in carload lots, and required each buyer to sign a contract for a minimum of 10 barrels at 24 cents a gallon. A small store that sold only one or two barrels a year hesitated to sign such a contract, and they appreciated the opportunity of buying in smaller quantities from us. The same was also true of cigars, but we had to buy our supply in the north and have them shipped from there, so the percentage of profit was small but netted us much good will. We tried bringing in jewelry assortments from the north, and saw unlimited possibilities in numerous other fields. Within a short time we had accumulated two or three truck loads of barrels, casks, kegs, jugs, and other containers. We bought a new typewriter; had letterheads, envelopes, and various forms printed; and established a checking account in the bank. I left the office at four o'clock each afternoon and worked until midnight in order to keep up with the orders, and prospects took on quite a rosy hue.

Returning from work one afternoon, I happened to meet Alston on Main St. and stopped to talk with him. I discovered he was drunk which was the first that I had known him to take a drink since our acquaintance began. I realized at once the significance of the situation, knowing that, if a Keeley graduate returned to drink, he was lost. When he returned home and was sufficiently sober, I lost no time in telling him that I must withdraw from the partnership. He demurred but I was insistent. He tried then to force me to buy his interest but I refused. After considerable parleying I finally obtained the typewriter for my interest, although the total assets of the business amounted to about $500.

He undertook to carry on the business alone but engaged me to keep the books and attend to the correspondence and other paper details. The cigars we were buying from a northern manufacturer were obtained because I had a credit rating with the Company and because I assumed personal responsibility for them. We had just placed a rather large order for more cigars when the partnership was dissolved. I immediately notified the Company of the dissolution and told them that any further shipments would be at their own risk. The goods had already been shipped when my letter was received but they recalled the shipment enroute and notified Alston of their action. That made him very angry at me and he ordered us to vacate our rooms, so I immediately engaged rooms elsewhere. In the meantime he was taken ill and confined to his bed and Mrs. Alston begged us to stay for at least a few days. In a day or two he received a letter from the cigar company, in response to one he had written condemning me, stating that he should not blame me in any way because they only withdrew the shipment when they found his financial rating unsatisfactory. He then called me in and apologized for his hasty action and begged us to remain permanently. However, as we already had other rooms engaged and knew that he was drinking, we decided it was best for us to

move. In a few days he went back to the Keeley Institute but they could do little for him and sent him home again. He then decided to move back to Asheville and Mrs. Alston continued to write to us occasionally from there. When we returned north we notified them that we would pass through Asheville and would have a couple of hours between trains at that point. They met us at the depot and we had dinner together at a restaurant. Mrs. Alston told Cora that he was drinking heavily and that she was very discouraged about their future. I believe Cora had a letter or two from her afterwards, but when those stopped coming we never heard anything more of them.

Life at the Witherspoon's

We moved from the Alston's to rooms on the second floor of a house owned and occupied by Mrs. Witherspoon and her three grown children. She was a typical southern woman and her house was nicely located within three or four blocks of the Weather Bureau office. I engaged a colored man to move our few belongings from the Alston house with his horse and wagon. True to form he had to hire another colored fellow to help him, although I was there and helped load the trunks and one large box. At the Witherspoon's I ordered them to carry the trunks upstairs. They did not like the idea but finally started with the smaller trunk which I could have carried alone. They moved it up a step or two at a time, set it down, wiped their brows, then gained another step or two, repeating until they finally reached the top. When they came down they had to rest a while and sat down. In the meantime, I had become so disgusted that I decided to empty the big box and the other trunk and carry the contents upstairs myself. They carried up only a few light things and had spent half the afternoon in moving the stuff a distance of only three blocks, with my having done most of the heavy lifting. Finally, I told them they could go and I would finish the job myself. When I asked what I owed them, they said $4.00. Having had considerable experience with colored people and in having goods transported, and knowing that the customary charge for moving trunks and other packages was only 10 cents per unit, I told them it would be a much colder day when I paid such a price. They sat down on the porch and I continued carrying the stuff upstairs. When I had finished they had been sitting there an hour or more. I asked what they were hanging around for and they said their pay. I took $2.00 out of my pocket and told them it was twice what the job was worth, but they could take it or nothing. When they took it I told them to get out and stay out. It was common practice to try taking advantage of northern people in this way.

While settling the rooms we discovered there were enough bedbugs in them to have carried the furniture out on their backs, and we began buying bug dope. I think we used three bottles during our few months' stay there, but said nothing to our landlady about it until we were settling up with her preparatory to leaving for the north. When we had moved in we mentioned the fact that we needed a small table in addition to the furniture in the room. She promptly said she had one that we might use and I immediately placed it in the room. No further mention was made concerning it until I settled our final rent bill. Then, for the first time, she mentioned rent for the table which I had assumed had been furnished free as a part of the furnishings of the rooms. Our discussion of the subject led me to the conclusion that she intended to take advantage of the misunderstanding to obtain the little additional money. The pettiness of it coupled with her bitterly sarcastic speech indicated that I needed to fight fire with fire. I told her if I paid additional rent for the table, I thought she should pay me for the bug dope I had bought. She called for an explanation and I spared none of the details of our experience. She was astounded that I should make such a statement,

as she had never seen a bug in the house, and knew positively that there had never been any there. I gave up the argument, paid for the use of the table, and told her it would serve as a continual reminder of the generosity, hospitality, and kindness of some southern people after I had returned to God's country.

The Fate of Editor Gonzales

The State election was held in the fall of 1902 and, because of the solidarity of the Democratic Party throughout the south, the contests centered in the primaries. One of the candidates for Lieutenant Governor was George D. Tillman, a nephew of U.S. Senator Ben Tillman, but of an entirely different sort than his famous uncle. During the campaign, Editor Gonzales of the Columbia State tried to show this candidate in his true character in an effort to defeat him. Tillman was a notoriously hard drinker, entirely unprincipled, but with a large rural following. On one occasion he had tried to extort money from his wife by holding their child by one leg out of a second-story window and threatening to drop it. Other stories on a par with that one were common about him, and the Columbia State published them from time to time. He said very little in reply but succeeded in being nominated and elected, which automatically made him the presiding officer of the State Senate.

The newspaper office was in the middle of the same block as the City Hall, where the Weather Bureau office was located; the City Hall being on the corner and opposite the State Capitol. Several weeks after the opening of the 1903 year, as I was returning to work from my noon meal, I noticed a crowd gathered around the Columbia State office on the opposite side of the street. When I reached the City Hall, I inquired the cause of the gathering and was told that Editor Gonzales had just been shot. It developed that he had just left the building to go to his lunch, when he met three men from the State Senate also on their way to lunch, the middle one being George Tillman. Without a word being said, Tillman drew a gun from his pocket and pumped two or three shots into Gonzales' stomach. The police took him to jail, found one or two other guns in his clothes, and locked him up without privilege of bail. Gonzales died the following day I believe.

Tillman was a native of the Edgefield district. Because of his political strength and popularity in that region, he insisted on being tried at Edgefield, for the dastardly murder. When the news came that the jury had acquitted him after a very brief discussion, I was greatly dismayed but some of the older residents seemed to take it as a matter of course. I had noted various miscarriages of justice in the Columbia courts, but this overshadowed all of them. Some weeks later a picture of the jury appeared in the papers and also in the window of a local photograph gallery. I was struck with the appearance of these men and bought one of the photographs. It is with our collection of pictures and any one who may examine it will have a better understanding of why justice blunders so often in the courts of that part of the United States.

Vacation In The Summer of 1903

Although my parents had visited us during the winter, we were becoming homesick to see our other relatives and good old Michigan. The summers were long and hot, the food was not very palatable, and my health was not good. We longed to visit Michigan but felt the heavy expense of such a trip was beyond our meager income. When I noted in the papers that the national convention of the Young People's Christian Endeavor Society was to be held in Detroit, and that excursion rates of one-half fare for the round trip would be granted, we decided it was a fitting opportunity. There were some discomforts on the homeward trip as the trains were crowded and off schedule, but these were partially off-set by some

move. In a few days he went back to the Keeley Institute but they could do little for him and sent him home again. He then decided to move back to Asheville and Mrs. Alston continued to write to us occasionally from there. When we returned north we notified them that we would pass through Asheville and would have a couple of hours between trains at that point. They met us at the depot and we had dinner together at a restaurant. Mrs. Alston told Cora that he was drinking heavily and that she was very discouraged about their future. I believe Cora had a letter or two from her afterwards, but when those stopped coming we never heard anything more of them.

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of the amusing things that occurred.

We arrived at the little town of Harriman Junction, Tennessee at 10 p.m. Here we were to change to the Queen and Crescent train bound from New Orleans to Cincinnati. The train was not due until 2 a.m., ao it was a 4-hour wait along with perhaps 150 others in and around a little depot that had seats for not more than 30 or 40 persons. One of us managed to get a seat for brief periods where we could hold little Jessie and where she could sleep a little. The train proved to be two hours late and when it arrived the young people made a wild scramble for it. By the time we reached it, the conductor told me there would be no seats for us and advised us to wait for a second section that was following. After a wait of another hour or more the second train arrived just after daybreak. After our total wait of more than seven hours, I did not intend to miss this train so we managed to get into the front rank and be among the first to board it. When we reached the platform the coach ahead seemed to be almost empty while in the other direction it was a full coach. I sensed the significance of the situation and chose the full coach. We managed to get a seat together but the aisles were soon filled with people who had to stand. After the train started some of them, seeing no crowd in the coach ahead, made a dash for it. In a few minutes they all returned, saying it was "too dark" in there. It was , of course, the Jim Crow car commonly used on southern railroads for negroes. In this case, no more than a half-dozen seats were occupied yet these white Christian Endeavor delegates preferred to stand during the five or more hours required to travel from northern Tenessee, across the state of Kentucky, to Cincinnati, rather than sit in the same coach with colored delegates to the same Convention.

Perhaps to add insult to injury, in their opinion, when we left Cincinnati on another train which had no Jim Crow car, they not only had to ride in the same coaches but, in some cases, in the same seats with the colored delegates. Somewhere in Ohio, coffee was brought into the coaches and served to us at a station stop. To save time and inconvenience, the sugar and cream were already in the coffee. Many southern people drink only black coffee so the coffee we got at this stop was promptly dubbed "slop" by them, whereas we thought it the best we had drank on the entire trip.

Our vacation proved very enjoyable and our 30-day leave passed quickly. We lamented the necessity of leaving the more comfortable climate and more congenial social conditions in Michigan and return to the hot and humid climate and backwardness of the southland. As soon as I had returned to duty there, I began bombarding the Washington office with letters requesting a transfer to a northern station. At that time, the Southern Railway was noted for the number and frequency of its train wrecks. While on our northward vacation journey we saw three trains lying on their sides at points along the right-of-way between Columbia and Asheville. On our return we saw two other wrecked trains between the same two points--a total of five wrecks in 30 days, and there may have been others which we did not see. Fate decreed a few years later that the president of the Southern Railway system should be killed in a wreck on its own lines.

A Street-Car Boycott by Negroes

The street cars used in Columbia were the open type with transverse seats extending the full width of each car. Southern white patrons objected to riding in seats behind negroes because of the distinctive odors frequently noticeable on hot days, and carried their protests to the City Council. A decree was issued by that body that negroes should fill the rear seats and whites should occupy the front ones. This order angered the negro population and they declared a boycott. There were large numbers of horse-drawn cabs in the City, all of which were oper-

ated by colored men. The universal fare between any two points in the City was 10 cents for each person and, when the boycott was announced, the cabbies immediately agreed to carry the colored population for 5 cents each. This being the same as the streetcar fare, the boycott became permanent and it was a rarity to see a colored person on a street-car during the remainder of our stay in that City.

Other Samples of Race Prejudice

Two business men in their shirt sleeves were walking along Main St. together one summer day. Two big young Negroes were travelling in the opposite direction. The point where they were about to meet was in front of a store undergoing repairs, and a portion of the sidewalk was blocked in consequence. The space remaining was only wide enough for two persons and, contrary to the usual custom in that country, the two Negroes stayed side by side and pretended not to see the two white men. I was on a streetcar and directly opposite the men. Noting the evident intention of the Negroes not to give way for the white men, I watched with interest what the result would be. When they came face to face, one of the whites landed a terrific blow on the stomach of the Negro in front of him. The two colored men immediately stepped off the walk into the street, and the two business men proceeded on their way as though nothing had happened.

On a very hot summer day I stopped in at a drug store to get a soda. I was slightly acquainted with the proprietor as I had been in his store several times, aiming to keep in touch with the drug business in case I should wish to return to that field at a later date. He seemed a very agreeable chap and I enjoyed visiting with him. On this particular day, while talking with him and sipping my soda, an old colored woman came in the front door. She appeared to be more than 90 years old, very feeble, and almost exhausted from the heat. When he went forward to meet her she leaned on the showcase and said: "Please give me a drink of water", evidently being faint. In reply he said gruffly: "No, get out of here". After she was gone and he had returned to me, he remarked that he would not dare to give her a drink as it would ruin his business. There were no other persons in the store and I could not see his point of view. I told him very plainly that if it had been me, I would have granted her simple request regardless of any consequences. Before I left the store we fought the Civil War over again, as well as all the other differences between the northern and southern points of view. I never visited his store again because there seemed to be so few subjects for compatible discussion.

WEATHER BUREAU EXPERIENCES AT COLUMBIA--Chapter XVII

The planting of gardens normally begins in February, and the planting of cotton begins early in March in South Carolina. Weather and Cotton Report was issued weekly throughout the long crop season. These reports were based on weekly reports from the Bureau's cooperative weather observers, of which there were 60 or more in the State, and the issue began about March 1 each year. Mr. Bauer prepared these reports as one of his regular duties, and they were popular with the cotton trade as the cotton market fluctuated in accordance with the crop outlook as indicated by them. About April 1, Mr. Bauer attended a convention of Weather Bureau officials in a northern city and followed it with a short vacation. During his absence I was temporarily in charge of the office and responsible for these weekly reports. While I knew nothing about cotton, the preparation of the reports was not too difficult because they were merely condensed summaries of the statements furnished by the local observers. I experienced no diffi-

culty with them, but did not get an opportunity to see fields of cotton until our train trip to Charleston which I have already described. Seeing many fields with purplish-white flowers along the route my curiosity was aroused and I inquired of a fellow passenger what crop it was. When he told me it was cotton I was rather surprised because I had expected, for no reason at all, that they would be pure white blossoms. Had the cotton traders, cotton farmers, and congressmen ever discovered that some of the official cotton reports had been written by a person who could not recognize the plant when he saw it, there would have been a violent explosion.

A Feud Between Bureau Chiefs

While weather and crops are closely interrelated, the publication of crop information by the Weather Bureau was, in reality, an encroachment upon the field of the Bureau of Statistics. The Chief of the latter protested this infringement but the aggressive and selfish Chief of the Weather Bureau refused to give up the precedent he had succeeded in establishing. The wrangling finally came to the ears of the public and steadily increased in bitterness, more or less to the detriment of both bureaus. When it finally reached the impasse stage it automatically became the duty of the Secretary of Agriculture to settle the dispute between these two bureaus of his Department. He was James M. Wilson, familiarly called "Tama Jim", who had held the office for a considerable number of years. He issued an order to the drastic effect that, hereafter, the Weather Bureau was prohibited from issuing a crop report or even using the word "crops" or the name of any crop in future weather reports. Likewise, the Bureau of Statistics was not permitted to discuss any phase of the weather in forthcoming crop reports. After this complete segregation of the functions of the respective bureaus, our weekly publication became the Weekly Weather Bulletin.

Some twenty-odd years later, after the original feuding chiefs had passed from the picture, and after my locating in Lansing as the head of the Bureau of Crop Estimates for Michigan, I arranged with the Michigan Section Director of the Weather Bureau to issue joint weather and crop reports. I had no printing facilities at the time, while he had a printing plant. I wrote and signed the crop summary to which he attached his signed weather summary, printed, and mailed it to both our mailing lists. This arrangement was practical, popular, and highly satisfactory to both of us. But after about two years the Weather Bureau at Washington suddenly ordered its discontinuance, indicating that someone in the Washington Weather Bureau office had not forgotten the original ill feelings. After another period of years had elapsed and new heads had risen in both bureaus, the Washington offices launched the brilliant idea of a combined weather and crop report. We were ordered to inaugurate such a joint report if found feasible, and it was done in most states. Very few of us who can recall the original circumstances are left to remember the bitter jealousy that existed for so many years, but we are happy to know that the ill feeling has, at last, apparently been obliterated.

Climatic Conditions in Columbia

Although Columbia was about 125 miles from the Atlantic coast, its altitude was only about 360 feet above sea level. This was favorable for a relatively high degree of humidity which, in turn, made the hot summer days very uncomfortable and the brief cold spells in winter seemingly very cold. As I have already indicated, spring opened around March 1. April temperatures sometimes exceeded 90 degrees, and by July such temperatures occurred almost every day. I usually took the evening observation, at which time the day's maximum temperature reading was read from the self-recording maximum thermometer. I recall that, beginning about

July 1, the maximum readings were above 90 degrees for 27 consecutive days, and, after one or two days' respite, they again exceeded 90 degrees for 16 consecutive days. Such high readings extended, on occasional days up to the latter part of October.

I recall one strenuous observation that fell to my lot on a cold Sunday morning in winter. The instruments were located on the highest portion of the roof of the City Hall. The roof of the building was on four different levels, and it was necessary to climb three flights of open stairways between these different roof levels. Each step was covered with a heavy coating of ice and, in places, I was compelled to climb these rounded ice coatings on my hands and knees because it was impossible to retain a footing on them. When I reached the flat roof of the highest portions where the instruments were located, I discovered the door of the instrument shelter was frozen so solid that I needed a screw driver to insert in the crack and pry it loose. Therefore, I had to make an extra round trip to the office for it and also a hammer. As all observations must be taken at exactly the proper time I had to hurry which I could not do under the circumstances. Finally, I succeeded in getting the thermometer readings and, when I glanced up at the wind instruments, I saw that the wind vane and anemometer cups were frozen in a stationary position. This meant that neither wind velocity nor direction were being recorded on the triple register in the office, such readings being necessary to complete the observation records. Therefore, I had to climb the 20-foot iron pole that supported these instruments and break the ice around them. The heavy ice coating made it difficult to grip it with either hands or feet, and there was danger of a slip and a fall. However, I finally succeeded in freeing the instruments and completing the observation. Numerous observations were taken in connection with sleet storms in my northern assignments in succeeding years, but none of them were as difficult as this one in the south.

There was a large municipal theater in the City Hall and, as our offices were on the top floor, the entrance to the gallery was on the opposite side of the hall from them. The various roof levels were over different portions of the theater, and the highest roof where the instruments were located was over the stage. While taking the early observation on another Sunday morning, with no other people about the building and scarcely none on the streets, I observed what I thought was then smoke coming from one or two of the numerous ventilators on the roofs. I watched these for a minute or two and decided it probably was only vapor coming from the warm rooms below into the colder air above the roof. However, I intended to make a little investigation when I got back to the office, but it was forgotten for a few minutes as my thoughts were centered upon reading the barometer and self-recording instruments in the office. When these readings were completed I sat down at my desk and proceeded to make the necessary mathematical calculations and entries in the record books. Very soon I heard the fire siren which immediately brought my mind back to the smoke I had observed. I ran to the window and saw the fire department stopping in front of our building, then went across the hall to the gallery doors, but could neither see nor smell any smoke. Firemen came up the stairs and forced open the gallery doors, and smoke poured into the hall so thickly that we could not see into the theater at all. It proved to be a slow smoldering fire that was difficult to locate and, as it recurred two or three times during the following week, was attributed to defective wiring in some remote spot.

An Esteemed and Worthy Negro Friend

Joe Cook was the head janitor or custodian of the City Hall, a position he had held for around 25 years. He was about 50 years of age and always ready and

willing to do any favor asked of him. I first met him in our office to which he came once a week to shine Mr. Bauer's shoes. I listened to his conversation, which included politics, important events, and views about most of the city and state officials. He was well informed, sincere, and absolutely honest. Mr. Bauer told me many things about Joe and said he considered him the most intelligent and honorable Negro he had ever known. At first I did not patronize his shoe shining business as I did not feel able to spend a nickel a week for that luxury but, after a time, I decided the information he could give me plus the shine justified my indulgence in this extravagance. He owned his home and his reputation was such that he could borrow any desired sum of money at the bank solely on his personal note. I treated him with the same respect and courtesy that I would accord to any white friend, and he always sought opportunities to do small favors for me. Columbia's first sky-scraper office building was erected during our stay in the City, and when it was completed in August or September, 1903, we moved our office into it. It was two or three blocks from the City Hall but Joe came over to see us once in a while at the new quarters. When it was announced in November that I was being transferred to a northern station, he made a special trip over to see me.

He begged that I should take him north with me and promised that he would work faithfully for me or do whatever I wished. I told him that I fully appreciated his loyalty and friendship, but that I would have no work for him to do and would not be able to give him much help in a strange city to become established. I pointed out that it would take considerable time to acquire such a fine reputation as he had in Columbia and that, in the meantime, he would be under constant suspicion and working handicaps. Furthermore, even if he succeeded in getting a good position at higher wages, the higher cost of living and the sacrifice of his present home and friends, I felt sure, would be a disastrous and regrettable move for him. He accepted my advice with great reluctance but requested that I do two favors for him. One was to visit his home before I left the City and the other was to write to him after I became established in my new location. I readily agree to do both of them, and faithfully fulfilled my promise.

On a Saturday afternoon I walked out to his house, and found a very well-built and comfortable cottage of five or six rooms. It also had a basement which was seldom found in that City. His wife was a very neat, intelligent woman and I found she was an expert dressmaker who did sewing for aristocratic white families. She was busily sewing while we visited, and I noted the house was spotlessly clean. Joe took me into their bedroom and showed me a suite of furniture that would have compared favorably with the very best homes in the City. He told me it had been a wedding gift from the City officials. When I was about to leave he requested me to wait a few minutes and he disappeared down the cellar stairs. When he returned he held in his hand a large bottle of wine, which he said he had kept for 20 years with the intention of opening it only on some very special occasion. Although I begged him not to open it, he insisted this was an occcasion worthy of the 20-year wait. This circumstance was all the more remarkable to me because I knew that Joe liked liquor and, while he seldom drank immoderately, knew that he must have practiced considerable self-denial to keep that bottle unopened for so many years. Of course, no southerner would have deigned to visit such a home or share the same bottle with a Negro as I had done that day, but I felt no hesitancy or impropriety in accepting his warm-hearted and hospitable invitation. Later I wrote to Joe and he replied with well-written and newsy letters, but after two or three exchanges I dropped the correspondence because of more pressing interests. No doubt, ere this, he has gone to his final reward. If

so, I have no fear that he fared less favorably than any white person of parallel attributes.

Concluding Miscellaneous Remarks About Columbia

I have dwelt at considerabl length on our experiences in Columbia; not because of any special importance attached to them but in an effort to portray as accurately as possible some of the differences between the southern and northern ways and conditions of life. While I must differ radically from the southern points of view on many matters, I hold no ill will toward the people living there, and my remarks that may seem critical in their nature were simply intended to emphasize the differences observed and mentioned.

It was considered a sacrilege to play any lively or even classical music on Sundays, and all music on those days was generally limited to religious hymns. While the Methodists were deeply religious they adhered strictly to the Southern church, and refused to recognize the Northern Methodist church. Only Confederate songs were used in the schools, sessions usually opening with either Dixie or the Bonnie Blue Flag, which I heard almost daily while passing them on my return from noon lunches.

While my father was visiting there I took him to the war museum in the State Capitol which was supervised by the Daughters of the Confederacy. I introduced him to one or two of the old ladies whom I happened to be slightly acquainted with. They explained the various exhibits and gave us bits of war history. When I told them that my father was specially interested because he had been a Union soldier and had passed through Columbia during the war, they began discussing the merits of the War with him. One of these gracious old ladies concluded her remarks to him with these words: "After all, you know don't you, Mr. Church, that our cause was just and that we were entirely in the right".

The Confederate Veterans' Reunion was held in Columbia during the summer of one of the years we were there. The old soldiers marched to fife and drum music just as our northern veterans did at G.A.R. conventions, the only noticeable difference being the gray instead of blue uniforms. Dixie was their favorite tune and some of them would dance every time it was played. Their sessions were held in the theater in the City Hall. On one of the days I went across the hall and spent most of the afternoon listening to their speeches. There were several generals and other high officers present, and they gave interesting talks on the causes and conditions that resulted in their defeat. One of the statements made greatly interested me because it presumably was justified by the facts. He stated that practically all school histories had been written by northern people from the northern viewpoint, and that many of the statements in them were grossly exaggerated. He cited the instance of a certain battle where the southern army was outnumbered by a ratio of 40 to 1, and was very short of arms and ammunition; yet, the history books said it was a fiercely fought battle and only won by the superior courage and valor of Union soldiers.

On the south end of the State Capitol Building, there were numerous dents in the stone work, broken places in the cornice and window sills, and other evidence of the shelling it received from Sherman's army. The shells were fired from a rise of ground on the south side of the Broad River, a distance of two miles or more. No attempts had been made to repair the damage, instead, the people seemingly preferred to perpetuate their grievances. They charged that Sherman's Army was responsible for wantonly and needlessly burning the city, the destruction by fire being complete except the stone Capitol, one or two brick churches, and a few other brick buildings. General Sherman denied that his army had any part in it, that the fire occurred when the army was many miles away, but the

true facts are still in dispute and may never be known. My father's regiment reached the City some little time after the fire, and camped in the ashes and ruins. When he visited us there he was unable to point out the camping spot other than its general location in relation to the Broad River.

On a previous visit to the south my father and mother had attended a service at a colored church in a small town, and they spoke of the unusual and humorous incidents they witnessed and heard. They expressed a desire to attend one in Columbia and we took them on a Sunday evening to one of the leading colored churches. The minister and congregation were more intellectual than at the previous one attended, and the services were not very different than the familiar ones in churches attended by white people. However, we were escorted to a raised platform at the right of the pulpit and seated so that we faced the main congregation. In front of the pulpit was a marble-topped table to which the congregation marched and placed their individual contributions, in lieu of the usual contribution boxes passed by deacons in other churches. We did not feel called upon to join in this ceremony so remained seated on the platform. When it ended the minister called one of the deacons to him and whispered in his ear. That individual immediately resurrected a contribution box, brought it to us, and received our offerings.

In the fall of 1903, after receiving no encouragement from Washington that my request to transfer to a northern station would be granted, I repeated my request and added a statement to the effect that I would resign if it was not forthcoming by the end of that year. One of the reasons that prompted this course was the fact that a visit from the stork was expected in the spring, and we desired to be nearer to our friends and relatives at the time of that event. Mr. Bauer appreciated our viewpoint of the matter, and endorsed my letter with a statement that my record had been excellent and that a transfer should be granted in order to keep me in the Service. One of the stations which I had listed for preference was Toledo, and orders for a transfer to that city were received shortly after my letter had reached Washington. We lost no time in preparing for the journey, and reached our destination about December 3. Cora and Jessie continued on to the Harker home in Michigan, while I remained in Toledo to take up my duties there and to locate suitable living quarters. These were found at 511 Bush St., in what was called Lower Town which simply meant down the river from the business district. I rented one side of a double house and then sent for our household goods which were still stored in Michigan. During the first few days in Toledo the minimum temperatures were around zero, which was quite a contrast to the balmy weather we had experienced in Columbia at the time of our leaving that City. I lived at a hotel and Cora visited in Michigan until the household goods arrived.

SUNSHINE AND SHADOWS IN TOLEDO, OHIO--Chapter XVIII

I had visited Toledo on two previous occasions. While each was a very brief stay they were long enough to convey the impression that the people were generally friendly and cosmopolitan. My first visit was the result of a cheap Sunday excursion. Father Harker accompanied me and we had about eight hours available for sight-seeing, after which we arrived back in Clarksville late in the evening. On the second trip I was accompanied by Cora, the purpose of the visit being to purchase a line of holiday goods for our drug store, as already mentioned in a previous chapter. These first favorable impressions were one of the factors inducing me to list Toledo as a preferred station, and we found no cause for regret

in making this choice insofar as the friendly attitude of the people in general was concerned. The climate was very similar to that of southern Michigan; there were beautiful parks, excellent theaters, and we were within a few hours' ride of our parents. Notwithstanding these many favorable advantages, some of our personal experiences resulted in severe disappointments.

Conditions in the Weather Bureau Office

The office was centrally located, being on the second floor of the Post-office Building. The staff consisted of William S. Currier, official in charge; Frank E. McLeary, messenger; and myself as assistant observer. Frank was a native of Toledo, and had been messenger in the office for four or five years, and could take observations, make weather maps, operate the machines, and care for the instruments. In fact, there was nothing in the office that he could not do or had not done whenever the circumstances required. He and I immediately became very good friends and he lost no time in fully acquainting me with the existing situation in the office, and with the history of events during his employment there. From him I learned that the former assistant, Arthur Teeple, did not get along well with Currier. The official in charge made damaging reports about him to Washington, and Teeple retaliated with counter charges. Frank said Teeple was a good man but that he could not stand the domineering tactics of Currier. The Washington office was inclined to uphold the official in charge, and solved the trouble by sending Teeple to Columbia, perhaps as an intended punishment. I have sometimes suspected I was sent to Toledo as a sort of punishment for presuming to threaten resignation in case a transfer was not forthcoming. Before I had been in Toledo a week I was fully aware of the disagreeable situation to which I had fallen heir, and before the expiration of the first month I began scouting the City in an effort to locate a different and more agreeable position. I met with no immediate success but firmly resolved to continue my search until something of a promising nature could be found.

Currier, like most of the older men in the weather service, was a relic of the Signal Corps. That institution had charge of weather reports from the time of their inception, which was about 1870, until the Weather Bureau was created as a part of the Department of Agriculture under the Civil Service in 1893. The weather offices of the Signal Corps were mostly one-man stations in the earlier years, and these were placed in charge of an enlisted soldier who could operate a telegraph key. His duties were merely to take the daily observations, record them, keep a daily journal, and telegraph his observations to Washington. He issued no forecasts or other reports hence there were practically no educational requirements, other than the ability to operate a key and keep sufficiently sober to perform his simple routine duties. Some of these men were well endowed with natural capabilities, and had been promoted to the Washington staff and in charge of the field offices in the more important cities. All of the men under whom I served, except one, and the man I superceded at Indianapolis were originally in the Signal Corps. The Chief of the Weather Bureau, Willis L. Moore, also fell in that category. For that reason, the rules of discipline were of the army pattern throughout my career in that service, some of which seemed quite ridiculous in a civilian bureau. One of the rules still in effect when I left the Service was that an employee on duty must wear his coat regardless of the temperature in the office. This rule stemmed from the old days when enlisted men wore army uniforms at their work, the uniform being incomplete without a coat. We overstepped this rule in some of the offices, and when I assumed charge at Indianapolis I issued my own personal order that employees might leave off their coats if they chose to do so. Another rule was that no employee was to open the official mail except

the official in charge, nor could he send a letter to Washington except "through official in charge" which must be initialed by the latter.

The station at Toledo was not a section center, hence had no sub-stations, and ranked lower than any of the others at which I served. However, a weather map was issued each day except Sundays and holidays, a glass map was made daily at the Produce Exchange, and all possible services were rendered to the business interests of the City and to the marine interests on the Great Lakes that docked in Toledo. Storm warnings were issued whenever ordered by the Washington office. Maps and forecast cards were posted in leading business places in the business district. I usually took the morning observation and Currier the evening one on week days, unless he could find a suitable excuse to miss one, in which case Frank was delegated to take it. The three of us alternated in taking the observations and doing the other necessary duties from Saturday noon until Monday morning, so that each had two free week ends out of each three.

How the Stork Disturbed Our Neighbors

The Tanner family, consisting of Mr. and Mrs. Tanner and two little girls, lived in the next house north of us; while we lived in the north half of our double house. Mr. Tanner was employed as a teller in one of the large banks, and he and his family became very good friends of ours. In anticipation of a visit from the stork, Cora had arranged through Mrs. Tanner for the services of a nurse but had failed to get her address at that time. On the morning of April 9, I was awakened about 3 o'clock and told to summon the nurse. The only way to locate her was to arouse the Tanners and I rang the door bell and banged on the door. They slept on the second floor, and continued to sleep serenely throughout my desperate efforts. I returned to our bedroom and we held a council of war. It so happened that their bedroom window was directly opposite and on the same level as our own. I conceived the idea of using a long pole to reach and rattle their window, which was about 12 feet distant. I brought up the longest pole I could find but it proved to be too short, then I brought up a shorter one and lashed the two together with a piece of rope. By this means, I succeeded in reaching their window and awakening them. Securing the needed address I hastened the two or three blocks to it, fearful that I might have similar difficulties there. The nurse promptly answered my ring, and promised to come as soon as she could make herself ready. I returned home and, finding that all was well, started out in the opposite direction to notify the doctor. He lived at least five or six blocks away and, after my call at his residence, I returned home. I was due at the office to take the morning observation at 6:30, and it became increasingly evident that I must choose between staying at home to do whatever expectant fathers are supposed to do or carrying out the official duties for which I was responsible. After waiting impatiently until after five o'clock, I set out for Frank McLeary's home which was about eight or ten blocks distant. He had just arisen and readily assented to take the observation in my stead. After sending a telegram from the nearest telegraph office, I returned home. These several errands gave me plenty of physical exercise that morning. Had we been able to afford a telephone in the house the trips would have been avoided and considerable time saved. In response to my telegram, Mother Harker arrived on the late afternoon train and was gratified to learn that we had another little girl. She remained as long as we needed help just as she had done four years earlier when Jessie arrived.

Masonic Experiences in Toledo

On the evening of my arrival in Toledo, I left the hotel for a walk after supper to acquaint myself with the lay of the business district. I had not proceeded more than a block when I noticed a sign which read: "Koehrman & Duckett

Shoe Store". I knew this must be the Mr. Koehrman I had met in Cincinnati while on my first trip to Columbia, and with whom I became chummy through our mutual membership in the Oddfellow fraternity. I intended to look him up as soon as convenient but had not expected to locate him so quickly and easily. On the opposite side of the street and in the same block I noted the sign of a Masonic Lodge at the foot of a stairway. On the following afternoon, I called at the Koehrman store immediately after work. Mr. Koehrman immediately recognized me and introduced me to his partner. I noted that both wore the Masonic emblem and mentioned the fact that I had become a Mason while in Columbia. While talking on the subject of Masonry, I mentioned that they had a Masonic lodge near them on the opposite side of the street. They promptly told me that it was a clandestine lodge, or illegitimate, which true Masons were forbidden to visit, and informed me where the Masonic Temple was located. I had heard previously of clandestine lodges but had not expected to discover one so quickly.

While on the train, traveling from Columbia to Asheville, a very friendly and intelligent colored porter accosted me in words intended to convey the fact that he was a Mason. I did not respond in the proper words for mutual recognition because Negro Masons are treated as clandestine. He tried several different phrases but I avoided giving the proper responses to any of them. Finally, he left me but soon returned with a book which he handed to me to look over. I found it contained the Masonic work, in fact the complete ritual, and apparently in exact accordance with the official text. When he came back he asked if I did not find it absolutely correct. I told him politely that I could not discuss the matter with him. He seemed a trifle hurt and disappointed but said: "Yes, I know you don't recognize us but we have some fine lodges for which we have official dispensation equally authentic as yours". He showed me his membership card, and also his cap which had stenciled on the inside his name, address, and his Masonic affiliation. He explained that he did this because he lost a cap every few months by having it blown off by the strong drafts on platforms between coaches, and that nearly all were eventually returned to him by mail because of the inscription. No doubt he observed and practiced the principles and precepts of Masonry as fully and as conscientiously as the members of any regular lodge.

As stated elsewhere, I had applied for the Commandery degrees in Columbia but left before receiving them. As soon as I had attended the Blue lodge and the Chapter in Toledo a few times, and had made some acquaintances among their members, I requested the Columbia Commandery to order the degrees conferred in Toledo. But I found that involved far more red tape than anticipated. My photograph had to be attached to the order and officially identified and stamped as being that of the person accepted for membership in Columbia. It was then transmitted to the Grand Commandery of South Carolina where its official seal was attached. From there it was forwarded to the National Grand Commandery of the United States and another seal attached. Then it went to the Grand Commandery of Ohio for another seal, and finally to the Toledo Commandery. I received the degrees in February 1905, because of the long delay due to the procedure just described. The new Temple in Toledo was just being completed and my initiation along with others was the first Commandery initiation in it. The new, upholstered furniture had not yet been installed and the members sat upon temporary wooden benches for the ceremonies. After having received all of the degrees, an official document announcing the fact had to be transmitted to Columbia via the same circuitous route in reverse order as the one already described that emanated from Columbia.

John A. Carr, Special Pension Examiner

The room in which the Weather Bureau office was located being a large one,

we were assigned only one-half of it for our use. The other half was occupied by Mr. Carr, a special pension examiner. His only furniture was a desk and a file case so that much of his space was unused, yet he insisted on keeping the front edge of his desk exactly on the middle line of the room. This was because he thoroughly detested the domineering, discourteous, and argumentative tactics practiced by Currier. Our half of the room was quite crowded and Currier made several attempts to beg the privilege of using some of the vacant space on the other side, but Carr consistently refused. If the janitors happened to move his desk while cleaning he would put it back on the line when he arrived the next morning. My desk backed up to his so that we sat facing each other with only the two desks between us. He liked Frank very much and always seemed very friendly to me. He often told us we could use any of his space or equipment as much as we liked, but that Currier could not. He conversed very freely with us particularly when Currier was away from the office.

He received, on an average, about 20 cases from Washington during each month. These were pension claims connected with persons living within his district, which included the City of Toledo and a few adjacent counties. Some of the cases were very simple and required only the securing of an affadavit or deposition from one or two persons; others were more difficult, and a few involved lengthy investigations of complicated situations, fraudulent claims, marital tangles, etc. He called some of the people to his office for questioning and furnishing depositions; in other instances he had to go out and get the evidence himself. He aimed to clean up about 20 cases per month so that his backlog would remain fairly constant. When he completed and forwarded 20 cases, even if it was only the middle of the month, he aimed to take it easy for the balance of the time and would work only on the few that were dragging along over a period of many weeks or months. He often discussed with Frank and me some of the more interesting or peculiar ones, and how he proposed to solve them. These discussions, and the questions and depositions we overheard, gave us a considerable knowledge of pension law and its ramifications; also, a better insight into the many quirks of human nature.

A Pathetic Marital Situation Uncovered

On a certain afternoon Mr. Carr told us that he had a case coming up the next morning that was unusual and possibly would result in a pathetic scene in the office. He seemed quite concerned about it, so we knew it was something quite different from the usual run of cases and our curiosity was thoroughly aroused. On the following forenoon a lady about 60 years of age appeared at the office, and was accompanied by a daughter who may have been between 30 and 35 years old. The mother, at Mr. Carr's request, recited a history of herself from the time of her marriage onward. She had married a veteran of the Civil War and they had taken up life on a farm. They had worked hard, been happy together, and without disagreements of any kind. When the daughter was about four years of age, the father was helping some of his neighbors in cutting lumber at a sawmill in the neighborhood. One morning he arose at the usual early hour, did his chores, and went towards the mill just as he had been doing on previous days. She asserted he was in his usual cheerful mood and that there had been no argument or trouble of any kind. However, he did not return from work that evening and, when she inquired about him of the other mill workers, found he had not been at the mill that day. Searching parties were organized and the woods and surrounding country were carefully gone over but no trace of him was found. Nor had she ever seen or heard anything of him afterward. Her opinion was that he either had met with some tragic mishap or had committed suicide, although she knew of no motive for the

latter. About ten years before this investigation she had applied for and was granted a widow's pension.

The investigation resulted from the fact that a man by the same name had recently applied for a pension. He was a married man with a family and resided in Kentucky. When Mr. Carr told this story to the widow pensioner, she did not believe it could be true. Mr. Carr had the man's photograph but, before showing it to her, carefully explained that if she admitted its identity she would lose her pension, and, if the Government required, could be compelled to refund the total of all pension sums that had been paid to her. When she signified that she fully understood his statement, he handed her the photograph. Without hesitation, she immediately said: "It's him". The daughter also corroborated the identification, and said she could still remember his features. All of these details were set forth in the deposition, which she willingly signed, in order to show that she was entirely innocent of any intent to defraud the Government. It was a dramatic scene but she withstood it bravely and displayed no outward emotion. How-ever, it must have been a severe shock to her confidence in mankind.

Frank McLeary Obtains a Promotion

The close bond of friendship, between Frank and me and his knowledge of and experience in Weather Bureau work, led me to urge him to take the Civil Service examination for assistant observer. I was quite sure he could pass it creditably, and it would give him a salary of $70. instead of $40. a month. He hesitated for the reason that all his friends and relatives lived in Toledo, and he dreaded the possibility of being transferred elsewhere with a change of status. While he disliked Currier as much as Carr and I, he had managed to get along with him, and preferred to stay and endure the situation rather than to go a long distance away. I continued to urge him by arguing that, in case he was sent away, we could probably arrange for him to return and take my place when I left which I hoped would be soon. He took the examination, successfully passed it, and was almost immediately assigned as assistant at Wilmington, N.C. Mr. Carr claimed to have considerable political influence at Washington, and told Frank he was sure he could bring him back to Toledo within a comparatively short time.

Frank did not like the prospective assignment but accepted it and found it no more to his liking than he had anticipated. In the fall, I obtained a lead on a position which I intended to accept within a month or six weeks. I informed Mr. Carr of the fact and he began pulling the wires in Frank's behalf with the result, somewhat to my surprise, that the deal was arranged even before I announced that I was leaving. It also was a surprise to Currier because no mention of the prospective changes had been made by any of us to him. Frank became the assistant in my stead, married soon afterward, and continued with the office down through the years. He received promotions from time to time strictly on his own merit, because Currier never recommended his advancement and was greatly surprised when each came through. Currier was retired several years ago on reaching the age of 70, and Frank succeeded him in charge of the station. I have not seen him since he acquired that position, but believe he will reach the 70-year retirement age in two or three years. As he began when about 17 years old, he will have served more than 50 years when he is compelled to retire.

When Frank left for Wilmington a new messenger boy was appointed to fill the vacancy. I had to perform the messenger duties, while teaching them to him, in addition to my own duties. This was due to the fact that Currier was neither willing nor capable of assuming any of them himself. The boy was rather slow in learning and several months passed before he was able to carry on the more difficult ones, nor did he ever reach 50% of Frank's efficiency. During the four or

five years that Frank served as messenger, he never had been granted a vacation although he was legally entitled to it. Currier took his leave regularly each year, but never could spare Frank long enough for one.

I Took a Vacation

Shortly after Frank had left for Wilmington, and before the spring flowers had scarcely faded, Currier informed me that he would like to take a vacation of two weeks at a lake in Michigan. He asked me if I thought I could handle the work while he would be away. It meant that I would have to do his work in addition to my own, and that of the messenger. I would have to take both daily observations, make the weather maps, and keep all of the records. I replied that I could but only on one express condition which was, that I might have a similar vacation a few weeks later. In this way I forced his acceptance of the specified condition, although he did so with evident reluctance. The extra work was not too difficult because he took the leave in June when the weather was generally good, and we enjoyed the quiet and peaceful harmony that prevailed in the office for the two-week period. His regular duties consisted of taking one observation and recording it, helping with the pencil map, and writing the daily journal. He wrote his items for the daily journal, a simple statement of the prevailing weather for the day, with a pencil on a sheet of tablet paper. He then turned it over to me to type, because he could not operate a typewriter, and a letter-press copy was made from the typed sheet. He usually spent two or three hours composing his pencil notes, whereas I was able to type them direct and compose them in 10 or 20 minutes. So his absence added very little to my daily duties. One of the duties of weather officials was to take the weather records, whenever called upon to do so, into court and testify as to weather conditions on any certain date. This prerogative was jealously retained by officials in charge as they were permitted to keep the witness fees. Currier was no exception to this fact, and boasted that he always insisted upon his fee before giving his testimony, thus saving the usual delay until cases were settled. When he left on his vacation he told me to attend to any such cases and to be sure and insist upon my fee in advance, as that feature seemed repulsive to me. However, when I arrived the lawyer said: "I presume you must have your fee in advance", and I nodded affirmatively. He reached in his pocket but found he had no money in it, so he asked the judge if he could loan him the amount. The judge complied and I received it. Later, I learned that I had been called by the City of Toledo which served only to increase my embarassment, as I felt I had unwittingly placed myself in the position of doubting the City's willingness and ability to pay the fee.

After Currier's return and I was planning my vacation, I mentioned that I wished to go in about two weeks and thought I should be sending my request form to Washington. I knew it took a full week to receive the approval, and I simply wanted to make sure that it arrived in ample time, and he told me to wait until the proper time. He made no further mention of it and I waited until the date of my desired departure was only a week away. Cora and the children had already gone to Michigan in order that their vacation might be lengthened over my own. I filled out the form, told Currier of my plans, and asked him to initial it. He demurred and said he did not see how he could get along with only the messenger, as neither could make the weather map or use the typewriter. I firmly reminded him of his promise and pointed out that I had done all the work in his absence, intimating at the same time that he should be able to do as well. He held up the leave slip until the following day, and then said he had a proposition for my consideration. It was that a typist be hired to come each day and make the weather map, and that we share the expense equally between us. I considered this the

height of imposition but, knowing that he could not make the map without such help, and doubting that I could get my vacation otherwise, I concealed my feelings and accepted the proposition. He then initialed the leave slip and forwarded it to Washington.

I intended to leave Toledo Saturday afternoon, thereby securing the advantage of the Saturday half-holiday and Sunday which were not charged against annual leave. Currier proposed that a typist be called in on Saturday morning to make the weather map under my instruction, so that she would have the benefit of the experience before having to take the full responsibility. The typist came and we found she had no experience whatever in cutting stencils or copying tabular matter. I started her on the map stencil but she made numerous mistakes, more than it was worth while to correct, so the stencil was discarded and we started over with a new one. While she continued to make a few mistakes, she proceeded very slowly and faithfully tried to avoid them. When the time allowed for getting out the map was nearly exhausted, she was no more than half finished with the stencil cutting. Currier ordered me to take over and finish it in order to get the map in the mail on time. I knew very well that she could not handle the job successfully during my absence, and Currier suspected as much. He told me that he thought he would try another girl on Monday, and I wished him good luck.

When Saturday noon arrived the leave slip, thanks to the delay in forwarding it by Currier, had not been returned from Washington. He told me that I could not go until it arrived, so I wasted the afternoon in the office waiting for it. We got our mail at the general delivery window, instead of from a private box or from carrier delivery as most other offices were in the habit of doing. I staid until the general delivery window closed for the night, but the coveted piece of paper had not arrived and I went home in a very disgusted frame of mind. I returned to the office early on Sunday morning. Of course, the delivery window would not be open but I was determined to get the mail by any possible means. I went around to the back door of the postoffice and walked into the sorting room. There were only two or three clerks on duty and none of them knew me, but I went up to one who was sorting mail, introduced myself, explained to him how badly I needed that leave slip, and asked him to run through the general delivery mail for it. He seemed to appreciate the situation and very graciously granted my request. I tore open the envelope in his presence and showed him the slip I had been looking for. I thanked him, went to the office, initialed the slip and put it on Currier's desk, then began calling the railroad stations for information on train departures. I found to my further disgust that there was no Sunday train to be had until evening. However, a friend dropped in and said he thought there was a boat leaving for Detroit about that very minute. I dashed away for the boat dock and arrived in time to see the steamer moving sedately down the river some three or four blocks from where I stood. There was nothing further that I could do except to wait until the evening train, which delivered me in Clarksville about 10 or 11 p.m. Sunday evening. Had I been able to leave Saturday noon as intended, I would have reached the same destination at 6 p.m. on Saturday. The single thought that consoled me was the difficulties I envisioned for Currier in getting out the weather maps with an inexperienced typist. When I returned from that very pleasant vacation, I found that Currier had tried about five different typists before finding one that could do the work creditably and within the time limit.

Official Courtesy to the Public

There were two large daily newspapers published in Toledo, and a correspondent for each visited the office every day to get the weather story. Currier was inclined to be quite civil to them as he naturally appreciated favorable pub-

licity, but would argue with them on the leading topics of the day. A few other important personages were treated in a similar manner, but the average visitor received little courtesy or kindly consideration. Currier would usually lead off with some derogatory remark intended to create an argument and, if the visitor challenged it, a long and heated discussion was apt to be the result. In this way he made and retained very few friends and created a host of enemies.

One afternoon an agent for the City Directory came in to get the information for the next issue of the Directory. He sat down with us and copied the information I gave him about myself and family. The messenger boy was testing the storage batteries which operated the self-recording instruments, and Currier was sitting on his heels to supervise the job. His back was towards us and when the agent went over to him and stated his errand, Currier turned his head only slightly and mumbled unintelligibly. The agent politely said: "I beg your pardon, what was it you said"? Currier replied with a sneer: "If you'd dig the cotton our of your ears you might be able to hear what was said to you". The agent snapped back with: "If you'd take that big wad of tobacco out of your mouth, maybe you could be understood". I do not recall the further remarks, but Currier made no move to get up and give the desired information and the agent left. I was curious to learn how the Directory would publish his listing, so looked for it as soon as the book was published. He was listed merely as "clerk, weather bureau", which I considered a rather charitable disposition of the case under the circumstances. It devolved upon me one morning to stamp the forecast cards. It was the first time I had done it in this office, but I had stamped them in the Columbia office whenever the messenger was absent. Rubber logotyped words were provided for the purpose and were kept in a small case. A type holder containing space for four or five lines was used, and I proceeded to set the words in it in the same manner used in a printing office--that is, with the type inverted so as to be read from left to right. Currier came over to my desk, grabbed the the holder out of my hand, and said he would show me the proper way to set the type. After demonstrating with the type in an upright position, which necessitated setting from right to left and reading the words backward, he handed it back to me with a rather sneering remark about my lack of good sense and judgement. On this one occasion I sharply replied that I didn't think I had set type in a newspaper office for two years for nothing, and suggested he take a few lessons in the art. It surprised him to learn that type was set in that manner, and he offered no further comment on the way I did it.

An Adventure in the Manufacturing Industry

From the beginning of that year of 1904 onward throughout the summer, I had followed the daily want ads in an effort to find a more desirable position. I interviewed dozens of people in response to their ads but the results were generally disappointing. The positions with bonafide firms were of a mediocre nature, while those which offered attractive features were promotion schemes by irresponsible individuals with an investment as the chief prerequisite. I did find a few investment propositions that seemed to offer possibilities, and I referred each of them to my neighbor, Charles Turner, the banker. He advised against all of them, except one. This was a company in process of organization to manufacture a combined scale and truck. This was a two-wheeled hand truck designed for general use in warehouses, depots, and farm barns. Bags, boxes, or other merchandise placed on the truck could be weighed simply by lowering the truck to a horizontal position and throwing a lever, thus saving much handling in the process. The promoter was an Englishman by the name of Sam Snell, who was quite well and favorably known in Toledo. He had promoted and successfully managed the Toledo Cycle

Fittings Company, a $100,000 business, for the period of years that the bicycle business was on the upgrade. He left it, as he told me, because the developing automobile industry would greatly curtail the bicycle business. I consulted Mr. Tanner and he said that Mr. Snell had a good reputation for honesty and business ability. While I had the matter under consideration, a Mr. A.C. Johnson signed up for a considerable investment of stock in the proposed Company. He had been a successful business man and had retired, because of age, from the ownership of a successful lime manufacturing business. I found that he was scrupulously honest and that he was making the investment simply to employ the proceeds from the business he had sold. He was to be the president of the Company, Mr. Snell was to be general manager, and I was offered the position of secretary provided I made a reasonable investment in stock. I was to handle the correspondence, keep the books, and attend to all office matters. My starting salary was to be $85. a month, with increases as the business developed.

The truck-scale had been manufactured by a company known as Indiana Scale & Truck Company at its plant located in Bluffton, Indiana, until it got into financial difficulties and was taken over by one of the Bluffton banks. The purchase included the Bluffton plant, the patents, and all stock and equipment on hand, and we made a trip to Bluffton to look over these assets. It was a commodious brick plant and had a railroad siding, and the price at which the whole could be obtained was very attractive. We incorporated our Company in Ohio about November 1 but, unfortunately as I later discovered, gave it the same name as its predecessor. We secured office space in the leading office building and I immediately began working there after hours without pay, in order to gain needed experience in forming the Company and in handling the necessary details. I bought a book that dealt with the formation and development of corporations that proved very helpful to me. I kept Frank fully informed of these developments, also Mr. Carr, but not Mr. Currier. As I planned to leave the Weather Bureau on December 1, Mr. Carr began pulling his wires in Washington with the result that, when my request for a year's furlough reached Washington, Frank was immediately assigned to take my place. This was highly agreeable to everyone concerned, including Currier.

Thus far I have failed to mention an incident that was an important and compelling reason for making so desperate an effort to get away from the domineering Currier. Officials in charge of weather Bureau stations were required to submit semi-annual confidential reports on each employee under their supervision. No copy of these reports was to be retained in the office, nor were they to be shown to the individuals concerned. When Currier prepared his report concerning me, instead of mailing it immediately to Washington he left it lying on his desk. The record book in which the observations were recorded was always kept in his desk, so his desk must be left unlocked in order that the observer could record his observation each day in the book. As I always took one of the daily observations, naturally the confidential (?) report loomed before my eyes when I opened the desk to get the book. The rating he had given me was: "A fair observer". Probably he never had given a better report to anyone, nor had he ever been known to recommend a promotion for anyone who had worked in his office. However, as far as I know, no one before or afterward ever gave me a rating as low as that. It was difficult for me to understand why I deserved such a low rating, after having demonstrated that I could perform any and all duties in the office, when he himself could not do more than one-half of the various operations. Furthermore, it was significant that he had deliberately violated his instructions by leaving the report where it was certain I would see it.

Another series of incidents, involving the connivance of a Washington official, also greatly disturbed me. It was a rule that the records and computations of each observation were to be checked by another than the one taking the observation. As Currier took one observation each day and I the other one, he was to check my observations and, likewise, I was to check those taken by him. Despite these checks and corrections of discovered errors, occasional errors were discovered in Washington when the monthly record of observations reached that office. In such cases the error was charged, one-half to the one taking the observation and one-half to the one who had checked it in the field office. The checking division in Washington was very efficient and two or three errors in a month's observations often were found. The checkers listed these on a prescribed form charging one-half point for each error against Currier and the same against me. However, I soon discovered that the sum of the errors charged to Currier had a "0" imposed over the original entry while mine were allowed to stand as originally entered on the sheet. It so happened that the original entries by the checkers was in black ink, while the change to a "0" was in a faded brown ink which corresponded with the signature on the form by the chief of the division. After noting this for several months in succession, and feeling it a rank injustice to me, I asked Currier why I was charged with the errors and none against him. He merely grinned and said it could be explained by his having a good friend in Washington. As assistants could make complaints only through the official in charge, I took no steps to bring this bit of crookedness to light. However, within a very few years that chief of division was transferred from Washington to the charge of the field office in Hawaii, at a reduction in salary and rank. I never knew why he was punished but assume that some of his shady acts had been uncovered.

Obtained a Furlough for One Year

Not desiring to divorce myself completely from the Government Service, I asked and obtained a furlough for one year beginning December 1, 1904. I immediately took over the secretary's duties with the new company, which had been incorporated and was about ready to begin manufacturing operations. A superintendent had been selected to operate the plant in Bluffton; coal, steel, brass, and other supplies bought and delivered; and a small force put to work in the factory. I questioned the seemingly small amount of invested capital, but was told that as soon as the plant was in operation it would be comparatevely easy to sell additional stock. While I continued to be skeptical on this point, I could not over-rule the judgement of the ones who, admittedly, were more experienced than I. From this point onward troubles developed rapidly.

The first machines built were an exact duplication of those made by the predecessor company which, upon test, we found to be defective and the scales refused to weigh accurately. This necessitated a change in parts, patterns, and metallic composition of the scale beams. This was costly and delayed operations. When this difficulty was solved and production started, a traveling salesman was employed. He made some sales and we succeeded in getting a few local agents in other states, but there was a necessary lag in cash returns and our expenses for labor, coal, and materials steadily increased. Not many weeks elapsed before we were in need of additional cash to meet the payrolls and other bills. We had no good argument on which to sell additional stock, as the business was not on a paying business and prospective purchasers were naturally suspicious of a business seeking more capital so soon after incorporating. Finally, it became necessary to borrow some funds, and one of the stockholders agreed to make a loan on the Corporation's note. From my book on corporations I secured the proper wording

for such a note and drew it up in accordance therewith. When we met to sign it, the one to whom it was to be given objected to the wording and asked that I change it. This I refused to do because such a change would have made each individual stockholder liable for the entire account, whereas as written each was liable for only his proportion of the whole. He held out for some time but, when I told him I would not change it under any circumstances, finally accepted it. Fortunately, we were able to pay the note in full when it became due.

Conservative President Johnson disagreed with the manager's policy of rapidly increasing the payroll and volume of production. Relations between the two became very tense and finally resulted in their complete avoidance of a meeting with each other. In that situation, I was compelled to act as the go-between. This being very distasteful to me, and I having the greater confidence in President Johnson, I determined to eliminate the promoters from the Company if possible. Finally, I succeeded in getting a statement from Johnson that he would buy out the promoters, and an acceptance of the offer from the latter. Some time in January I arranged for a meeting and succeeded in getting a settlement between the parties concerned. In the meantime, Mr. Johnson had placed his daughter in the office as bookkeeper, stenographer and typist. She was experienced and capable and that eased the burden I had previously carried.

After Mr. Snell and the other promoter were out of the Company, the plant was closed, the superintendent discharged, and the shop men laid off temporarily. As it now stood, Mr. Johnson and members of his family owned practically all of the stock except that in my name. He announced that we would proceed to sell the machines on hand and only start up the factory when more machines were needed. This was obviously the right thing to do, but he requested me to go out on the road as a salesman. I protested that I could not do it as I had no previous experience of that nature, but he insisted. I went to numerous towns in northwestern Ohio and southeastern Michigan but with no success, principally for the reason that they had bought machines from the predecessor company which had proved unsatisfactory. Despite my best efforts to explain that this was an entirely different Company, and that we had perfected the machines, they remained unconvinced and refused to buy. Mr. Johnson had decreed that no office salaries would be paid until the business was on its feet. I pointed out that, while he and his daughter could do this without undue hardship, it was impossible for me to pay rent and living expense without an income. he seemed greatly worried about the business and, while he professed sympathy for the situation in which I was placed, could suggest no alternative. I had received thus far only my December salary, and the January salary was past due, so there was nothing for me to do except look elsewhere for employment. He agreed to carry on as best he could and if the business became established on a paying basis he would ask me to come back. I knew that he would make an honest and determined effort, but had little faith in his being able to do so. I considered my investment and back salary as entirely lost. As the most of our savings from the sale of the drug store were involved, I felt the loss very severely. The savings of our nearly eight years of married life plus those of my earlier years in partnership with my father on the farm had almost completely evaporated in this ill-chosen investment.

For the first time in my life I was without a job. With a wife and two children to feed and clothe, house rent of $20. per month to pay, and only a few dollars left in the bank, I was thoroughly despondent and inclined to look upon myself as a complete failure. Had it not been for the cheering words and abiding faith of my loving wife, I might have had serious difficulty in facing the situation with my usual determination. I set out each day and tramped the streets of

Toledo looking for work. As our finances dwindled I felt I could not afford carfares or noon lunches, and resolved to take any kind of work that promised an honest dollar. I became acquainted with another fellow in similar distress and we tramped together. He had some experience as a salesman and was offered a few poor jobs in that line, but the same people would not give me a trial because I lacked that kind of experience although I had more education, ability, and cultural training than he. I began these quests for work in February and continued on through March, April, and into May. During that three months' period I found only one promising position with a reliable firm. It was that of bookkeeper and cashier for the largest wholesale fruit and produce commission house in the City. As soon as I learned of the opening I lost no time in making application. It was on a Saturday afternoon, and only the business manager was in the office, so we had a favorable opportunity to fully go over the proposition. After he had detailed the duties I inquired about the salary, and was informed that if I could handle the job the salary would be satisfactory. With my training in bookkeeping and experience in the fruit business, I felt certain I could fulfill the requirements. He told me that he would be in the office on Sunday to make out the weekly statements, and suggested that I might come in and help him if I cared to do so. I was glad to have this opportunity of gaining a further insight into the business, and we worked up to 8 o'clock in the evening to finish the statements. From him I learned that the Saturday afternoon and Sunday work were routine with him and the bookkeeper. I learned further that the business opened for business at 5 a.m., and that I would need to be on hand a little in advance of that time. The rush of business would last about two and a half hours, during which the cash and bookkeeping transactions ran into several thousands of dollars and for which I would be fully responsible. Then I could slip out for a few minutes for a quick breakfast and, on my return, take care of a lesser amount of business during the remainder of the forenoon. The afternoon was free to work on the books which probably would require up to eight o'clock in the evening.

The nature of the business seemed attractive but I was not surprised to learn that the previous bookkeeper had left because of being a victim of tuberculosis. I asked for a day or two in which to consider the matter fully and make my decision. Here was a chance with a reliable firm, with satisfactory pay, and an interesting type of work. However, it was difficult for me to understand why a prosperous and outstanding firm should expect a total of 90 to 100 hours of work per week from its office man. Such a position would leave me no time at home except for sleep, and all my meals would have to be taken away from home. While my need for the income was acute, I felt obliged to decline the offer rather than endanger my health. Nowithstanding the disappointment I never regretted that decision.

Termination of Furlough

On a Sunday in May I wrote a letter to Washington asking for the termination of my furlough and restoration to duty. I did this with a great deal of reluctance and advanced the date of the letter by four days. I placed it on the piano and said that, if I had no success in finding work by the end of the four days, I would mail it. Nothing happened so the letter was mailed on Thursday, and I expected a reply would be forthcoming in about a week. I knew that my restoration to duty must await a suitable opening, hence the possibility that some time might elapse before receiving an assignment. Only two days later, on Saturday, the door bell rang while eating our noon lunch. It was a messenger boy with a telegram which stated that my furlough was terminated and requested me to report

for duty at the Chicago office at once, and--to my surprise--at Government Expense. I went to the Toledo office that afternoon and obtained from Frank the necessary travel blanks, and boarded a train for Chicago on Sunday morning.

OUR SOJOURN IN CHICAGO--ChapterXIX

I arrived in Chicago on Sunday afternoon and formally reported for duty on the following morning. The office was located on the 19th floor of the Auditorium Tower, a tower surmounting the Auditorium Theater and Hotel Building. The office force consisted of Professor Henry J. Cox the official in charge, five observers, two messengers, a student assistant, and a printer. This was a District Forecast Center comparable to the ones at New Orleans, Denver and San Francisco, but Professor Cox was the ranking official outside of Washington. He made the official forecasts for 13 states, extending from Michigan and Indiana on the east to Wyoming and Montana on the west and as far southward as Missouri and Kansas. He also issued the storm warnings for some of the Great Lakes including the following: Huron, Superior, and Michigan. The 8-page monthly Weather Bulletin was printed here for two different states, and our daily issue of the weather map was about 2,000 copies. The maps were printed on a large job printing press, instead of on the milleograph we used at smaller stations. The daily forecast cards also were printed instead of being rubber stamped. A stereotype plate had to be cast, for the weather map, from a chalk plate made by one of the assistants each morning. The chalk plate was a thin sheet of steel coated with a layer of hard chalk about 3/32 inch in thickness. A map of the isobars and isotherms was laid over the chalk plate and the lines were traced with a pencil that left a slight impression on the chalk. Special instruments were then used to cut these lines through the chalk down to the steel plate. When completed, the chalk plate was put inside of a casting box whose sides were clamped together with heavy steel clamps. The stereotype metal was put in a large iron ladle over a gas stove and left there to melt while the chalk plate was being made. To get a good cast the metal had to be near a certain temperature. If too cold the casted lines would crumble in spots, and if too hot the cast would shrink in cooling and the casted lines would not be full height to print properly. As soon as the telegraphic reports began arriving, which was about 7:30, the chalk plate man would begin entering the symbols on the plate to show the weather and wind direction at each of the more than 100 stations. Later he received the map of the lines and they were put on as the final step. He had to have the stereotype ready for the printer not later than 9:30, and the 2,000 maps had to be mailed at 10 o'clock. Three of us folded and wrapped them by hand in the unbelievable time of 20 minutes, which was as fast as the press would print them.

Assigned Tours of Duty

Each assistant was assigned to a certain desk in which was a typed sheet listing the tour of duty associated with that desk. At the end of each month he was shifted to another desk and an entirely different line of work. In this way, each became familiar with all duties on the station in the course of time. When assuming a desk for the first time, he had to get such helpful instructions as he needed from someone who had served there before him. My first assignment was known as the split trick, which was the least desirable and, according to precedent, was always given the latest arrival at the station. This consisted of a certain tour of duty from 7:30 in the morning until 12:15 p.m.; then from 6:00 p.m. to about 10 p.m. I had charge of all the instruments in the office and on the roof. At night I took the 7 o'clock observation, made the three pencil maps

as the reports came in, telephoned a description of them to Professor Cox at his home in Hyde Park, took down the forecasts he dictated from my description of conditions, and sent them out by wire to many weather stations throughout his forecast district. When there were storm warnings, they had to be sent to storm warning stations at many stations along the shores of the Great Lakes, which added from 30 to 60 minutes to my day's work. One of the enjoyable features of this assignment was the fact that a reporter from each of the daily newspapers came each evening and I became well acquainted with them. While I was making the maps and getting the forecasts ready, they would sit arond, smoke, and swap stories of their varied and exciting experiences. They were bright chaps and we always got along finely together. Incidentally, I was able to pick up considerable information about reporting for big city newspapers.

Until such time as I was able to find a suitable place to live, and earn enough money to pay some of the moving expense, I lived at a rooming house a few blocks north of the River which was within walking range of the office. During this period of several weeks, the split trick was to my advantage. It gave me the afternoons free to look for living quarters, opportunity to become acquainted with portions of the city, and a chance to look around by daylight. One of my interesting experiences was when, in response to an ad, I went to an apartment house on the north side which was in a nice locality and in walking distance of the loop. The owner lived in one of the apartments and answered my ring in person. He was in dressing gown and slipper, and had an apartment to rent. The price was $80. a month which I was inclined to believe would be difficult for me to pay and meet our living expenses on our salary of $70. a month. Later, I found an apartment in Englewood for about $30. a month, but the landlady demurred when she learned that we had two children and insisted on withholding her decision for a few days. When I did get her answer by telephone it was "no". I then took the matter up with a real estate firm in Englewood and they cited me to a duplex at 5927 Normal Avenue, which they asked me to go and see and, if satisfied, contact the widow owning it who lived elsewhere in the City. When I arrived the widow happened to be there cleaning the vacant rooms. There were 5 or 6 rooms and it was a first floor suite. The second floor was occupied by a druggist and his family. There was a full basement with a furnace and a nice backyard with a fence around it. It was just the kind of place I had wished to find, and I hesitatingly asked the price. When she told me I nearly collapsed; it was $17. a month. The other places I had visited required a year's written lease, but when I asked her about it she said a lease only protected the tenant so she never bothered with them. Cora and the children arrived on July 1 and staid at the rooming house with me for a couple of days until the goods arrived. We moved into our rented home on July 3.

Then the split became very undesirable. It was 7 miles to the office, one hour by streetcar, 30 to 40 minutes by the Elevated, or 25 minutes by suburban steam train. Only the streetcar avoided a walk of several blocks at both ends. I had to arise early in order to reach the office at 7:30, and could not reach home for dinner until 1:30. Then I had to eat supper at 5 o'clock in order to make sure of reaching the office at 6:30 for the observation. The evening work lasted until 9:30 or 10 so I did not reach home until about 11, which made a long day and the expense of four carfares. I made no complaint about it to the official in charge, but he spoke to me about it one day and said he realized it was a hardship. He promised to relieve me of it as soon as possible. This he did, probably about September 1, after which I had the more pleasant assignment of day work and my evenings at home. However, every fifth week I had all of the office

work alone from Saturday noon until Monday morning, including all of the observations, records, maps, etc. On one Sunday morning I took the streetcar, allowing myself scarcely more than the required normal running time to reach the office. When we reached 23rd St., where the tracks ran under a viaduct, the depression had several feet of water over the tracks and the car could go no further. I hot-footed several blocks east until I got to the end of the flooded area, and managed to get a streetcar on another line that enabled me to reach the office almost on time.

Moving the Office

The new Federal Building, which was started in the heart of the loop district in 1893, was completed 12 years later in this year of 1905. Arrangements had been made for space in this building for the Weather Bureau offices, new instrumental equipment had been installed on the roof many months before, and records had been made at the new exposure for comparison with those officially made at the old office. In addition, records were to be continued at the old office for a year after the removal in order to determine with accuracy the relationship between the records at the two differing exposures. The first elevator landed us on the 8th floor or top of the main building that covered an entire block. There, another elevator took us to the 14th floor in the dome. In the center was a very large room which contained the recording instruments and desks of the assistants. On each side were three medium sized rooms containing offices, work rooms, etc., seven rooms in all. To move the large amount of equipment and furniture from the 17th floor of the old quarters, several blocks in the busy downtown section, to the 14th floor of the new building was no small task. The difficulty was increased by the fact that the map and forecasts be must issued as usual at the old office before disconnecting the machinery and working equipment, hence the moving could not start before 10 a.m. and everything must be in place and in working order at the new location in time for the issuance of the publications from there on the following morning. Professor Cox was naturally nervous and asked all of us to be on hand early in the morning and prepared to remain until the job was completed. The day was in the latter part of June, bright and sunny, and extremely hot. We managed to get the exclusive use of some of the elevators and fairly prompt service on the others. Because of careful preparations made in advance, the work proceeded smoothly and without mishap. We, the members of the staff, walked to the new quarters carrying in our hands the more delicate instruments through the crowded streets. To our surprise and relief everything was in proper place by 3:30 p.m. and then, to my greater surprise, Professor Cox shouted a cheerful "Come on, boys". He was a very staid and intellectual man, a graduate of Chicago University, a capable administrator, and a strict disciplinarian. We all joined the procession and followed him down the street about a block to a large saloon that served excellent free lunches with their drinks. The Professor told us to order anything we wanted, and the most of us took beer which was very refreshing on such a hot day. We spent more than an hour in the booths, eating a good lunch as we sipped our drink, and indulging in friendly conversation as we rested. This was the most democratic session I ever had with the Professor during my stay in Chicago.

Making Weather Maps at the Chicago Board of Trade

At the beginning of another month I entered upon a new assignment which involved an entirely different type of duties. My first task in the morning was the "cutting of telegrams". This consisted of receiving the coded weather reports from about 150 stations throughout the United States and Canada, cutting out with blue pencil the less important words, and then sending them out over the wires

to stations that made weather maps throughout the country. This work was supposed to be finished shortly after 8 o'clock, after which I was to go to the Board of Trade and make the glass weather map there. Unfortunately, on my first morning weather conditions were bad and messages came in very slowly. They were still coming in at 8:25 and I knew I was supposed to start the Board of Trade map at 8:30. I asked for instructions and was told to go to the Board of Trade and someone else would finish the cutting. That building was more than a block away and it took several minutes to get over there. Then I had to inquire where the room was located and, as it was on an upper floor, I did not reach the room until 8:35. The room full of speculators was in an uproar over the delay and hurled some rather nasty words at me. Another roar went up when I began entering the data on the map in the same manner I had done it at the produce exchange in Toledo. Here they wanted the data for certain stations entered first regardless of their position on the code sheets, and the symbols were different than used at Toledo. I was in helpless confusion until a newspaper reporter came to my aid. He had learned the code used by the Weather Bureau, and knew the customary procedure for making this map. We soon got matters in hand and the crowd quieted down. As soon as the first few stations had been entered on the map, some of the dealers would immediately leave the room to place their buying and selling orders on the Exchange. By the time the map was finished the room was practically empty of spectators. I was never late in starting the map after that disagreeable first day's experience, and this particular duty became a mere matter of routine for me.

Among the conveniences at the new office was a pneumatic tube in the forecast room that delivered the messages to us directly from the Western Union office more than a block away. Through it we sent all outgoing messages also. In the same room was a mail chute that carried our outgoing mail directly into the postoffice on the ground floor.

Other Duties Assigned to Me

One of my early assignments was the care of the instruments and self-recording apparatus left on the Auditorium tower after our removal to the Federal Building. Comparative records were to be maintained there for a year, and I went each day at 12 noon to change the sheets and care for the instruments as needed. On one occasion, I found the anemometer record was faulty, which made it necessary to take the anemometer down and put up a spare one. The instruments were on the roof of the tower which was only 25 or 30 feet square, flat, and inclosed by a parapet of brick which extended two or three feet above the roof. The support for the anemometer was an iron pipe about 2 1/2 inches in diameter set in the outside wall, instead of being in the center of the roof as at most other stations. The wind was blowing a gale of 45 miles per hour and when I got to the top of the support, that pipe was weaving back and forth like a slim flag pole. Being 20 feet above the roof and directly over the outside wall, I could look straight down to the street fully 20 stories below. I considered the possibility of the pipe being rusty and breaking under the unusual strain, or that the old wall would crumble and let it give way. Also, it was difficult working in such a gale, and was very glad when the job was finished and I was again in a safe place.

Another assignment was the making of the chalk plate map, and casting a stereotype plate from it. This was entirely new work for me and I did considerable practicing during afternoons before assuming the responsibility. It proved less difficult than anticipated, and, after a few days, I was able to do the work as creditably as any of the others. I have already described the process and no further comment is needed.

Frank Montgomery ranked as first assistant but, being temperamentally unfitted as secretary to Professor Cox, he was assigned to the keeping of the records. J.H. Armington, the second assistant, acted as secretary instead. He attended to all of the office business, wrote the letters dictated by Professor Cox, and took down the dictated forecasts. Montgomery was transferred to another station in the fall, at which time I was assigned to keeping the records in his stead. This work was familiar to me as it was similar to that at other stations where I had worked. When I took over the desk I found the pigeon holes full of dust and disorganized papers, the records being two or three days behind. I went to work on them to bring them up to date before starting to clean up the desk. I had not been at the desk more than a half-hour when Professor Cox came along. He bawled me out unmercifully for the condition of the desk, as he was noted for being extrememly meticulous. I told him I intended to take care of it as soon as I had the records up to date, but I naturally resented his placing the blame on me. He went on his tour of the other rooms, and when he came back he stopped and chatted pleasantly for a minute or two. He never mentioned the desk again. That was his personal method of administration.

When Armington went on his vacation I was informed that I was to take over his duties during the absence. Armington was not a stenographer but he managed dictation fairly well by using a sort of abbreviated long hand. Such a system was not easy for me and I had difficulty in handling the dictated letters and forecasts. Also I had never made out the station forms that the official in charge ordinarily made, which, at this station, were handled by the first assistant. The Professor was reasonably patient with me, but I felt I had fallen down badly and suspected my stock had depreciated in his estimation. When Armington returned I told him just how I felt, and he may have told the Professor about it because later he said the Professor spoke well of my effort. From this experience I realized how valuable it would be to have shorthand writing ability, so I began practicing where I had left off several years before. I told no one about it, intending it to be a surprise when I was called upon to take dictation in the future. Despite my resolve, Armington accidentally discovered my practicing and probably told the official in charge about it. Shortly afterward he mentioned one day that he had just been making out the confidential reports for the boss. I told him I presumed I had been given a black eye for my failure with the dictation, but he quickly assured me that I had been given a good rating and recommended for promotion. A few weeks later, in December, the promotion came. After a service of nearly four years at $840. per annum, I was now to receive $1,000. per annum.

Affairs and Cares at Home

Very soon after the family came to Chicago little Geneva became ill with some sort of digestive trouble. She was under a doctor's care for many weeks, became very thin, and caused us great anxiety. Invariably when we went about the City on the street car she would become very sick and nauseated. In such cases we had to leave the car and carry her on the street until she felt better, then board another car and continue our journey. We had a good doctor and he told us that we could save her only by limiting her nourishment entirely to her mother's nurse. She would cry for food when we were eating, and it was pitiful to see her so hungry for the food which we had to deny her. Cora's diary during that period reflects her great anxiety over the outcome. No improvement in her condition was noticeable until late in the fall after the arrival of cold weather. She then began to gain slowly and our hopes were raised. After a time she was allowed to have food from the table, and her recovery became more satisfactory.

The family living on the second floor of our house was the Lawrences. He was a pharmacist and worked in a drug store, and was a very fine fellow. He had served as a pharmacist in the Spanish-American War during which time he had been around the world. We had many good visits together and, on Sunday afternoons, we often went to some park for an outing. On one such trip we visited the White City and saw, for the first time, a baby incubator. Quite a few babies were being cared for there in glass cases and it was extremely interesting to watch them. One was a negro baby only 10 or 12 inches in length and with a head not much larger than a golf ball. It was like a miniature doll, with very bright eyes, and a happy smile for the spectators. Several years later, after our sojourn in the west, and while living in Indianapolis, we paid a visit to the Lawrences in Chicago. He then was manager of a Walgreen store in Englewood which I believe was No. 2, and the beginning of the Walgreen chain which now numbers several hundred stores. While visiting with him in the store, he introduced me to a man who he said was his boss and who had dropped in from his store down in the loop district. I am quite certain the man was Mr. Walgreen, who afterward developed the famous chain of drug stores. On Sunday afternoon, the Lawrences took us downtown to Grant Park where we saw our first aeroplanes in flight. Some years afterward Mr. Lawrence purchased a drug store on what I believe was 71st St. A year or two later, while in the store one evening, a hold-up man entered the store and ordered Mr. Lawrence to put up his hands. Instead he reached for a revolver on the shelf behind him, as he was of the fearless type, but the robber began shooting and Mr. Lawrence received several bullets in his body. He died within a few hours. Mrs. Lawrence later remarried, visited us in East Lansing, and we returned the visit at her urgent invitation. Some years later we were informed of her death.

Although our home in Chicago was maintained only six months, we entertained numerous friends and relatives during this period. Among these were my father and mother, several of Cora's Wisconsin relatives, and Clarence Skinner. The last named was my cousin Carra Skinner's husband. He lived in Grand Rapids and, for several years, had been employed in the engineering office of the Pere Marquette R.R. When that office was transferred and merged with the Detroit office, he was left without employment. He tried to locate a position in Chicago but without success, and left home hoping I might find an opening for him. One of the men in the Weather Bureau knew of a vacancy in one of the offices at the stockyards, and we went out there on a Saturday afternoon. The manager agreed to give Clarence a trial if he would be on the job Monday morning. I wired him and he reached our house on Sunday. After a trial of a few weeks he decided he did not like the job well enough to stay with it, so resigned and returned to Grand Rapids.

Except for our anxiety over Geneva's long and serious illness, we enjoyed our stay in Chicago. The people were friendly, the cost of living was extremely moderate, transportation facilities were excellent, good entertainment was abundant, and we were within easy distance of nearly all relatives. We had formed no desire to leave the City and looked forward to remaining there for several years at least. But the Fates did not so decree. Soon after my promotion was received I was ordered to report for duty at Cheyenne, Wyoming on January 1. While I did not relish the idea of going so far away from home and friends, it did offer the opportunity of seeing a part of the great West which I had a real desire to do. It did not seem desireable to move the family and household goods until I had examined conditions and prospects at the new assignment. Nor was it convenient to move in the middle of the winter season, so it was decided that I should make the trip alone and report my findings before undertaking the costly move. Profes-

sor Cox said he would have preferred that I stay with him, but thought the assignment offered better chances for future promotions.

IN OLD CHEYENNE--Chapter XX

I left Chicago on the evening of December 30th and arrived at Omaha on the following morning. The trip across Nebraska consumed all of that day and well into the evening, and I did not reach Cheyenne until about 11 p.m. This travel was mostly upgrade because Omaha on the Missouri River had a comparatively low elevation. Grand Island, Nebraska was 3,000 feet above sea level, and Cheyenne was 6,050 feet above the same level. During the latter portion of the trip, a brakeman sat in our Pullman and regaled us with weird tales of the wild and wooly west. How the cowboys rode into Cheyenne and shot up the town during drunken sprees, and stories of other wild affairs were told by him. None of the others seemed to take his talk too seriously, so I was not greatly disturbed by it. My principal concern was to what extent the high altitude would affect me physically, as several rejections for life insurance in previous years had led me to believe that I had a weak heart. During the short walk from the depot to the hotel I could detect a difference in my feelings but it was nothing of importance. The principal affect was that I could sleep very little during the first week, but Nature finally remedied that as I became accustomed to breathing the rarified air. A phenomenon that impressed me greatly was the extreme brilliance of the stars at night, far beyond anything ever seen at low altitudes. They appeared to be so much larger, brighter, and more numerous than anything I had ever seen in other places.

The city had about 15,000 population at that time, and its chief activity was the Union Pacific Railroad shops located there. The State Capitol was much smaller than our Michigan one, and only a little larger and more pretentious than some of the larger county courthouses. The country around the City seemed practically level and treeless; divided into large ranches whose buildings were several miles apart; with no native trees nor cultivated crops; and scarcely anything of interest to be seen. When Father Harker visited us there, I asked him why he did not like it and his reply was: "It is too much of a vastness". That terse statement fitted so well that I doubt if anyone could have offered a better one. As a matter of fact, the country was not exactly level as it was on the eastern slope of the Rockies. The Great Continental Divide was only 28 miles west of the City and at an altitude of 8,000 feet. The Union Pacific Railroad crossed it at an elevation of 7,000 feet, having excavated a cut of 200 feet from which the Company secured an endless amount of gravel and crushed rock for track ballast and building purposes. On one occasion while we were living in Cheyenne, a string of gravel cars broke loose while being switched at Sherman Hill and started eastward down the grade. Railroad offices in Cheyenne were immediately notified and an employee ran to a switch in the yards there and diverted the runaway cars onto a sidetrack where a string of loaded coal cars was standing. The cars arrived within a very few minutes and produced a large amount of wreckage, but no one was injured.

Reporting for Duty at the Weather Bureau

On the following morning after my arrival, I reported for duty at the office in accordance with my orders from Washington. Although it was New Year's Day, 1906, I found the Official in Charge, Mr. Walter S. Palmer, at his desk in the office. He welcomed me cordially and, because of it being a holiday, we had the opportunity of visiting together and becoming acquainted. He was only a few years

precaution he always carried in his light wagon a supply of preserved foods for emergency use, and by these means he was able to be fairly comfortable and quite safe until the storm subsided.

Establishing a Home in Cheyenne

Through the aid of Mr. Palmer I immediately located a room in a nice home only six or seven blocks from the office. It was owned by an elderly couple, and usually I was the only occupant of the second floor so that I had virtually a private bath. I began looking for a house to rent but found they were quite scarce and rather expensive in proportion to my salary. It did not seem practicable to move our goods in the middle of the winter, and when I was able to send Cora some money I suggested that she put our goods in public storage in Chicago until such time as I could locate a suitable place to live, and go to Michigan for a good visit before making the long journey. Mr. Armington of the Chicago office kindly assisted her with the storage problems and other details of breaking up housekeeping there under wintry conditions. I continued to look for a single house but was unable to locate a suitable one. Finally, I decided to accept an apartment in a 4-apartment house which had been available throughout the winter. From the fact that it had been unoccupied for several months, I suspected others had considered it not very desirable which led me to feel the same way about it. However, we found it very satisfactory in every way. It was located at 916 East Eighteenth St. and within a stone's throw of the City Park. The building was constructed of pine logs and formerly had been the ranch house on U.S. Senator Francis E. Warren's ranch a few miles from the city. He owned and rented about 60 houses and had taken down and numbered the logs in this ranch house, and reassembled them on a suitable lot in the City. Each apartment was two stories, had six rooms finished in pine, and modern with respect to conveniences. We had an end apartment so that we had windows on three sides and plenty of light.

In those days it was customary for railroads to grant passes to officials in charge of weather bureau stations, and Professor Cox of Chicago had annual passes on many of the roads leading from that City. He realized my moving costs would be rather heavy in proportion to my salary and, before I left Chicago he volunteered to try getting a concession in the form of reduced rates for my family and household goods. I was later informed that he had been successful in obtaining half-rates. I rented the house about the 1st of March and immediately ordered the household goods to be shipped in a chartered freight car, which would obviate the necessity of extensive packing and crating. I sent as much money to Cora as I could spare and told her to come to Cheyenne if she had completed her visit in Michigan. I asked a moving company to watch for the car of household goods and be prepared to unload them as soon as they arrived so that there would be no demurrage charges. In a very few days the owner of the van came to the office, notified me that the goods were at the depot, and that he was ready to move them as soon as I paid the charges. From him I learned the freight bill was $125., which was about double what I expected and twice as much as the amount of money I had on hand. I tried to borrow the additional amount from Mr. Palmer but was unsuccessful. With no acquaintance elsewhere I was surely in a predicament. Mr. Palmer thought the R.R. agent would accept my explanation, let me have the goods, and wait until payday for the amount I lacked. I went to the depot and discussed the matter with the agent. He was very decent and sympathetic but told me that he could not release the goods until the charges were paid in full. I told him that I understood I was to have a half rate but he said the freight bill showed no such notation. Furthermore, the goods had arrived as way freight and been placed in the warehouse, instead of in a special car. He promised to inves-

tigate the matter and said the storage charges would be one dollar a day until the goods were removed. My next salary check arrived in about a week and with the proceeds I went to the depot again. The Agent's investigation showed that, for some unknown reason, the goods had been transferred from the through car to way freight at Omaha, so had received some rough handling and become more or less scattered about. However, nothing of importance proved to be missing and there had been practically no breakage or other damage. The Agent cut the storage charges about in half, and also had obtained a confirmation of the half-rate freight charges, so that the total cost was very little more than I had originally expected. I began unpacking and arranging the furniture, and was keeping house at the new location before Cora and the children arrived.

The Reverend Frank Lincoln Moore

Within a very few days after my arrival in Cheyenne, a man came into the office one morning while Mr. Palmer and I were printing the weather maps. Mr. Palmer invited him into the printing room so that the printing could be continued while visiting with him. When Mr. Palmer introduced him to me as the Reverend Moore, pastor of the Congregational church, he mentioned that here was another Michigan man. Mr. Moore immediately asked what place in Michigan I hailed from, and I told him from a small town near Grand Rapids. He then asked what place, and I said Ionia County. Again he asked what place, and I explained that I had been reared on a farm in Boston Township and later had lived in Clarksville. Then he told me that he had been reared by his uncle on a farm near Lake Odessa, that his uncle had been a livestock buyer, and that he had driven the purchased cattle for his uncle from the farms in Boston township, and from those around Clarksville and Lake Odessa. He also mentioned that his wife was a relative of Herbert Powell of Ionia, whom I did not know at that time but with whom I became well acquainted while occupying offices in the State Office Building at Lansing when Mr. Powell was State Commissioner of Agriculture. In the late Twenties, while Mr. Powell still held that position, he came into my room one morning and said he had a friend from Chicago whom he wished me to meet. He then introduced me to the Reverend Moore. While shaking hands with him I realized who he was and asked him if we had not met before. While he hesitated a reply I reminded him of our acquaintance in Cheyenne, which enabled him to recall our association more tha 20 year earlier.

We attended services at his church in Cheyenne quite regularly, and I enjoyed his sermons. Unfortunately, it was my duty to be at the office each Sunday at 12 noon and change the sheet on the triple register. In order to do this I had to leave the church about 15 minutes before the end of his sermon, which I feared might be embarassing to him. I explained the situation, and he said it was alright for me to leave which relieved my feelings in the matter. Mr. Palmer said I might let the sheet run over until after the service, but this left a part of the current day's record on the previous day's sheet. I feared the Washington office would object to this being done every week, so I concocted a means of overcoming the difficulty. The sheet was wrapped around a brass cylinder that made four revolutions during a 24-hour period by means of a clock mechanism. By going to the office before church services began and inserting the new sheet under the old one, then removing the old sheet two or three hours later, I managed to have the recordings appear in their proper places on the sheet. The idea worked satisfactorily and I believe it was original with me, as I never heard of its being done by anyone else in the Service. This machine made a continuous record of the wind velocity, recorded the wind direction once each minute, the sunshine once each minute, and each hundredth of an inch of rainfall whenever it

occurred. The sheet was divided into five-minute spaces so that the exact time of each record could be determined accurately and properly entered in the station records.

The Reverend Moore had acquired a small printing outfit which he installed in an unused bedroom in the parsonage. With this he printed the four-page announcements distributed among the congregation each Sunday. I suggested to him that he could enliven the announcements by printing them in two colors. He approved the idea but said he knew very little about printing and would not know how to do it. I offered to help him and went to the parsonage on a Saturday afternoon for the purpose. Soon after we started the task he was called away, and I was left to finish the job alone. The fonts of type were inadequate in style and quantity and I had to resort to various makeshifts. Also, the fact that I had been away from the printing business for a number of years, I was without practice and worked much less rapidly than formerly. Printing in two colors necessitated making two press runs and changing inks between them. It was after dark before I finished the work, but it was quite creditable in quality. The minister called attention to it during the Sunday services and gave me full credit for the innovation.

The Reverend Moore had a brother who was a business man in a town 100 miles or so north of Cheyenne. While attempting to board a train after it was in motion he fell under the wheels and lost both legs. He died from the shock and his body was shipped to Cheyenne for funeral services and interment. He was a Knight Templar Mason and the Commandery was called upon to provide a funeral escort. I had recently transferred my membership to Wyoming Commandery No. 1, and had just purchased my uniform and equipment. Although I had no drill experience I entered the ranks making up the escort on this occasion.

Early Fishing Experiences in Wyoming

During my first ten or twelve weeks in Cheyenne, before Cora arrived, I ate the most of my meals at a restaurant directly across the street from the office. It was a very good eating place and was owned and operated by a Dutchman and his wife. One day in February I noted his absence and, on inquiry of his wife, learned he was away on a fishing trip. At noon on the following day, I asked him about his luck and bantered him about the number of fish he had caught. He said he would prove to me that he had been successful by serving me some of them for supper that evening. When the waitress came for my order at supper time, I told her I had been promised a fish supper but did not know whether it was authentic or not. She said she would see about it and when she brought my meal there was a plate of six fine mountain trout. Furthermore, he would accept no pay for the meal saying it was illegal to sell trout in that state. The incident aroused my interest in trout fishing and my curiosity as to the kind of bait that could be used in the middle of winter. I learned from him that he used only scraps of raw beef. I had no particular urge to try my fishing luck in such cold weather, but determined that I would do so as soon as spring weather arrived.

I attended the various Masonic Lodges regularly and made many acquaintances, among whom was Peter T. O'Neil, caretaker of the Capitol Building and grounds and a confirmed fishing fan. We planned a fishing trip to be executed when warmer weather put in its appearance. I sent to Sears & Roebuck for a rod, reel, creel, and other needed accessories. The weather during the closing days of April seemed favorable for our excursion, and we planned to go to Horse Creek about 30 miles north of Cheyenne on the following Saturday evening, camp overnight, fish on Sunday and return by train Sunday evening. As there was no north-bound passenger train on Saturday evening it was necessary to obtain permission to ride on a

freight train. Pete was able to get the authorization from the Superintendent of the Road because of friendship and Masonic connections. We were to meet at the depot in time for the freight which was scheduled to leave at six p.m. When I arrived there Pete had a third party with him by the name of Jim Niswander who, I afterwards learned, had lived in Lowell, Michigan before seeking his fortune in the west. Trout fishermen in that country adopted the custom of wading in the creeks in ordinary shoes and socks, the extreme dryness of the air causing them to quickly dry out after leaving the water. When I left home on this trip the weather was quite cold, similar to early March weather in Michigan, and I was not keen to wade the creek under such circumstances. I decided I was still a tenderfoot easterner and wore a pair of rubber boots instead of shoes. This caused a lot of razzing from the other two, but proved to be a lucky break for me as I will explain a little later.

Our train did not get under way until 8 p.m., and, during the two-hour wait, it began to snow. We did not mind the delay as we hoped to be able to spend much of the night dozing in the warm caboose, as we brought no camping equipment of any kind. It so happened this train was made up of only empty coal cars so there was no switching to be done enroute, and we arrived at Horse Creek Station by 10 p.m. At this point the only buildings were a pump house and water tower, and the former was a very small building with very greasy floors and no place in which to even sit down. No snow had fallen here and the weather was clear and quite cold. How to keep warm and perhaps get a few winks of sleep was our problem. At my suggestion, we laid down some discarded railroad ties outside and at one end of the pump house, and laid the pump house doors on these ties for a bed. Then we built a good fire out of other old ties so that our bed was between the fire and the wall of the building. We alternated in keeping the fire going while the other two slept on the boards, and the night passed quite comfortably for us. We ate our breakfast soon after daylight but lamented the fact that we lacked a warm drink. Down the track, about a half-mile distant, was a ranch house, and I told Pete I would gladly pay for a pot of coffee if he would go after it. He agreed and when he returned he had not only the coffee but some other items as well, nor would the rancher accept any pay for it. We had moved our cans of worm bait some distance from the fire, and found them frozen solid in the morning. We thawed them out and started for the creek, scaring up a coyote on the way.

There was a beaver dam made of brush in the creek and we began fishing some distance above the dam where the water was only 12 to 16 inches deep. There was about a half inch of ice along the edge of the creek but the other two waded boldly to the center and began fishing with their lines floating down stream. It took me a little time to assemble my new outfit and the others had caught several trout before I got started. Finally, I waded out but carefully avoided going far enough to get any water in my rubber boots. Before we had been at the creek more then 20 minutes, one of the fellows said he had to get out of the water as he was thoroughly chilled. In another 10 minutes the other one had to do likewise. They went up on the cliffs at the side of the canyon where the sun could reach, dry and warm them. I continued to fish alone, my only discomfort being cold fingers in handling the wet worms and fish, thanks to the rubber boots that kept my feet dry. I remained in that spot for a couple of hours and until there seemed to be no fish left there, then proceeded up the creek in the canyon. After a time I overtook the other two who had caught very few fish since leaving the beaver dam, neither had I caught any in this shallower water. We fished the rest of the day without catching any more. When we took stock of our catch at the end of the day, the other two had a total of about 30 whereas I alone had 56. I promptly reminded

them of their promise to show me how to catch trout in Wyoming, complimented them on their teaching ability, and pointed out that I had proven myself a very apt pupil. I told them, too, that rubber boots were not to be sneezed at under such circumstances.

A month or two later, under ideal weather conditions, another trip was made to the same place on a weekday. On this occasion, I was accompanied by Cora and Pete and we waded the creek in our shoes as the weather was warm. We traveled by regularly scheduled passenger trains, going up in the morning and back in the evening. We took a picture of the falls in Horse Creek during this trip, and it is in one of our albums.

Walter S. Palmer, Official in Charge

About two months before my arrival in Cheyenne Mrs. Palmer passed away following the birth of their second son. The first child was three or four years at that time which, with the tiny baby, gave Mr. Palmer much concern in providing properly for their care. He had tried two or three different housekeepers none of whom were satisfactory. Shortly after my arrival he employed a lady by the name of Mrs. McCabe and she proved to be the type he had sought for the important and difficult task of caring for the children and the home. She had separated from her husband and I believe he was living in New York City at the time. Being Catholic she was unable to seek a divorce, but before I left the City she was notified of his death. Shortly afterward she married Mr. Palmer and, notwithstanding their different religions, it appeared to be a happy marriage. Several years later, while I was in charge of the Indianapolis office, Mr. Palmer was transferred to Fort Wayne, Indiana. Although this was a less important post than the one I held, he never indicated any jealousy because of it. When I went to Indianapolis he wrote a fine letter of congratulation on my advancement in that office, and we maintained an infrequent correspondence. In May, 1914, Cora and I accepted their invitation to visit them over a weekend. Just at this time I received notice of having successfully passed the Civil Service examination for a position in the crop reporting service, which provided an opportunity of discussing my prospective change of work during our visit with them. On the Sunday morning, during our visit, Mrs. Palmer arose early, attended Mass, and had breakfast ready when we arose. Later in the forenoon we accompanied Mr. Palmer to his church, and it appeared to us that an amicable arrangement of religious matters existed betweeen the Palmers.

Mr. Palmer had told me at Cheyenne something of the eccentricities of the first Mrs. Palmer's father who lived in the little town of Harrisville, Alcona County, Michigan. He told of the old fellow's visit at their home in Chicago some years before. After he had been there several days, they noted that he never entered the bathroom. When questioned about it, they learned that he went out among the bushes in the park after dark. They took him to task for this unorthodox behavior and he bluntly told them that he had been brought up to eat in the house and relieve himself out of doors, and that he did not believe in the modern notion of eating outdoors and going into the house to attend to Nature's calls.

Within a year or two after we moved to Lansing, Mr. Palmer had been stricken with a virulent type of diptheria and died within 24 hours. Within another year or two, I had occasion to spend a night at Harrisville while on a northern official trip, and determined to learn something additional about Mr. Palmer's father-in-law. What I learned was that he had cut off the Palmer grandchildren from any portion of his estate for the sole reason that they were being reared by a Catholic stepmother. Nothing has been heard of the Palmer family since except that Mrs. Palmer later returned to Cheyenne where she married a successful

business man and where she has a nice home.

Began Active Work in the Masonic Lodge

Mr. Palmer was a Past Master of Cheyenne Lodge, No. 1, and soon after my arrival in the city he invited me to that lodge and introduced me to its members. Since becoming a Mason I had attended lodge only infrequently and had memorized very little of the work. It was apparent that I would have more time and a better opportunity to attend in Cheyenne than had been my privilege in other cities, so I determined to devote some time to the study of Masonry. In that jurisdiction it was the prerogative of the Master to appoint the lower officers up to and including the Senior Deacon, instead of their being elected by the membership as is done in Michigan. It so happened that the Senior Deacon thus appointed proved incapable of learning the work and when the Fellowcraft degree was to be conferred, it became necessary to send for the Senior Deacon of the Other Lodge in the city to come in and deliver the Middle Chamber Lecture. This seemed a shameful situation to me and I determined to learn the lecture in time for use when that degree was to be given again. The lecture is about 40 minutes in length but I had it well memorized by the time the Fellowcraft Degree was again scheduled. It developed that another member had the same idea and had learned the lecture too. He was less modest than I in notifying the Master of the fact and he was delegated to give it that evening. For the remainder of that year he regularly acted as Senior Deacon although I was given the privilege of delivering the Middle Chamber Lecture on one or more occasions. When the end of the year approached and new officers were elected he was given the post of Junior Warden. When the new Master made his appointments I felt that the work I had done entitled me to the position of Senior deacon, but instead, he appointed a personal friend of his who was scarcely known to the membership. This new appointee failed miserably on his first attempt to do the degree work, and never appeared in Lodge during the remainder of the year. At each succeeding meeting I was appointed as acting Senior Deacon and carried out the duties fully. Had I remained in Cheyenne until the end of the year, it is probable that I would have been advanced to Junior Warden and eventually would have reached the Master's chair. However, my transfer to Salt Lake City prevented this accomplishment.

On one occasion, the famous orator, William Jennings Bryan came to Cheyenne and delivered a speech before the winter session of the State Legislature in the afternoon. Our Lodge met that same evening and, after being opened, the Master announced that he understood Mr. Bryan was a Mason and that he thought it would be fitting to send a committee over to the hotel and invite him to visit our lodge. This was done and he came over and, after being duly examined for admittance, I went to the anteroom to meet him. As acting Senior Deacon it was my duty to escort him into the lodge-room and introduce him to the lodge. Later in the evening he was called upon for a speech and he responded with a fine talk on how he came to be a Mason and related some of his Masonic experiences. For the young generation of this much later date, it may be well to explain that he was the Democratic candidate who unsuccessfully opposed President McKinley in the 1896 and 1900 elections. He ran again for president in 1908 against William Howard Taft, and again was defeated. Later he served as Secretary of State in President Wilson's cabinet.

I affiliated with Wyoming Commandery No. 1 and with Wyoming Chapter No. 1, and attended many of the meetings of each. These were held in the Masonic Temple, a comparatively new and fine building at that time. It had a bowling alley and pool and billiard tables where I spent an occasional evening or an hour or two immediately after leaving the office. I did not take up bowling but watched some

of the games. Governor Brooks bowled frequently and was a genial and wholesome fellow. He was known as the Cow Boy Governor. While trying to master some of the rudiments of the game of billiards a man on the sidelines volunteered many valuable hints for my benefit. He was J.A. Riner, Judge of the Federal District Court. He died soon after I left Cheyenne and T. Blake Kennedy succeeded him as Federal Judge. Kennedy was Master of my lodge when I was acting Senior Deacon. Among other noteworthy men I met in Cheyenne was Homer Cook who was Superintendent of Public Instruction. After I entered the crop-reporting service, he became the Wyoming statistician and I had the opportunity of meeting him in Washington and elsewhere on several occasions. Later he was transferred to the Denver office as assistant and was retired some years ago. Another was Clarence T. Johnston, in charge of Government Irrigation Investigations in Wyoming, and was one of the engineers that built the great Shoshone Dam. Many years later he left the Government Service and moved to Ann Arbor, where I contacted him in the course of my travels. At that time he was a consulting engineer at the Michigan State University (? U of M).

The Frontier Show

When I arrived in Cheyenne, the annual Frontier Show had become an established event, having been started some three or four years earlier. I believe the scheduled date was early in August and advertised as a one-day show. A parade on the streets of Cheyenne was held in the forenoon. It consisted of Indians in full regalia, some mounted and others on foot, large numbers of cowboys and cowgirls on their ponies, bands, etc. It was very colorful and interesting to us. In the afternoon we went to the fairgrounds where the contests were to take place. The program started at one o'clock and ran past six o'clock, at which time the management announced it could not be completed that day and that it would be continued on the following afternoon. It was both thrilling and interesting, so that the time passed rapidly, and we enjoyed every bit of it. Valuable prizes were given to the winning contestants who came from many different states. One feature was the bronco-busting contests or riding of outlaw (untamable) horses. Other contests were: pony races, relay races, steer roping and hog-tying, riding bulls and steers bareback, wild horse races (ridden for the first time), wild horses hitched to wagons (first time in harness), and many others of a similar nature.

Many comical and unpredictable incidents occurred that enlivened the program. A black stallion known as Old Steamboat had been in the contests each year and no one had succeeded in staying on his back during his bucking. As the contestants were compelled to ride the horse they happened to draw by lot, those who drew this horse on both afternoons were out of luck as neither succeeded in riding him to the finish. A noted rider, who had won the National championship at Pendleton, Oregon the previous year, came to Cheyenne and entered the contests there. He won quite easily on both days over the local contestants, after which the crowd demanded that he ride Old Steamboat. He accepted the challenge and, not only rode him to a standstill, but applied the spurs and raced him around the mile track.

One of the promoters of the show, Charley Irwin, was the owner of many of the horses and cattle used including Old Steamboat mentioned above. He allowed his wife and daughter to ride in the races and to accept their winnings which seemed somewhat out of place. In the ladies' race on the second afternoon a cowgirl, waitress in a local restaurant whom I and many in the crowd knew personally, entered her own horse in the race. Irwin stopped the proceedings and ordered the judges to measure her horse's height. It was ruled that the horse was above the limits set for cow-ponies and she was compelled to ride another and unfam-

iliar horse. Mrs. Irwin was allowed to ride her own horse which was evidently an old racer and one that seemed fully as tall as the one ruled out. Of course she won the race and got the prize money. Much of the audience was peeved and booed Irwin whenever he was in sight of the grandstand, a later event was the steer roping contest which was won by a sheriff from Arizona who, despite missing his first throw of the rope, roped and tied his steer in a minute and a half. As Irwin walked in front of the stands the crowd jeered and asked him why he didn't enter that contest and get that money, too. He was around 45 or 50 years of age and weighed something like 240 pounds and none of us had seen him in any contest. The crowd was noisy and in a bad mood. After repeated jeering he jumped on his horse and rode to the corral. A steer was let out and Irwin roped and tied him in 45 seconds which, I believe, was the world's record at that time. I always suspected that an unusually lively steer was selected for the Arizona man, and that Irwin's steer was an old and lazy one.

The wild horse race was no simple stunt. The horses were roped in the corral and brought onto the track. Each contestant was allowed a helper in saddling and mounting his horse, after which he had to ride him once around the track, and the winner was the one who finished first. No bridles are used in that part of the country, a hackamore, which is a sort of halter being used instead. As there are no metal bits there is little control over a horse that sees fit to bolt or run away. I saw one jump the fence and race across the prairie for a mile or two before he could be turned and brought back. Some would go around the track quite decently until nearing the finish at the grandstand, where he would be scared by the fluttering flags and band music, which would cause him to reverse and go around the track in the opposite direction and thereby lose so much time he would be out of the winning.

On one occasion a large collie dog went over into the arena where most of the contests took place and excitedly ran back and forth barking and dodging animals and men. He made such a nuisance of himself that some of the helpers chased him away numerous times but he would come right back. Finally, one of the men galloping back from the corral threw his rope as he passed the dog and lassoed him by the neck. He did not slacken his pace or stop so that the dog was dragged up to the scene of action, where, one of the other men removed the rope. Evidently, the dog did not relish this treatment as he ran across the entire arena and continued across the open fields in the direction of the city without stopping or looking back.

The two-day show proved such an outstanding success that year, that the next one-that of 1907, was lengthened to three days. I was counting on and looking forward to this larger and greater event, but was ordered to Salt Lake city on July 1 a few weeks before it took place, and could not afford the expense of a round trip of a thousand miles to see it.

My Cousin Carra Skinner and Her Husband, Clarence, Arrive

Clarence had been selling insurance for the Bankers' Life Insurance Company in Grand Rapids. Competition was very keen and he decided to look for a better location. They stayed with us for a few weeks until he decided to remain in Cheyenne, then they rented living space elsewhere. Clarence was a member of the Knights of Pythias and was experienced in military tactics. He soon became the instructor of their drill team and thus made numerous acquaintances. He sold some insurance but not as much as he had hoped, and they returned to Michigan a few months later.

My Further Educational Experiences

After entering the Weather Bureau Service, I learned that advancement was

contingent upon successfully passing examinations in various subjects. There were three sets of three subjects each. The first set was necessary to be passed before a promotion to the $1,000 grade would receive any consideration. This set was passed in the fall of 1902 in Columbia. The subjects and grades received were: Grammer, 86%; Arithmetic, 79%; and elementary meteorology, 83%. I spent no time in reviewing the subject of arithmetic and only a small amount on the others, which accounts for the moderately low grades received. However, my eligible rating was established and I saw no point in attacking the next set until the first promotion was forthcoming. However, the official in charge at Chicago advised that I proceed with the second and third sets as rapidly as possible. Accordingly, in September, 1905, I took the subject of algebra and made a grade of 94%. Further effort to complete the second set was spurred by the fact that my first promotion was received in Decmeber 1905. During the eight or ten weeks that I was in Cheyenne before the family arrived, I had much more time for study and took up the formidable subject of trigonometry which I did not get in my school courses. A further handicap was the fact that I only had a brief term in plane geometry in high school, which necessitated further study and review of that subject in order to obtain a more comprehensive understanding of trigonometry without the aid of a teacher. I wrote the examination in this subject in March, 1906, which was about the date my family reached Cheyenne. I received a rating of 96% and, at the same time, took a supplementary examination in grammar which had been added to the course after my original examination in that subject. In that effort I made a grade of 79%. In June, I tried the examination in physics and received a rating of only 66% which was below the passing grade of 70%. In September, I made a second attempt and secured a rating of 82%. This completed the second set of examinations, and I began my studies on the third set. In May, 1907 I barely passed the subject of astronomy with a grade of 72%. On July 1 of that year, I received my second promotion and was transferred to Salt Lake City at the same time. The subject of plant physiology was passed in November of the same year with a grade of 92%. The final subject of the third and last set, advanced meteorology, was passed in February, 1908 with a grade of 90%.

During my first year in Cheyenne I made the acquaintance of the district agent of the international Correspondence Schools and we became very good friends. Occasionally, he sent some of his enrolled students to me for help with their problems in mathematics. This personal help, supplementing their instructions by mail, was of material benefit to those who found those subjects difficult. My close association with the agent finally resulted in my enrolling in the School's course in engineering, a subject that appealed to me because of the variety of mathematics involved and, further, that the majority of my professional friends in the west were graduate engineers and engaged in engineering pursuits. Hence, during the time that I was studying and passing the numerous Weather Bureau subjects, I was also conducting my engineering studies. In addition to completing and passing final examinations in the subjects of: geometrical drawing, elementary mechanics, pneumatics, logarithms, strength of materials, geometry, trigonometry, graphical statics, and hydraulics; the subject of mechanical drawing was simultaneously studied. This subject required much time and after I had been in Salt Lake for about a year, office responsibilities became so heavy that I was forced to abandon the completion of this subject and all of the other remaining ones of the course. The subjects covered were time-consuming but interesting and, strange to say, some of them proved applicable and very helpful in my Weather Bureau work and later in my statistical studies and graphic charts. While regretting my inability, through force of circumstances, to complete the

course I never felt the considerable effort and time expended on it as lost or wasted, but rather as an addition to my varied fields of education, research and experience.

Fred and Harriet Harker Move to Cheyenne

In the summer of 1906 Father Harker sold his farm at Boston Center, Melvin Harker had also sold his farm and been reinstated in the employ of the Illinois Central Railroad, first at a temporary western station and later at Gypsum, Iowa, a small town a few miles east of Fort Dodge. Father and Mother Harker decided to move to Gypsum where Father Harker secured a position in the gypsum mills located there. Before Fred and Harriet had decided where they would seek their fortunes in the west, I wrote to them and suggested that they come to Cheyenne. I knew that there was a demand for carpenters there and, as Fred had gained some experience in that work in building a new home on the farm, I was certain he could find employment in Cheyenne. I urged them to come as early as possible in the fall in order to become established before winter, but by the time they succeeded in closing up their Michigan affairs they were unable to reach Cheyenne before the week between Christmas and New Years. After a good visit with us, Fred became anxious to seek employment. I introduced him to a building contractor who had just completed his year as Master of our lodge. Fred was given interior finishing work on a brick block that this contractor had under construction. Fred did not like the working conditions there and, after a few weeks, resigned. After doing a few small carpenter jobs on his own, he secured employment with a young and progressive contracting firm. This company obtained the contract for building about forty large brick structures at Fort D.A. Russell, now known as Fort Francis E. Warren, and Fred soon went to work there. In a short time he was made foreman which gave him the opportunity of gaining much valuable training and experience in the building business. This contract lasted for a couple of years and Fred traveled the three miles to the Fort each day on a bicycle. During that period Harriet was employed as a piano player in a movie theater, thus adding to the family income.

As soon as warm weather arrived in the spring of 1907 Fred and I determined to do a little trout fishing. The only time available to both of us was on Sundays which limited our fishing trips to nearby streams that could be reached by bicycle trips. The principle accessible one was Crow Creek which came down from the north through the grounds of Fort D.A. Russell and skirted the edge of the City of Cheyenne. The nearest favorable fishing spot was said to be about ten miles north of the City, and we set out for that locality one Sunday morning. We followed the main highway to the Fort, then followed a dirt trail that paralleled the railroad right of way for several miles. We parked our bicycles at the end of the trail and followed the railroad on foot for at least another mile until we came to a place where the railroad crossed the creek. We fished in that vicinity during the forenoon with comparatively little success. About noon a thunder and rain storm set in and we took shelter under the railroad bridge where we ate our lunch while waiting for the storm to end. The rain soon ended and we returned to our fishing, but the fish did not bite, and the weather continued threatening, so we decided to return home. By the time we reached the place where we had left the bicycles it began to rain again. There were no trees or other shelter nearer than the Fort which was about six miles distant. Hail soon began to fall with the rain, and Wyoming hail storms can be very vicious. The stones began to clip our ears and pelt our hands while the rain promised us a good wetting. To make matters worse, the dirt trail became very slippery and after we had ridden a mile or so it was almost impossible to ride the wheels, and began to

look as if the remaining miles would have to be negotiated on foot. About this time, I heard a whistle from a train that was approaching from behind us. When the train was nearly opposite us, I heard a shout and, thinking the passengers were razzing us, did not take my eyes from my wobbling wheel. But when the shout was repeated, I looked in that direction and a man on a car platform asked: "Do you want a ride?" I nodded in the affirmative, still believing it was just a joke. However, he reached for the bell-rope and brought the train to a halt. I called to Fred who was a little way ahead, and we climbed the fence and boarded the train. We were soaked to the skin and our wheels were covered with mud. We learned our good Samaritan was the Superintendent of the road and that he had with him some New York officials of the road. They had started north to inspect the road but, when the rain began, decided to return to Cheyenne. Fred and I, needless to say, were deeply grateful for this favor, and opined that such a generous and courteous gesture would not have been shown under similar circumstances elsewhere we had lived. Our good times with Fred and Harriet in Cheyenne continued only a little more than six months, due to my being ordered to Salt Lake City on July 1.

Another Blessed Event

About two o'clock on the morning of January 27, 1907, I was officially notified that the stork was headed for our house. As we had no telephone, I mounted my wheel and gave due and timely notice to our physician. The practical nurse we had previously engaged was occupied with another case, so it was necessary for the doctor to obtain a trained nurse from the city hospital. The stork was very slow in putting in an appearance. When four and then five o'clock arrived I began to be somewhat disturbed at his nonappearance. I was due at the office on this Sunday morning at 5:30 to take the weather observations. Mr. Palmer had seen fit to take a vacation for a few days and was out of the City. The only other person in the office was a recently appointed messenger boy who had not yet learned to take the observation, so I was the only person in the City qualified to perform that official duty. When I explained the situation to the doctor, he said he would do the best he could to hasten matters. Little Verna arrived at 5:45, I was on my wheel at 5:50 and at the office more than a mile away and up the flights of stairs at 5:55. The various instruments in the office and on the roof were read, computations made, the telegram coded, and delivered at the telegraph office two blocks distant at 6:05. While this was five minutes late, it so happened the circuit was also late that morning and only opened just as I arrived, so that Washington never knew of my tardiness in filing. Fred and Harriet were still staying with us at that time but knew nothing of the commotion until morning.

Newspaper Files Complaint Against Me

In the early summer of 1907 there was a vacancy for the position of messenger in our office. As some time would be required to unwind the necessary red tape in filling the position through the Civil Service, authority was granted to employ a temporary messenger to carry on the duties in the meantime. The pay was rather small so it was difficult to obtain competant temporary help. As a solution to the problem I suggested to Mr. Palmer that we might employ Harriet Harker to work in the office, do the messenger's indoor work and some of my record keeping, and I would assume the messenger's outside work. This consisted of delivering about 50 weather maps and forecast cards to individuals and firms in the City and required about two hours each morning, from 10 to 12 o'clock. Mr. Palmer considered this a happy solution and it was immediately put into effect. It had been customary to deliver the forecasts and weather summary to the Wyoming Daily Tribune, they being clipped from a copy of the weather map and delivery made while

making the rounds of the map route. I had understood that the clipping was supposed to be placed on the city editor's desk, but when I arrived on my first trip there was no one at the front desk to inform me where to go so I left the clipping on that desk. On the next morning or two those at the front desk paid no attention when I came in and seemed to be busy, so I continued to leave the clipping there and hurried on my way. About the fourth morning the business manager was at the desk and, as I turned away after leaving the clipping, he called to me and told me very gruffly and commandingly to put it on the city editor's desk. I said "very well, but someone would have to show me where to go". I was led through a gate, zigzagged around several desks, down a hall, and into a booth about six feet square where there was a desk. In other cities where I had served it was customary for the newspapers to call at the office for this information, hence I considered it a special favor to carry it to the Wyoming Tribune office. I did not have any objection to doing this but it rankled to have the business manager, who was known to be more or less unpopular because of his egotistical and domineering disposition, ordering me to do his bidding as if I were a mere child, so I continued to leave it on the front desk determined to have a showdown. A day or two later, the manager was standing at the desk when I came in. I laid the clipping in front of him, said "Good Morning", and turned away. He immediately called me back and reminded me that he had ordered it be delivered to the city editor's desk and repeated that order in no uncertain terms. I walked back to the desk and said, in effect, that I did not happen to be working for the Tribune and that I had no intention of becoming their messenger boy while I was employed by the Government. He was livid with anger and said: "You will hear from this". As I continued my rounds I wondered what attitude Mr. Palmer would take as I knew that Washington expected all officials in charge of stations to keep in good graces with the newspapers. When I finished my route that day I went home to lunch as was customary after every daily delivery. When I reached the office after lunch, I sensed something had happened from the expression on Harriet's face. Mr. Palmer was out to lunch so I asked her what had happened during my absence. She told me that the Tribune had called Mr. Palmer and complained about my conduct. I asked her what was Mr. Palmer's reaction and she said he had backed me up fully and told the managing editor plenty. When he returned I told him the circumstances and he said he did not blame me in the least. We thought this would end the matter, but in the course of a couple of weeks Mr. Palmer received from Washington a letter that the managing editor had sent to the Chief together with a letter from the latter asking for an explanation. The letter of complaint stated the Tribune was a large newspaper, that the office was a very busy one, that clippings left on the business counter where customers were constantly transacting business would be easily lost or misplaced, that the various divisions of their office were as separate and distinct as the departments of the National Government, that my conduct had been insolent and arrogant, that I was unfit to serve as a Government employee, and demanded that action be taken at once to correct the situation.

Mr. Palmer went to the Tribune office and, in a conference with the editor-in-chief, explained that I was not the office messenger but his chief assistant and had volunteered to take on the extra duties of the messenger until that position could be filled, that I had to cover the long delivery route in record time in order to get back to my own duties. He said further that I was perfectly willing to deliver the copy wherever the Tribune wanted, but that I resented being ordered to do so as was done in this instance. The editor had a sympathetic understanding of the situation and the matter was amicably adjusted by Mr. Palm-

ers's assuring him that I would deliver the copy in accordance with his wishes. Mr. Palmer then wrote a full explanation to the chief of bureau and the action taken by him to close the incident. He belittled the complaining letter by saying that the different departments of the newspaper, mentioned in the letter, was rather far-fetched as each consisted of a booth about six feet square occupied by a single employee and that they were all adjacent to each other on opposite sides of a short corridor not more than 30 feet in length. He also stressed the fact that I had been "ordered" not "asked" as stated in the complaint. A few days later a copy of the reply made by the Chief to the complaintant was received by Mr. Palmer. It was courteous, but terse and very much to the point, in Chief Willis L. Moore's characteristic style. He stated that I had an excellent record for conduct and ability, and either stated or intimated that he saw no justification for censuring me. Some weeks later I received my second promotion and I was ordered to Salt Lake City as first assistant on that larger and more important station. From this action it is evident the newspaper complaint failed to injure my standing at Washington. When I was ready to announce my promotion and transfer, I contacted the competing daily paper and they gave me a very nice write-up. This gave that paper a scoop on the news item and pleased them because of it. What the Tribune thought I never knew.

A Few Impressions of Cheyenne

Although my stay in Cheyenne was only 18 months, we enjoyed it more than is possible to describe in a short paragraph. The people were extremely generous and friendly and, while their attitude differed somewhat from that prevailing in the east, we found it much to our liking. Cheyenne was an important division point on the Union Pacific Railroad, and the railroad shops was the largest and most important industry in the city. Through the influence of U.S. Senator Warren, the Fort was raised to the status of a brigade post while we were there, and this was of important benefit to the City.

When I cashed my first pay check at the bank, I asked for a bank draft for the portion that I was sending to Cora for expenses. The check was for $83.33, and after deducting the face amount of the draft, the cash handed out made the total equivalent to $83.35. I thought the clerk had made an error and reminded him accordingly. He politely explained that pennies were not used, hence 33 cents was treated as 35 whereas 32 cents would have been called 30 cents. When I mentioned that he had neglected a charge for the bank draft, he informed me they made no charge for such drafts. In other cities the charge for this service usually ranged from 20 to 30 cents. Here I was a total stranger and not a depositor, yet this service was free. I also found that pennies were not in general use either here or in Salt Lake city. The only places where they were received were at the postoffices. Why this sensible and efficient custom is not in general use throughout the Nation I am unable to say unless, perhaps, there is a preponderance of penny-pinchers in these eastern states. Another peculiarity in the use of currency was the entire absence of paper money, all payments being in gold and silver. I do not believe I saw a dollar bill during the five years we lived in the west. At first, because of my unfamiliarity with gold currency, I had to read the values on the coins to know their worth. However it soon became easy to recognize each denomination by its relative size. When the Government withdrew all gold from circulation a few years ago, I assume that westerners had to adopt paper currency.

My opinion of Cheyenne's climate was, on the whole, generally favorable. There was an abundance of sunshine and very few days that were entirely cloudy. While there were occasional days in summer with a maximum temperature in excess

of 90 degrees, the low relative humidity permitted no feeling of oppressiveness and if one stepped from the sunlight into shade there was an immediate sensation *of coolness such as one experiences here when he goes into a cellar on a warm* day. The summer night temperatures were usually in the 50's and the warmest night during our stay there registered a minimum of 63 degrees which meant that a blanket on the bed was never uncomfortable. The winters were long but not particularly severe. Freezing temperatures sometimes occurred as early as late August or early September and as late in the spring as late May or early June, but the coldest during our stay was 17 degrees below zero on one night only. The mercury fell below zero only occasionally and such temperatures were no more uncomfortable than 20 to 30 degrees above zero are in Michigan. There was very little snow during the winter but occasional heavy falls occurred in April, May or June. The chief weather complaint registered by the people was in regard to the daily winds. There was seldom any wind at night but between 8 and 9 in the morning it would rise to 20 or 25 miles an hour and continue until about 4 o'clock in the afternoon when it would rapidly subside. This was due to the fact that we were on the eastern slope of the Continental Divide. As the sun's warmth became effective, a rising vertical current of air was produced and cooler air from the more elevated regions rushed down the slope to take its place. These winds were universally from the northwest and, during severe barometric disturbances, sometimes reached velocities of 50 or 60 miles per hour, occasionally 70 miles or more. In midsummer, a thunderstorm around two o'clock in the afternoon would occur on the majority of warm days. These rarely lasted as much as a half-hour. They were often accompanied with unusually vivid lightening and heavy hail. No one ever carried an unbrella or raincoat, merely seeking the nearest shelter for the few minutes the storm lasted. Occasionally the hail was heavy enough to cause extensive damage to windows, and on one or two occasions during our stay it fell to a depth of six inches. The people scooped it up and filled their ice refrigerators because the stones ranged in size from that of walnuts to that of apples. It would require a book to adequately describe Cheyenne, the State of Wyoming, and the interesting people who reside there. That I must leave to others and get on with my own story.

ON TO SALT LAKE CITY--Chapter XXI

When I was ordered to Salt Lake City on July 1, 1907, again it was advisable to leave the family behind until necessary arrangements could be made and living quarters obtained at my newly-assigned station. It was around the midnight hour when I boarded the Union Pacific train at the Cheyenne depot. The distance from there to Salt Lake City does not appear to be very far when viewed on an ordinary map of the United States. Nevertheless, it is about 500 miles and the trip consumed about 15 hours according to the operating schedule of that day. The train crossed the continental divide at an elevation of 7800 feet 28 miles west of Cheyenne and, at daylight, we were little, if any more than half way across the State of Wyoming but at a lower altitude, probably between 4000 and 5000 feet. The country was mostly quite level but the grass was brown and dead and, for considerable stretches, no grass existed. This is what is known as the Red Desert, the soil being red in color and a veritable desert for more than 200 miles. Some of the small streams that we crossed contained water that was bitter and poisonous. We reached Green River shortly before noon and this town was surrounded by grass land that was green and the country was still generally level. As we moved on westward we soon entered the foothills of the Wasatch Mountains,

and when we neared the Utah line at the southwest corner of Wyoming I realized we were near to the mountains themselves. this range of high mountains extended north and south as far as one could see and we were headed directly toward it. I sincerely hoped the engineer would find a path through it as, otherwise, our 60-mile speed would result in quite a shock. Shortly, beyond the Utah line, we entered a tunnel that seemed to be several miles in length. When we finally emerged on the other side of the range we immediately crossed a river over an iron bridge or trestle. On the immediate right was a nice apple orchard loaded with apples. There were maple and other well known trees, gardens, fields of grain, and other crops,, none of which I had ever had even a glimpse of since leaving the eastern states. It was an inspiring sight to see so much lush greenness and emphasized the contrast between the ample rainfall of the western slopes and the aridity of the eastern slopes. A little later we entered the Weber Canyon, through which the Weber River flows to the City of Ogden and empties into Great Salt Lake. Like all streams emanating from melting snows in the mountains, the Weber River was swift, cold, and clear water. The Canyon was comparatively narrow but small farms and villages occupied the available land. From Ogden to Salt Lake City we traversed farming country that extended from the mountains two or three miles east of us to Great Salt Lake several miles to the west of us. Practically all of the Salt Lake Valley in which is most of the State's productive agriculture, is supplied with irrigation water.

The Salt Lake City Weather Bureau Office

The office was located in the Dooly Block, a red brick building on Second South Street. While only four or five stories high, there were very few, if any, higher buildings in the city at that time. It was not a modern office building, having been built many years before; nor was it very profitable to the owner. He was reluctant to make improvements, redecorate rooms, or provide first-class janitor service.

Dr. Robert J. Hyatt was the Section Director in charge. He was an easy-going and jovial man whose ability as an executive consisted principally in having his helpers do nearly all of the work. He was lavish with compliments of their work and rarely offered any adverse criticism. He seldom took official matters seriously or maintained anything resembling a business-like system in his office. He did open the daily mail, a function zealously guarded by most Weather Bureau officials, and did answer nearly all of the infrequent letters from the Washington office. Station accounts, vouchers, and special forms, usually prepared by officials in charge, were turned over to his assistants for preparation, retaining only his prerogative of attaching his signature before mailing. He had a weakness for liquor and, while I never saw him intoxicated, he spent a little time each day in some nearby saloon. He was a poor manager of his personal finances and always seemed hard up. He was heavily in debt on his home and seemed to make very little progress in reducing it. His title of "Dr." stemmed from the fact that he had been a dentist before entering the Government service. Although he had not practiced the profession since, he confided to me that he was doing the dental work on his wife and children and even filling and treating his own teeth, presumably in the interest of economy.

J. Cecil Alter had been first assistant on this station for a number of years. he resigned to enter a commercial printing business with some of his wife's relatives, and my transfer and promotion was for the purpose of filling the vacancy created by him.

The second assistant was Robert A. Scott, a young man from Missouri whose father was a politician and, I believe, a member of the Congress at the time. He

was quite a congenial young man and performed his duties in a capable and satisfactory manner. He lived in a rooming house and offered to share his room with me. This I did during the few weeks that elapsed before my family arrived.

The messenger was Harvey Selley, a native of Salt Lake City and a Mormon. He was a fine young man and very efficient in his work. This comprised the office staff at the time I assumed my duties there.

About this time the Washington office decreed that a printing plant should be installed, and we promptly requested the services of a printer. Within a few weeks the printer arrived in the person of J.B. Snyder, a native of the deep south. He understood the art of printing and his work in that field was generally good, but, due to his inherent laziness, he utilized every means of having the rest of us help him with some of the printing duties. Among his other shortcomings, he was a liar, a drinker, a woman chaser, and a generally unprincipled character. Our suite of offices included a room at the back end of the building in which a cot bed, book case, table, and a few chairs had been installed. We used the room occasionally for quiet study or to lie down when not feeling well, but actually it was used very little. Snyder asked permission to occupy this room thus eliminating the cost of a room elsewhere. When Dr. Hyatt asked my opinion about granting the request. I suggested that he be required to take the morning observation regularly in return for the favor. I was taking one observation each day and found it very inconvenient. When taking the morning observation, I had to rise at five o'clock to reach the office at 5:30, take the readings, make and record the computations, and file the telegram at 6 o'clock. Then I went home to breakfast and returned to the office at 8 o'clock for the day's work which lasted until four in the afternoon. If I took the evening observation, I remained at the office after the day's work was over, took and recorded the observation, and filed the telegram at 6 o'clock, after which I had to carry the weather report to five daily newspaper offices. I did not reach home until about 7 o'clock which made my day's work a comparatively long one. Snyder agreed to take the morning observation which relieved me of observation work except for an occasional day. I taught him the work of taking the observations and found it almost a hopeless task. He was careless and made many errors in reading instruments and computing the results. It was my duty to check all observations and, when found, to call errors to the attention of the one who made them. When such errors were found in Snyder's work, which was almost daily, he often "doctored" the readings to coincide with his computations instead of allowing the errors to go through to Washington and be entered against his personal record. I criticized him severely and complained to Dr. Hyatt but the latter would take no action. Later, when I was temporarily in charge of the station, I sent many of Snyder's errors through to Washington without reporting them to him first. This resulted in his receiving numerous black marks on his record and letters of censure. Finally, he became alarmed, took the observations more seriously, and made far less errors in his work. We had secretly hoped that his poor record would result in his discharge from the Service because he was cordially hated by every member of the staff. However, nothing of the kind happened and I believe he remained in the Service until his death which occurred several years after my return to the east.

Within a few months Scott became very dissatisfied with his progress and, at my suggestion, took the Civil Service examination for the position of Naturalization Examiner in the Department of Justice. He passed the examination and secured immediate appointment to the office in St. Louis, his home city, apparently through the assistance of his Congressman father. I saw him only once after that. Several years later, while on an official trip to Washington, I learned he

was employed there. I called him on the telephone and he spent the evening with me at my hotel. He had taken a complete law course in Washington and had a very good position with the Department of Justice at the time.

His place as second assistant in the Salt Lake City office was filled by the arrival of Herbert Tullsen, a tall and large man of Swedish ancestry. I believe he entered Government employ as a teacher in the Indian Service, then transferred to the Weather Bureau for a time. Later he returned to the indian Service where both he and his wife were employed as teachers but, through the arrival of some children, found it a poor environment in which to rear and educate them. He applied for reinstatement in the Weather Bureau and was sent to Salt Lake City. He and I became very good friends and worked well together.

Our Salt Lake City Home

There was an extreme scarcity of vacant houses in the City when I arrived, and the few that were available for rent were very unsatisfactory. Real estate dealers advised that the only practical solution was to buy a small home, and even these were very scarce. I was shown a 5-room brick bungalow on a good street, in a good neighborhood, and only about 12 blocks from the office. The house was in reasonably good repair and the lot was large enough for a garden in the rear. The owner had gone to take a position in Oregon, and his wife was staying on in the house until a sale could be made. The price was $3,000. but I noted that she was exceedingly anxious to get away as soon as possible, so made an offer of $2,750. which she accepted. As this was to be a cash deal, I told the real estate agent that its completion depended upon his securing a mortgage loan for me. I instructed him that the loan must come from a reputable source and not through any loan shark. He arranged for the loan with an old man who had been retired for a considerable number of years and who was living on the interest income of his accumulated wealth. He said he considered the old man strictly honest, but that he was very meticulous and very eccentric. He gave as an illustration that the old man would not accept checks--nothing but cash. When we assembled to sign the papers the old man took me aside and told me that he did not approve of the standard mortgage blanks in general use and that he had some printed in accordance with his own ideas. One clause permitted him to demand his payment in gold if he saw fit, which he explained was due to the fact that in the panic of 1873 all other currency depreciated in value. As I could visualize no repetition of a depreciatd currency during the probable life of the mortgage, and as gold was readily obtainable at the banks I dismissed the clause as of no consequence. Another clause read about like this: "Payments of $100. or multiple thereof may be made on this mortgage at any interest-paying date until the principal is reduced to $500. which must be paid in one lump sum". He explained this meant that he did not care to be bothered with a mortgage of less than $500. and that the final payment must be the full $500. This provision appeared reasonable and, feeling confident that I could obtain that amount from some other source if needed, I signed the mortgage which would become due five years later. The reason for the recital of these details will be explained at a point farther along in my story.

My first interest payment was made promptly when due and in cash because of his known antipathy for checks. Late in 1907 a scarcity of money developed. It was very little felt in the eastern states but became very serious in our section of the west. Banks stopped cashing checks and issued only cashier's scrip instead. We could pay grocer and other bills with it and the merchants would deposit the scrip with the banks. Each merchant was allowed up to $100. from the bank in small coins for making change. In this way we managed to get a few cents

occasionally, which we used to pay streetcar fares and buy postage stamps neither of which could be obtained by scrip. This was the situation when my next interest payment became due. I took my salary check to the national bank in which I had a checking account, told the clerk I wanted a certain amount in cash to pay a debt which could be met only with cash and the balance deposited to my credit. It so happened that the customer just ahead of me, evidently a merchant, had deposited at least $100. in currency and that money lay in front of me when I reached the window and made my request. The clerk politely told me that the bank had no money they could let me have. I called his attention to the fact that my salary check was drawn on the U.S. Treasury and that this bank being a national one was the authorized representative of the Treasury Department, but my argument and plea had no effect and I was obliged to deposit the entire amount of the check to my account. When I returned to my office, I immediately called up the mortgagee and explained the situation to him. To my surprise he suggested that I give him my check for the amount due as he would deposit my payment in the bank anyway. Thus my difficulty was solved and my opinion of the old man was immediately improved.

My First Trip to Saltair

When I had been in the City only a few days I was surprised to meet on the street a man whom I knew quite well. He was a member of my Commandery in Cheyenne and it was there I had become acquainted with him. He was a civil engineer and had come to Salt Lake to look for employment. He had not found it yet and, as it was Saturday and neither of us working in the afternoon, we decided to go to Saltair. This was the City's resort at Great Salt Lake at a point seven miles west of the City. A train of open cars drawn by a small engine made frequent trips to and from the resort at a fare of only 25 cents for the round trip. The pavilion was a beautiful structure built over the water a little distance from the shore, and was reached by a planked trestle on which the train deposited its passengers. The central portion of the pavilion was a large dance hall said to be the largest of its kind in the world and easily accommodating 2,000 couples. An orchestra played each afternoon and evening and I believe there was no charge for dancing, at least during the afternoon.

At each end of the pavilion a double row of bath houses curved out over the lake for a distance of nearly half a mile, like the horns of a giant ox. The double row of rooms opened onto a broad board walk on each side. We rented a room and bathing suits and were given a key numbered to correspond with that on the door. Great Salt Lake rises and falls in cycles of several years in length. At the time of this first visit the water was low and quite shallow near the pavilion, so we walked out to the far end of the bath houses before going into the water. Even there it was less than waist depth and we found it desirable to go even farther out into the lake for good swimming, but crowds of 2,500 to 4,000 were not uncommon on more important days. Each bathroom was equipped with a fresh water shower as it was necessary to rinse off the salt water, otherwise it would form a crust on the body. While returning on the train I noted many people with encrusted salt plainly showing in their ears and at the roots of their hair, indicating carelessness in using the fresh water showers. At that time of low water the salt content was 26%, but in years of high water it fell to about 22%. When compared with the 3% content of the oceans, the extreme density of the water can be more fully appreciated.

While returning from our swim along the board walk to our bathroom, I was startled by a shout from a bather in the water saying: "Hello, Verne". He immediately left the water and approached us, and I then saw it was Louie English the

son of Earl and Ida English of South Boston. He had a companion and I learned they had just graduated from the law school of the University of Michigan, and were on their way to the Pacific coast to establish themselves in their chosen profession. Louis asked me if I could find them a cheap place to stay as they could not afford the luxury of a good hotel. I took them to my rooming house and secured a room for them there. A day or two later they departed for Portland, Oregon where Louis began the practice of law. At last reports he had become a successful businessman through the acquisition of some valuable timber properties in that state.

A Week-end Cruise on Great Salt Lake

In the summer of 1908, Harvey Selley and his father purchased a motor boat. They invited us to go in a camping group which, according to plan, left Saltair on a Saturday afternoon. Our party of six consisted of: Harvey, a boy friend of his, a newspaper reporter, Dr. Hyatt, Tullsen, and myself. We took along an ample supply of food and fresh water, the latter being unobtainable in the vicinity of our proposed camping place. Because of the density of the salt water in the Lake, boating was known to be dangerous when high winds prevailed but that afternoon was sunny and only a light breeze was blowing. We headed north across a stretch of open water about seven miles wide to the south end of Antelope Island. This island was four to six miles wide and 18 miles long, and was separated from the mainland by a distance averaging only about one mile. When we reached the southern tip of it we veered to the west and skirted its western shore for several miles. The shallow water along the shore was full of large rocks but it was not difficult to find openings where we could get the boat up to the sandy beach. We selected a favorable spot and went ashore, built a fire and prepared to cook our evening meal.

Harvey's uncle also owned a motor boat which he kept on the Jordan River in Salt Lake City. He, together with his son and some of his friends, had arranged to bring their boat down the river into the Lake, and around the island to our camping place. Harvey's father was to come with them. We delayed supper awaiting their arrival and, while waiting, took a swim in the Lake. We had no bathing suits but it was already twilight and there were no other people nearer than 15 or 20 miles. We had a fine swim and, there being no fresh water shower available, we stood around the fire until our bodies were dry then wiped off the salt with our towels. As the other boat still had not arrived we then ate our supper and, after a time, laid down on the sand to sleep. About midnight we were awakened by a strong wind blowing from the west and found that the other boat still had not put in an appearance. We feared they had met with an accident or were in some sort of trouble, and about one o'clock Harvey and his chum determined to set out in his boat to look for them. They proceeded northward as the other boat was to come around the north end of the island. After going two or three miles, they saw the light of the other boat coming around the northern tip several miles away, so they immediately returned to camp. The other boat arrived about an hour later. They had traveled a much greater distance than we, had been delayed enroute, and the high winds at the north end of the island greatly impeded their progress.

Sunday morning we cruised northward, stopping at a couple of small islands which were mere heaps of bare rocks rising only a few feet above the water. We found no bird life on these although we understood that some of the Lake's islands were thickly populated with birds. We continued northward until we reached the northern tip of Antelope Island. From this position the city of Ogden was in plain view across a bay several miles in width. A short distance north of Ante-

lope was a small island of bare rocks on which we saw plenty of birds. We visited it and found four varieties of birds: sea gulls, cranes, blue herons, and black cormorants. We found nests of each species in which there were eggs and young birds of varying ages. The nests were in the crevices between the bare rocks and were made of materials collected from the mainland, such as twine, pieces of wood, and pieces of wire. Although the area of the island was only equal to that of an average city block, the birds were exceedingly numerous. We pointed a rifle upward and discharged it a number of times without aiming at anything. We averaged a sea gull for every three shots. We took a few snapshots and there are two or three of them somewhere among my possessions. In one, there were about 100 cranes standing in a line along the water's edge. We speculated for a time as to why these birds had chosen this spot for their home and what was the source of their food supply. After watching them for some time we discovered they were picking up and bringing in dead fish from the Lake. As no fish can exist in the Lake, we reached the conclusion that the fish had come down the Weber River which empties into the Lake at Ogden, and were killed when they reached the salt water in the bay.

Several miles to the west of us several islands could be seen, two of which were quite large; one was Fremont Island, but I do not remember the name of the other. On one we could dimly see what appeared to be a cabin and on the shore in front of it was a cairn of rocks. I was told this had been the home of a man who had been afflicted with tuberculosis. The legend was that he had died and, his wife being alone with him, she was forced to bury the body without help as there was no means of communicating with anyone. I thought this would make a good magazine story and I resolved to gather the facts, go to the island and get some pictures, and submit a story to some eastern magazine. But my time was too fully occupied and I left Salt Lake City before I had the opportunity of undertaking it. There was a Captain Davis who owned the only steamer on the Lake and who was acquainted with Dr. Hyatt. He came to the office one day and I questioned him about the legendary story. I found that he had known the man, had ferried him to the island, and had carried supplies to him at intervals of several months, and had brought back the widow some time after his death. It seems he was a lawyer and had a considerable library of books which the widow left, together with the furniture, in the cabin. When the Captain took tourist excursion parties to the island at infrequent intervals, some of the visitors would come back to the boat with books or other items from the cabin. He would order them to return everything they had taken to their proper places, and refused to move his steamer until they had complied. In this way he kept the property intact. Just a few years ago I had the pleasure and satisfaction of reading in a magazine the complete story of this man before he went to the island, his life on the island, the events connected with his death and burial, and the subsequent remarriage of his wife. At the time the article was written she was still living and was a resident of Ogden. The basic facts were the same as I had heard them, at least 30 years before the article of which I speak was published.

During the cruise we traveled over what was said to be the deepest portion of the Lake. There the water was about 40 feet in depth but we could plainly see any small object resting on the sandy bottom. We dropped a few bottle caps and they were readily visible after reaching the bed of the lake. The clearness of the water seemed surprising when so heavily charged with salt that one cannot stand it in his eyes or throat without great suffering. We returned to Saltair Sunday evening and I have always considered it one of the most enjoyable outings I ever experienced.

A Storm and Shipwreck on the Lake

On the second Saturday following the cruise just described, Harvey Selley, a boy companion, and Harvey's grandfather set out from Saltair on a cruise similar to the one we had taken. The party of three camped on the west side of Antelope Island just as we had done, and were scheduled to return to Saltair late Sunday afternoon. A series of thunderstorms occurred during the afternoon and, as usual, each was accompanied by high winds. When the party had not returned to Saltair by late evening, Harvey's parents became alarmed and the father and uncle set out in the darkness with the other motor boat to look for them. They circled Antelope Island during the night but found no trace of them. The Monday morning papers carried a story of the possible disaster, and numerous motor boats went out from Saltair and spent the entire day cruising around the islands and open waters for a distance of more than 20 miles from Saltair in search of the lost party but found no trace of them. On Tuesday morning, Captain Davis put out with his steamer and cruised nearly to the north end of the Lake and circled most of the islands. On Wednesday, he went out again together with all of the small craft on the Lake. By that time, we at the office had nearly lost hope of their being found alive. The boats were out all of that day and returned one by one in the late afternoon with a report of no success. However, one launch which did not arrive at Saltair until about nine in the evening had the aged grandfather aboard. He had been picked up on the western shore of Antelope Island not far from its northern tip. Later in the evening, a telephone report was received from a ranch house, the only one on the Island and located on the eastern side about half way between the north and south ends, stating that the two boys had arrived there and would return to the City the following day.

Here are the remaining details of the story. The party had left Antelope Island immediately after their Sunday lunch, and headed in a northwesterly direction for the island on which the cabin I have previously mentioned was located. This was across an open stretch of water and about 7 miles distant. When they were about half way to the island, they were struck by a sudden wind and thunderstorm, and the powerful waves broke over the boat. These soaked the batteries and put the engine out of commission; also soaked their food and water supply rendering them useless. A pair of oars carried in the boat for emergency were gotten out, but they could make no progress against the high winds. In their frantic efforts to bail the water out of the boat and keep it on an even keel, the oars floated away and could not be recovered. The wind was from the east and carried the boat rapidly toward mid-lake. The storm lasted only a short time but the damage had been done. They were unable to start the engine and, with no means of propelling the boat, were utterly helpless being a considerable number of miles from any land. While surveying their predicament and endeavoring to find some means of getting out of it, a second storm came up. Luckily, this time the wind was from the west but fully as strong as the previous one. It drove the boat at a fast pace in an easterly direction and, by means of the rudder, they were able to direct it towards Antelope Island. The force of the wind drove the boat onto the rocks in the shallow water and stove in the bottom of the boat, but they were then near enough to shore to wade the remaining distance. They helped the old man ashore and salvaged their watersoaked food and other belongings. The rain was pouring down and they managed to catch some of it in hollow rocks to quench their thirst, but the food was so salty it could be eaten only with difficulty. They managed to construct a crude shelter out of rocks and spent three nights and two days there. They kept a fire burning throughout each night and tied a shirt to a pole they set up on a nearby hill as a daytime distress signal. They saw the

boats that passed to and fro in search of them and shouted themselves hoarse in an effort to attract their attention, but neither were their signals seen nor their shouts heard. By Wednesday morning they were all in a greatly weakened condition and decided an effort must be made to reach the ranch house which was nine miles away. They knew that the old man could not stand the trip, and the boys had been reluctant to leave him alone. But now, they decided it must be done and the two boys set out. The Island is quite mountainous so the boys crossed the northern part, which is more level, to the eastern shore which they planned to follow down to the ranch house. As they neared the eastern shore Harvey's companion fainted and Harvey revived him by carrying water from the Lake in his felt hat. Harvey had to help him the remainder of the way and their progress was necessarily slow, so that they did not reach the ranch house until late in the evening and completely exhausted. In the meantime, a boat that had followed the western shore discovered the improvised flag, found the grandfather, took him aboard, and brought him to Saltair.

Emigration Canyon and Black Mountain

The Wasatch Mountains extended north and south along the eastern side of Salt Lake City. The business section of the city was about 4,300 feet above sea level. About a mile-and-a-half east of the business center the ground rose rather steeply to what was called the "bench" and a hundred feet or more above the central district of the city. This bench was nearly level and extended west about two miles to the base of the mountains which were quite rocky and which rose to varying heights from 9,000 to 13,000 feet above sea level. Snow remained on the higher ones throughout the summer, and it was a pleasing sight to look at those snow banks from our front porch on a hot summer evening. The city limits extended about to the western edge of the bench at that time, but some ground on the bench had been platted and a few houses were being erected. It is quite probable that most of the bench is now covered with good homes. On the bench directly east of the business center and near the base of the mountains, stood Fort Douglass and also the University of Utah. Incidentally, the edge of the bench marked the shore of Lake Valley, the desert regions of western Utah, much of Nevada, portions of Idaho and Oregon, and perhaps small areas in adjacent states. The geologists who discovered this fact gave the ancient lake the name of Lake Bonneville, in honor of an early explorer of that region.

Tullsen and I often took long walks on some of the Sundays for the beneficial exercise and to explore interesting spots in various localities. On one occasion we rode a streetcar to the end of the line near Fort Douglass which is near the mouth of Emigration Canyon. We then walked several miles up this canyon, ate our lunch, rested awhile, and returned later in the day. This canyon derived its name from the fact that the Mormon hand-cart brigade, that started from the vicinity of Kansas City, Missouri in 1847, passed down this way reaching the site of the present City of Salt Lake in 1849. The monument to Brigham Young, standing at the southeast corner of Temple Square, is said to be on the spot where Brigham stopped, stuck his cane into the ground and said: "Here we will build a city". My only other outing in Emigration Canyon was a trout fishing trip with my father when he, Mother, and Lena visited us in the fall of 1907. The group picture of the family now hanging in my den was taken during their visit at that time.

On another occasion, Tullsen and I determined to walk to the top of Black Mountain. It had an elevation of about 9,500 feet and was only a short distance north of the University. We left home at 7 a.m., took the streetcar to the University, and proceeded upward. The slope was not steep except in a few places and was mostly grass covered with an occasional out-cropping of large rocks. On this

slope the University students had constructed a large "U" (for University) which was plainly visible from every part of the City and, from that distance, appeared about as large a "U" as the letters in the name of a newspaper. We found it to be 200 feet in length and 150 feet in width. It was constructed of cement and painted white. Each year the students had a field day and a picnic dinner at the spot during which they gave it a fresh coat of paint. Some distance above this spot we arrived at a narrow "hogsback" from the crest of which we could look down into the valley on the north side of the mountain. We continued upward along this ridge and when we were within a few hundred feet of the summit, we discovered a large pine grove on the north slope in which there was deep snow because of its being shaded throughout the day. This was a sunny October day and people down in the city were in their shirt sleeves, whereas here was the first heavy snowfall of the approaching winter. We saw a campfire in the grove and some men near it so we decided to call upon them. They proved to be hunters on a Sunday outing and after a little visit we went on to the summit which had no snow as it was open to the sunlight. Here we ate our lunch and, as the altitude seemed to make us drowsy, indulged in a little nap. We had reached the summit at 11 o'clock and remained there about three hours. Becoming very thirsty as we had brought no water with us, we decided to descend the steeper north side so that we might reach a creek that could be seen at the base as quickly as possible. This creek was fed by melting snow in the mountains and was the source of the City's water supply. For that reason it was fenced to prevent contamination by animals, and was clear as crystal and about as cold as ice. After refreshing ourselves with several good drinks of it we followed its winding course down into the City.

Alter Returns to the Weather Bureau

In the spring of 1908 Dr. Hyatt began to show signs of failing health. His color became unnatural, he lost weight to the extent that his clothes no longer fitted him, and seemed lacking in strength and energy. He turned over the most of his work to me and he rarely did more than sign the official letters which I had written for him. When I mentioned his condition to him he stoutly denied that anything was wrong, refused to consult a doctor, and carefully refrained allowing any hint of it to reach the Washington office. This greatly increased my work and responsibility until it seemed to me that we should have an additional clerk. Dr. Hyatt was opposed to making such a request, evidently fearing that it might lead to discovery of his condition.

In an early month of that year, Alter confided to me that his commercial venture was proving unsatisfactory and that he regretted having left the Weather Bureau. I suggested that he ask for reinstatement in the Salt Lake office. He said he would be pleased to return but did not like the idea of becoming a second assistant, after having been the first assistant for several years. I urged him to come back, and argued that the Chief would not be apt to leave the two of us of equal rank on the same station very long. With some reluctance he consented and, at my suggestion, we jointly composed a letter asking for his reinstatement on condition that he be assigned to the Salt Lake station. In the same letter was a hint that I would be willing to go elsewhere if I were to be placed in charge of a station. I reasoned that whatever the result might be I would gain something. Either I would have Alter's help in carrying the load, or I would become an official in charge elsewhere and escape the heavy load of work I was carrying. We worded the letter as if written by Dr. Hyatt, and, as he liked Alter very much, he willingly signed the letter. Alter was immediately reinstated as second assistant, my work became easier, and we worked together in complete harmony. A few weeks or months later, orders were received from Washington, not for my

transfer but assigning Tullsen to a station in Texas. As he was not replaced this reduction in our staff added materially to my work and that of Alter; while Tullsen did not like his new assignment at all.

We Sold Our Home

With Alter's reinstatement it seemed probable that my transfer would follow within a few months. Not wishing to leave behind any real estate holding, we decided to offer our home at 755 East Sixth South Street for sale. Lest the reader be confused by such an address, it may be well to pause and explain the street system in that City which, really, is very simple and convenient when once understood. The Mormon Temple block is the center of the universe, in that, all streets and numbers are related to it. Our address was, therefore, on the 6th street south and in the 7th block east of the Temple, or a total distance of 13 blocks, south and east from it.

We listed the home with a real estate company and they sold it within two weeks for $3,000. After deducting the selling commission we had a profit over our purchase price in addition to a year's use of the house. The purchaser was a young life insurance agent, and the terms were $500. in cash and the balance on a contract basis. It developed that this young man had never been successful in saving any money and that his widowed mother, who was in good financial circumstances, was advancing the cash payment in an effort to instill in him the habit of thriftiness. She was represented in the deal by a keen lawyer who, for her protection, required the young man to sign an agreement that, if he failed to make his payments, his equity in the property reverted to her. After making one or two monthly payments he allowed the next two to lapse. The contract provided that a lapse of three payments permitted me to declare the entire amount due, and I felt that I should inform her lawyer of the existing situation. Before I found a convenient opportunity to call him, he called me to inquire if the young man was making his payments regularly. When I explained that he had missed the last two, he promptly said this condition must not be allowed to continue and that he would call the young man to his office and talk to him. This he did the next day and the young man came directly to my office after meeting his mother's attorney. He was very angry, said the old lawyer had abused him shamefully and, for that reason, he would make no further payments. After he left, I called the lawyer and told him how the son had reacted. He said he would arrange with the mother to take up the contract as she would not care to pay interest when she had ample funds to pay the full amount.

When arrangements had been completed by the lawyer for a meeting in his office to make the transfer and he had notified me of the date and hour of the meeting, I immediately went to see the old man who held my mortgage. When I told him of the arrangements and requested him to come to the meeting to receive the balance due on the mortgage and sign a release, he promptly stated that the mortgage was not due until the end of five years from the date it was given. I argued that the mortgage stipulated I could pay $100. or more at any time which meant that I could pay it in full. He said: "I will show you". He went to an iron safe in the room and took out a small slip of paper, explaining that the mortgage was in a safety deposit box at his bank but that he had typed the clause relating to payments for reference in case of an argument. (The fact that he had done this clearly indicated to me that he had expected arguments with his clients). On the slip of paper was typed the clause which I have already quoted. He read it aloud to me and when he came to the final words: "which must be paid in one lump sum," he asked "when" and immediately answered "when the mortgage is due of course". I thought such an interpretation was extrememly far-fetched and could not under-

stand how any human being who claimed to be honorable could, at the same time, be so grasping. I carefully refrained from further argument or offending language, and prepared to leave at once. As I departed he was quite affable and said if I would come back in two or three days he thought we might be able to work out some sort of an arrangement.

I felt I was unwittingly caught between the upper and nether mill-stone. The contract I had given obligated me to provide a clear title to the property when the contract was paid in full, and I could not give such a title until the mortgage was released. I went to see the mother's attorney and told him the circumstances. When I quoted the clause to him, as contained in the mortgage, he said he seriously doubted any court would sustain the interpretation the old man had placed on it. He advised me to see the old man again and thought likely he would accept the money although I might have to give him a bonus in preference to a court contest. A day or two later I again went to see the old man. I already knew that he had a hobby for compiling his family history, and, when I mentioned the subject, he brought forth a book he had typed tracing his genealogy back several centuries and in which he had made cartoon drawings to illustrate special events. It was a fine piece of work and he was justly proud of it. I spent considerable time discussing it with him until he appeared to be in a very amiable mood. As I arose to leave I asked him what he could do for me in regard to the mortgage. He thought a moment and said he would release me for the sum of $10. This was far less than I had expected and, under the circumstances, was much relieved to escape his clutches so cheaply. However, that was "blood money" which I could ill afford at the time and his demand lowered my estimation of him nearly to the zero point. My recital of these events in such detail is intended as an illustration of the need for exercising extreme care in executing legal documents and in transferring property.

For the remainder of our stay in Salt Lake City, we rented one side of a new brick double bungalow on Simons' Court. This small court extended westward from Ninth East Street between Fifth South and Sixth South Streets, and contained several double houses similar to the one in which we lived. Our landlord and the most of his tenants were Mormons. These homes were very comfortable and satisfactory, and only three blocks from the home we had owned and lived in during the first year.

Planning New Office Quarters

Either before or shortly after my arrival in Salt Lake City Samuel Newhouse, a wealthy mining man, began the construction of the Newhouse Hotel on South Main Street. When this was nearing completion he projected the erection of twin office buildings on the same street, in the same locality, and directly opposite the Post-Office. As these were to be either 10 or 12 stories (I do not recall which), they would be the highest buildings in the City, which the Weather Bureau generally preferred. These buildings were erected side by side and separated only by a narrow paved court or street. The south one was named the Newhouse and the north one the Boston Building. We made early arrangements for office space in the latter, and arranged for the installation of electric cables in the walls to connect the self-recording instruments in the office with the weather apparatus on the roof. The Weather Bureau had found by previous experience that the coping around the roofs of such buildings produced wind eddies just above the roofs, which made it impossible to obtain true records of wind directions and velocities. To obviat2e this difficulty it was arranged to place the wind vane and anemometer at the top of a 40-foot steel tower--similar to those used for wind-mills--to be erected on the roof. Due to Dr. Hyatt's ill health, the

arranging for and installation of these various items fell upon me.

No serious difficulties were encountered except with the steel tower. My solution for solidly anchoring the tower was that the posts and guy rods be bolted directly to the steel frame of the building. To accomplish this it was necessary that the work be done before the cement roof was poured, and, under the circumstances, I saw no way of having it done by other than the building construction company--the Thompson-Starrett Company of New York City. Accordingly, I took a number of official bid blanks to the construction superintendent. His bid for erecting the tower seemed very reasonable and he filled out and signed the blanks, grumbling at the necessity for making several duplicate copies to comply with Government procedure. I forwarded the bids to Washington and recommended acceptance, stating that it would be impossible to get competitive bids under the existing conditions. I soon received notice that the bid was accepted and the tower was being shipped; the same letter also contained a warning that the manufacturer's instruction must be followed explicitly in assembling the tower, otherwise the parts would not fit. I informed the superintendent of the various facts in my letter from Washington and asked that when the tower arrived and he was ready to erect it I be notified. Instead, on a certain Monday morning he called me by phone, said they had erected the tower on the day before (Sunday) and had had a heck of a time in assembling it. He said the parts did not fit it at all. He further stated that while he had expected two men to do the job in a few hours, it actually required eight men for the entire day and that considerable money was lost on the job. I made out a voucher for the amount of the bid and took it over to him for his signature. He reiterated his troubles with the job and that he had lost considerable money on it. I asked if he had followed the directions for assembly and he assured me that he had. He was certain that the manufacturer had sent the wrong parts for this particular tower, and I told him if such was the case I would try to have him reimbursed for his loss. He estimated the added cost and I immediately made a full report to Washington of his contentions with a recommendation that he be reimbursed for the loss. In due time, Washington reported that they had made complaint to the manufacturer who replied that he built only the one type of tower, that all drilled holes were machine spaced, and that there was no possible chance for error; furthermore, that a Government agent had inspected the tower before shipment and had approved it. However, Washington advised me to submit another voucher for the amount involved and it would be paid. I prepared the voucher and took it to the superintendent's office, but was told he was somewhere in the building. Although there were signs of "no admittance" I went into the building in search of him with the voucher in my hand. When I found him and started to explain my errand, he promptly cut me short with a tirade of abuse and said: "My company does millions of dollars worth of business a year and I have no time to fool away. If the Government is too small to pay its debts, I am done with it". Again I tried to tell him my errand and that I had secured approval of his claim, but he would not listen and virtually ordered me from the premises. I went back to the office and wrote Washington how I had been treated, quoted the exact language the superintendent had used, and advised that no further action regarding his claim be taken. As the work was done on Sunday, I surmise this man pocketed the money paid him for the job and charged the workman's time to the Thompson-Starrett Company.

When we were ready to move the office, Washington directed that a survey be made, starting from the zero point of the barometer in our old office and carrying it to the zero point of the barometer in the new office, then reversing and surveying back to the old office as a check on the accuracy of the survey.

A good engineer was employed and I carried the tape and rod while he made the readings and computations. After measuring from the barometer to our office window sill, then down to the sidewalk, then through five blocks of busy traffic, we reached the base of the new building. Then up ten stories through a window to the new barometer, after which we surveyed back in the same manner to the place of beginning. All readings were made to the hundredths of an inch, and when we completed the circuit it was found that our total error amounted to only .35 inch. A further check was then made to ascertain the exact elevation above sea level. This was done by means of a further survey from one of the city's bench marks of known elevation to the barometer. As the elevation of the old barometer had been established many years before, in a similar manner, the survey from the bench mark to the new barometer gave us another complete check on the entire survey.

When we moved to the new office it was necessary to install at once the wind instruments and sunshine recorder at the top of the steel tower. This job fell to Alter and myself on a certain afternoon. The tower was 40 feet above the roof, and the roof was 12 stories above the street, so we were literally up in the air. The platform surrounding the top was only 10 inches wide, so we had to stand facing each other nor could we change positions with each other. While attaching the instruments and the electric wires, the usual afternoon thunderstorm arrived. It was unusually severe and it seemed as if each bolt of lightning was going directly from the tower, and we were also well aware that the steel tower, as attached to the steel frame of the building, was an unusually favorable target for the lightning bolts. I think we both breathed long sighs of relief when the work was finished and we were safely back on the roof.

Reporting Assignment by the Salt Lake Herald

The leading daily newspapers in Salt Lake City were: The Herald, The Tribune, and The Deseret News (a Mormon paper). There were one or two others of lesser importance. All sent reporters to our office each week day and our relations were extremely friendly. The Herald invited me to write articles for it and I managed to find time to prepare a few. One of these was a full-page feature story in a Sunday issue describing the work of the Weather Bureau and included pictures of the instrumental equipment. The Herald was pleased with it, and a copy of it sent to the Washington office brought a letter from the Chief that was as near a commendation as he customarily gave a minor subordinate.

In the summer of 1908 I had a longing to go to Cheyenne, visit numerous friends there including Fred and Harriet Harker, and see the Frontier Show once more. Not being financially able to do this I went to the city editor of the Herald and suggested that I would like to report the Frontier Show for it. I explained that I had already seen the show, was familiar with it, and would be able to report quite fully on it. When I offered to go merely for my railroad and personal expenses, he readily agreed to the plan and gave me detailed instructions concerning the material wanted. A story was to reach the paper by mail each evening of the 5-day show, describing the day's events, and about one column in length. I was to collect some typical pictures that could be used with the stories. As 24 hours had to be allowed for mail to reach Salt Lake, it was necessary to write a description of the various events in advance of their occurrence. Because of my previous knowledge of the show, the first article was not too difficult and, after the show opened there was ample material that could be projected into the future. In addition, I was to send a telegram each evening announcing the names of the prize winners, special occurrences, and any needed corrections in my mailed story for that day.

The assignment proved to be a lucky one for me. About the first acquaintance I met on the street in Cheyenne was T. Blake Kennedy whom I have already mentioned as having been the Master of the Masonic lodge when I was active there, and a prominent attorney. He asked the reason for my being in Cheyenne and I told him I was the representative of the Salt Lake Herald to report the Frontier Show. He then asked me if I had obtained a press badge from the executive committee, and when I realized that I had not, he advised doing so at once. He said he was a member of the committee but I had better see the chairman of it. When I learned the chairman was the managing editor of the Wyoming Tribune, the man who had complained about me to Washington, I said I had grave doubts that he would give me a badge and I would not ask any favor of him. Kennedy then offered to get it for me and bring it to his office. When he pinned it on me he said it entitled me to a box seat in the grandstand throughout the show, entrance to the grounds, and entrance to anything in the City. Then I paid a visit to the competing newspaper office where I found the paper had changed hands since my departure from Cheyenne and there was no one there whom I knew. However, I explained my presence as the representative of the Salt Lake Herald and my former official connections in Cheyenne. This brought forth a little story about me in that day's issue of the paper, and which I hoped would not be missed by the Tribune editor.

I begged the use of a typewriter in the Weather Bureau office and my stories were written there. Once more I had the opportunity of witnessing the colorful parades and thrilling events of that great show. A new steel grandstand had been built in a more favorable location since my earlier visit, and the programs lasted from one to six p.m. on each of the five days. I did not stay in the grandstand very much of the time as I needed to get information by circulating among the performers and obtain a close view of the more important events, so gave some friend my reserved seat whenever vacating it.

I returned to Salt Lake at the end of the week with a feeling that my brief vacation had been a most enjoyable one and that the experience gained would be helpful in the future. The Herald editors asserted that my work had been wholly satisfactory.

A Trip to Brigham City

In August, 1907, my father, mother, and sister Lena came to visit us. We showed them numerous interesting points in and near the City that could be reached by public transportation. Early in September I noted that an excursion to Brigham City was scheduled to celebrate "Peach Day". I proposed that our two families take in this event in order to obtain a glimpse of Utah's principal peach-growing area. The place was about 50 miles north of Salt Lake City and Brigham City was a small town of not more than 1200 people. The crowd at the Salt Lake depot was so large that it was necessary to have two excursion trains. We were on the second section which consisted of 11 coaches all filled with people. We did not reach our destination until nearly noon and then found that several other trains were there ahead of us. There were several restaurants and numerous temporary eating booths to care for the crowds. We decided to eat early and managed to get a table in one of the larger restaurants. On this table were peaches prepared in every conceivable form; fresh peaches, peach sauce, peach pie, peach preserves, peach salad, etc. There were many tent booths filled with peaches and melons, and supplies of each were kept on the counter with signs saying "Help yourself". As fast as the dishes were emptied they were immediately refilled, and as evening approached I noted there was still an ample supply of these fruits to be had for the taking. At one booth we were asked if we had received our tickets and when I replied in the negative he gave me a ticket for each adult in our

party. We were told to present these tickets at a booth near the depot before boarding the train. This excited our curiosity and some hours later we presented the tickets at the depot booth. To our surprise each was given a small covered basket containing several choice peaches to be taken home with us. This was certainly the most unique and effective advertising I have ever encountered, and at last accounts the annual peach day was still being held there. Father and I walked out to some of the orchards and found the trees were mostly well filled with choice fruit.

It is generally impossible to grow peaches at an altitude above 4,000 feet because of the shorter season caused by late spring and early fall frosts, but here the orchards were bearing with seeming regularity at an altitude of 7,000 feet. The orchards were located on a bench at the base of the mountains similar to the bench already described in Salt Lake City, and directly in front of the mouth of a canyon. A continuous draft of air flowing down this canyon, across the bench, and over its lower edge was the saving feature of this fruit industry. As nearly as we could judge, the protected area was not more than two miles in width beyond which the beneficial canyon breezes did not extend. Undoubtedly, there were other areas in the State where peaches were being grown; if so, they would be located similarly to this one. An area of similar type near Provo was growing strawberries on a commercial scale and that city advertised its annual strawberry day.

Our Office is Visited by a Weather Bureau Inspector

The Weather Bureau maintained two inspectors who were supposed to inspect all offices once every two or three years. No advance notice of such visits were sent, the apparent object being to more easily discover any laxities of administration or violations of rules. This was a hang-over from the earlier years when the Weather Bureau was a part of the Signal Corps of the Army and conducted according to army regulations and army officials. Station officials were forbidden to report a visit of the inspector to each other, and inspectors refrained from giving information about their projected itineraries. However, some officials, particularly in western states, followed the practice of tipping off their friends whenever an inspector was traveling in that vicinity. On one occasion, before we had moved from the old office to the new, Dr. Hyatt received an anonymous note in the mail which said that the inspector had left a certain city on a certain train. Many years before, when Dr. Hyatt was in charge of the important station at St. Louis, an inspector had given him a very unfavorable report that resulted in his being severely demoted in salary and transferred to the lesser station of Vicksburg, Mississipi. For this reason the Doctor feared inspectors as much as the black plague, and when this warning note arrived late in the afternoon he lost no time in calling his wife on the phone. Within a half hour, and just at closing time, she appeared at the office carrying a mop, pail, broom and other cleaning utensils. We were ordered to make a thorough cleanup and were all kept on duty until midnight, both the Doctor and his wife working along with us. We also were ordered to return the next morning at 6 o'clock and to remain on duty until the job was finished regardless of what hour it might be completed. All breathed a sigh of relief when that time arrived. The inspector had not arrived nor did he put in an appearance until a few months later. When Inspector Conger (from Detroit) did arrive there was no advance warning.

When he cleaned and inspected the instrumental equipment he found it in good order. This was due to the fact that I had cleaned it at regular intervals as specified in the regulations and as I had been taught to do on other stations. When he inspected the stock room, which was merely open wooden shelving in a

dead-end corridor adjoining our office, he exclaimed: "The hell-hole of despair". The shelves were filled with stocks of envelopes, blank paper, some of which were yellowed with age and so rotten that they were unusable. Probably some of these had been there for 20 years. Dr. Hyatt insisted on ordering quantities far beyond the current needs and would not let us clear away the worthless debris. We were required to make semi-annual requisitions for all needed supplies, and I prepared the requisitions. Each time, before doing so, I took an inventory of the stock on hand and carefully computed the amount of additional supplies needed. After handing the requisition to Dr. Hyatt for approval, he invariably would increase most of the items sometimes doubling or trebling the quantities before signing the form.

On the following morning, inspector Conger asked Harvey, the messenger, to go with him into the small rear room. After an interval Harvey returned and another employee was called. From them I learned that they had been quizzed about the affairs of the office, the conduct of each of the others, Dr. Hyatt's behavior, etc. As I was the last one called I had considerable time in which to formulate my intended replies and decide the attitude I would assume under his cross-examination, a procedure I had not encountered in previous inspections at other stations nor of which I approved in this case. In answer to his questions, I stated that the relations between all employees were harmonious and that they were performing their respective assignments in a satisfactory manner. When he asked me questions about Dr. Hyatt's conduct outside the office, I was able to say that I knew nothing that could be criticized. Finally, he referred to the mess in the stock room and asked me why I had permitted it to exist. I explained that I had been careful in preparing all requisitions but that Dr. Hyatt had evidently seen fit to increase the quantities before signing them, nor would he let me dipose of any old and worthless stock. He then proceeded to tell me that as first assistant I was responsible for the existing condition and that he was holding me accountable. I replied that as long as I was only an assistant I accepted no responsibility beyond that delegated to me by my superior, and would absolutely refuse to be held accountable for administrative matters beyond my control. He tried to argue with me but I remained adamant and he finally dropped the subject.

A bit of humor developed while Conger was cleaning the anemometer. Tullsen asked him if he recalled the time that he (Tullsen) had refused to do his bidding when he inspected the Tacoma, Washington station some years earlier. Tullsen then related the circumstances. Conger was cleaning the anemometer in the Tacoma office just as he was doing while Tullsen told his story. Suddenly he had asked Tullsen to go to a store and get him a small bottle of alcohol. Tullsen said he wouldn't do it, whereupon Conger said: "Very well, I will go myself". When he returned with the bottle and proceeded to use the contents in cleaning the instrument, Tullsen realized he had misinterpreted the purpose of the request and hastened to make apology. It was due to the fact that there was a Bureau regulation absolutely prohibiting any employee having in his possession or keeping in the office any intoxicating liquor. Tullsen had assumed that Conger was merely testing him with respect to that regulation.

The only repercussion from the Inspector's report, I believe, was a comparatively mild criticism of Dr. Hyatt's administration in a letter to him from the Chief.

Installing Snow Bins in the Mountains

About the time I went to Salt Lake, Alter had written a magazine article proposing that the Bureau erect snow bins at high elevations in the mountains in

which to catch and measure the winter snowfall. The object was to enable the Bureau to forecast the amount of irrigation water that would be available during the following summer, thus enabling farmers to gauge the acreage of crops that they could grow. The idea was finally adopted and we were directed, in the spring of 1909, to establish a number of such bins at strategic points throughout the State. Likewise, section directors in other western states received the same orders. As Dr. Hyatt was physically unable to travel or plan the undertaking, the project was assigned to me. I had no intimate knowledge of the State other than what I had obtained from topographic maps, nor information as to where it would be logical to set up such stations. I corresponded with forest supervisors and with some of our cooperative weather observers, and received considerable help from both of these sources.

The bins were to be constructed of 2-inch planks, and were to be 10 feet square, 6 feet deep, and supported on posts so that the bottom of the bin was about 4 feet above the ground. The bottom of the bin was to have a trap door that could be opened downward. The plan was that each observer should visit his bin about once a month, level the snow in the bin, measure and record its depth, then empty the bin through the trap door. For this service the observer was to receive $1.00 per observation. I found the major difficulty to be in finding suitable locations at high elevations which could be reached by the observer without extraordinary effort or personal danger when snows were deep and severe storms prevalent. I hoped to be able to favor some of our regular cooperative weather observers with this bit of pay inasmuch as they had kept records for us over a period of years without remuneration of any kind. While engaged in organizing the project two of these observers happened to visit our office, both of whom having made previous calls on us and with whom I felt somewhat acquainted. I learned that each of them lived close to some mountains and were eager to serve as snowfall observers for the pay offered. Each had asked me on several occasions to visit them, and here was my opportunity. One of these men was well past 70 years of age but still hale and hearty. He had lost an eye and when I inquired about it he told me his story. He was a Mormon and a polygamist of the old days. When the Government sent an army into Utah back in the seventies to squelch the Mormons and wipe out polygamy, he fought with the Mormons against the U. S. troops. He lost the eye in one of the battles and, when the Mormons were finally subdued, he and hundreds of others were thrown into prison where he was kept for three years. The Government eventually decided that nothing was being gained, and all such prisoners were released. He seemed to hold no bitterness against the Government and had been a faithful weather observer for many years. He formerly had four wives but only two were then living. He said their home life had always been harmonious and that he would challenge any visitor to accurately name the children of each mother by their demeanor.

An Official Visit to Kamas Prairie

Resolving to select the first snow bin site in the vicinity of this old man's home, I went by train to Park City a mining town about 30 miles east of Salt Lake. Here I was to take a bus to a small village near his home, but the bus failed to stop at the hotel for me as it had been requested to do. I managed to find an old man with a team and wagonload of feed who was making the trip of a dozen miles or more to that same village. We traveled over steep mountain roads

and reached our destination about supper time. I made my way on foot to the old man's ranch about a mile distant where I was entertained with meals and lodging during my stay. The old man's family in this home consisted of a wife around 60 years of age and two sons in their late teens. When I arose in the morning I found the old man and the boys sitting calmly on the porch, and was told that we would have breakfast as soon as the wife had finished the chores. In a few minutes she came from the barn with two pails of milk, then proceeded to prepare the morning meal. I had previously heard that it was the custom for women to do the chores, but it was difficult for me to believe it was universal especially when there were several males to one elderly woman as in this case. I decided this must be a strictly Mormon characteristic but later learned it was even much broader than that.

After breakfast the old man wanted me to meet a neighbor living about a half-mile away on the main highway. This neighbor was a forest ranger and both of us being Government employees had numerous subjects in common to talk about. When we returned from this brief call we met a considerable group of children on the highway. After we had passed one boy called out: "Hello, Grandpa". The old man turned around and upon recognizing him returned the greeting. As we moved on he remarked: "You know, I really have so many grandchildren that I do not always see or recognize them when they are among a group of other children". When I asked him how many grandchildren he had he replied he had counted them some little time before and there were either 84 or 86, he had forgotten which number was correct. I inquired about his own children and learned that 19 was the total. We hitched a team to a double buggy preparatory to locating a site for the snow bin. The wife wanted to ride with us as far as the Mormon church where she and other members were spending the day sewing. We drove on a few miles into the mountains and found a level spot mostly surrounded by pine trees which we decided was an ideal place for the snow bin. We arrived back at the ranch about noon and put the team in the barn. I tried to visualize the old man and the boys preparing the noon meal in the absence of the wife and mother, but the old man had other plans. He said we would go across the road to his son's home for our dinner. One member of that family was an old, white-haired lady and when I was introduced to her I noted her name corresponded with that of the old man and that she was a Mrs. Then it was that I realized she was the other living wife and that she was living with one of her sons instead of with the husband. However, all were agreeable and I detected no evidence of ill feelings among them. The second night was also spent there. We arose very early the next morning as the old man agreed to drive me to a railroad station some 20 miles north where I could get a train that would take me to my next scheduled stop. We left before daybreak in order to catch the morning train.

While the country for a number of miles both north and south of his ranch was fairly level and accessible to irrigation, the only crops were hay and a small acreage of oats. This plateau, known as Kamas Prairie, had an elevation of more than 7,000 feet which prohibited growing other crops than the ones mentioned. His ranch extended back to the base of the mountains and his herd of cattle were allowed to graze back into these mountains, which were public domain, subject only to a small grazing fee charged by the Government.

The College Town of Logan

The early morning train already mentioned carried me to the main line where another train took me to Logan in the northern end of the State. This town was the seat of Utah's agricultural college but, to me, it appeared an illogical place for an insti-tution of that kind. It's elevation was above the limit for

most crops, the surrounding country was mostly rough and mountainous, and, being near the northern border of the State, was far from the Salt Lake Valley which was considered the State's best agricultural area. A Government Forest Service station was located here and it was my purpose to enlist its aid in erecting one or more snow bins and to have the observations taken by forest rangers. I arrived on Friday and found the Forest Supervisor was out of town. He would not be back until Monday, so the only apparent alternative was to sit down and take it easy until his return.

I took a room at the town's only hotel and found the accommodations unworthy of being bragged about. The meals were abominable, so I tried various restaurants with no better success. On Saturday afternoon I met a traveling salesman in the lobby of the hotel who, like myself, was staying over Sunday. He was selling office furniture so we found subjects of common interest to talk about. When supper time arrived he asked me where I wanted to eat. I told him I had eaten each meal at a different place and I did not care to go back to any of them a second time. Having learned that he had previously been in the town a number of times, I suggested that he lead me to his favorite place. He said I might not like its exterior appearance but it was the best place he had ever found in Logan. I told him I would be glad to eat in a barn if only the food was good, so he took me to a little place on a side street where an old streetcar was set up on blocks. We entered by means of steps leading up to the door at the middle, and sat on stools before a counter with a stove behind it. The cooking and serving was done by two men, and here we each had a good steak and all that normally goes with it, including pie for dessert. It was the first good and palatable meal I had had in the town and I was ready to do full justice to it. Prices had been exceptionally high, elsewhere, so I nearly fell off the stool when told that my meal was 35 cents. It is needless to say that place received my patronage during the remainder of my stay.

I met the Forest Superintendent on Monday morning, made complete arrangements with him, and returned to Salt Lake that afternoon.

Life With the James Family

The other weather observer with whom I became acquainted through occasional visits to our office was Walter James. He lived some 60 miles southwest of Salt Lake city and Government Creek was the name of his postoffice. I never saw that postoffice nor is it shown on any map in my possession. I am quite sure no town of that name existed so presume it was nothing more than a dwelling house somewhere in the wilds of western Utah. The preliminary arrangements for the snow bin and my trip to his place were made with him in my office. He said no lumber was obtainable in his locality or nearer than Salt Lake, so advised that I purchase the required materials in Salt Lake and have the lumber company ship them to him. He further stated that he lived 26 miles from the railroad station, and would have to drive there with team and wagon to get the lumber. It was arranged that I have the lumber shipped on a certain day and then follow it by train the next morning. He would meet me and get the lumber at the same time. When I arived at the appointed place the next morning about 9 o'clock, there was no depot, no other buildings, or people in sight. I believe the place was called Ajax, but it was only a siding. My lumber was in a pile on the ground and, with no living thing in sight, I began to speculate what I would do if my man failed to meet me. However, he soon arrived and loaded the lumber. After proceeding two or three miles he drove to the side of the road and tied his team to a post. He said he had to buy a few things and invited me to go with him. There were only one or two houses in sight and nothing that resembled a store. He led me across the road and

down a short flight of stairs. Opening a door we stepped into a well-lighted and well-stocked large store. It was filled with general merchandise of every description. He bought a few groceries and other articles and, after looking around a bit, we left the store. I noted that the roof was of sod and oval in shape, with the peak of the mound only a very few feet above the original ground level. It was somewhat similar to the outdoor cellars formerly seen in Michigan but many times larger. Mr. James told me this place was built many years before as a rendevous against Indians and brigands; later it was used as a road house and dance hall, the gatherings being spiced with fights and occasional killings; now it was serving a more useful purpose.

As it was 10 o'clock or later when we left the store, and as we had a partial load on the wagon which would mostly prevent driving faster than a walk, I mentally calculated the 26 miles that lay before us meant an all-day ride. I was not seriously concerned about something to eat in the meantime, but wondered why I had been so thoughtless as to buy no food for a lunch while at the store. We had gone but a few miles when Mr. James pulled the team to the side of the road and said he would let them rest a little while. On the dashboard hung a stone jug by a strap, the contents of which I had a curiosity to know but did not dare to ask about. When we stopped he took up the jug and said it was time for a drink of water. He had carried it all the way from home because there was no water enroute. The day was warm and the water was nearly at a dish-washing temperature. He then brought out a box from under the seat which he opened and which contained as fine a picnic lunch as I ever ate. The country we passed through during the entire day was gently rolling and quite barren. There was a little grass but it was dry and brown and a whole quarter-section would not have kept a single animal alive. The only animals seen were one or two coyotes (pronounced ky-oat-ees, with accent on the second syllable, in the west) and numerous prairie dogs. I did not observe any birds along the route nor anything on which they could live. The road was a natural dirt highway, mostly sand, and I do not think we passed a house along its entire course. At one point a cluster of four or five houses could be seen a little distance away. Mr. James explained that their district school house was located in the group and 18 miles from their home. I asked him how his children managed to attend a school so far from home, and he explained they rented a part or all of one of the houses where they cooked their own food and remained throughout the school year. He also mentioned that his nearest neighbor lived seven miles from him. Finally, we ascended a hill which overlooked a valley a few miles in width. At the lowest point in this valley was a rectangular area, laid out in fields, and as green as any Michigan farm in springtime. It was completely surrounded by the same dry and barren waste as that through which we had traveled all day, and it truly seemed like an oasis in the desert. He pointed proudly to it and said: "That is our land". It was about 6 o'clock when we reached the home where he had lived for the past 40 years. The family included his wife, two sons, three daughters, and his wife's sister. The house was quite large, comfortable, well furnished, and neatly kept. There were many good books and numerous popular magazines in sight. The five children ranged in age from 23 to 40 years and none were married. It was a happy, contented, and highly intelligent family. I learned that some of them would go to Salt Lake City at frequent intervals, stay two or three days at a hotel, shop for dresses, clothing, and other needs, attend theatres and other entertainments, do some sight-seeing, etc. In this way, they seemed to have kept fully abreast of the times. Mr. James was a Welshman and his wife was a native of Ohio. She had been a school teacher for some years before her marriage. From these few facts it should be correctly deduced that this was not

a Mormon family.

While awaiting supper I noted that one girl prepared the entire meal and placed it on the table, the others remaining in the living room with me. The supper was equal to that served in any Michigan farm home, after which I observed that another girl picked up and washed the dishes. When I came downstairs in the morning I saw the girl who was cooking the breakfast was a different one from the one who had prepared the evening meal. I also saw one of the girls doing the chores at the barn and, soon afterward, she came to the house with the milk. Then it was that I realized this was a universal custom in Utah and not limited to Mormons as I had supposed. I resolved that if I ever returned to farming as an occupation, I would want to locate in Utah. However, I did not find Mr. James and his sons sitting on the porch as at the Mormon home already described. They were in the garden with shovels directing a flow of irrigation water between each of the rows. After breakfast they directed the water away from the garden which by that time was thoroughly wetted. I need not add that this garden was as thrifty as any I had ever seen, and far more so than the average farm garden in Michigan. As cattle-raising was the chief source of income on this ranch, much of the cultivated land was devoted to hay. Under irrigation it was universally a heavy crop. During my stay the boys were engaged in putting up hay in which they were given some help by the girls. Mr. James led me a short distance from the house to an artificial pond of considerable size. This was fed by a comparatively small stream of water that flowed down from the mountains a few miles away. The overflow was carried into irrigation ditches that led into the different fields and was used as needed. The pond constituted a reserve supply that could be drawn upon if necessary at any time.

Mr. James asked me if I could ride a horse, and when I hesitated a reply, he said that would have to be our means of travel to reach an elevated place for the snow bin. I had ridden but little and, after seeing the bucking broncos perform at Cheyenne, had no desire to demonstrate my lack of experience in that direction with western horses. I suspect he read my feelings because he hastened to say that he would give me one of his oldest horses which would cause no trouble. For himself he selected a younger and somewhat livlier horse. When we were ready he brought out a gunny sack with our lunch in it and tied it to his saddle; then went back and got his rifle saying it might come in handy in case we met a mountain lion. We followed the creek up to the base of the mountains, the sides of which were mostly covered with bushes and small timber. Continuing along the side of one of the mountains we came to a shallow cave or grotto among the rocks. Near it was a spring of nice clear water coming out of the ground, and this was the place he had selected for eating our noon lunch. He explained that his boys had staked out and recorded mining claims surrounding this spot, and that they were required by law to perform five man-days of labor each year in order to hold them. The cave before us represented the total results of their labor during the few years that they had owned the claims. I suspected that they were not very optimistic over finding any gold, as apparently they had performed no more than the amount of work legally required. After resting for a brief time after the lunch, he told me we would climb "Old Camel's Back" that afternoon. This was the highest peak of the range bearing the same name. We circled the mountain several times on our horses, gaining some altitude as we went. Finally, upon reaching a steeper part where it was difficult for the horses to keep their footing, he said we would leave the horses there and go on foot the remaining distance. The ascent was not particularly difficult and in a little while we arrived at the rounded crown which, probably less than 100 feet across and free of trees, afforded a

good view of the surrounding country. Perched on this round summit was a heap of large rocks extending upward in the form of a cube some 30 to 40 feet. The four sides were perpendicular and at almost perfect right angles to each other and the top was flat. Many of the rocks were as much as six to ten feet in diameter and I could see no possible way of climbing to the top of the pile. Mr. James said it would require some extra effort but that the view from above was worth it. Stepping into the narrow space between two large rocks, and with our elbows against the sides and our toes in crevices wherever they could be found we inched our way upward to the top of the first layer. Here we would find another small space to aid us in negotiating the second layer and, continuing the process, we managed to reach the top after 15 or 20 minutes of rather strenuous effort. The day was clear and bright and we could see more of the earth's surface from one spot than I have ever experienced before or since. To the northwest was the Great Salt Lake Desert extending westward into Nevada. To the west we could see ranges of mountains in eastern Nevada; to the north, a range of mountains in southern Idaho more than 150 miles away; to the east the Wasatch Range was in plain view; and to the south were numerous ranges of central and southern Utah in view.

The following day was spent in hunting jackrabbits, looking over the ranch, and visiting with the family. I was outfitted in a cowboy suit and one of the girls took my picture in that costume. That picture is still among my possessions. On the succeeding day, Mr. James transported me back over the long trail to the railroad where I boarded the train and returned home. Many times since I have reflected upon the unique location of that home, the perfect coordination of duties between its members, and the seeming happiness and contentment that existed in such complete isolation.

Dr. Hyatt's Condition Becomes Worse

Shortly after the opening of the Year, 1909, and several months prior to the events recorded on the immediately preceding pages, we noted that Dr. Hyatt had become more feeble, more emaciated, and unable to do any work at all in the office, except attaching his signature to letters and forms. His mentality had weakened and, on some days, it was necessary to keep close watch of him to guard against possible acts of injury or destruction to items of office property. His office was across a hall from the rest of us, and we would feign errands to it at frequent intervals in order to keep tab on him. also, we daily expected to find him slumped lifeless in his chair. On one occasion I found him laboring over his typewriter writing a telegram. I offered to help him being, at the same time, curious and suspicious of its contents. He refused my offer and finished it himself. After he had signed and folded the blank he did accept my offer to dispatch it to the telegraph office for him. I took it into my office and, after reading it, I showed it to the boys, then tore it up and consigned it to the waste basket. He had managed to formulate a couple of sentences but they were absolutely meaningless and would have caused consternation at Washington. Thereafter we increased our vigilence over him.

Around the middle of February he failed to appear at the office on a Monday morning, and his wife telephoned that he was ill. However, she requested that I make no report of his absence to Washington which, of course, was a violation of regulations. Expecting he would either be returning soon or becoming too ill to return at all, I awaited developments and took no action. He did not show up at the office during that week and, when there were letters to be mailed to Washington, I would take them to his house for his signature. I took the last ones on Saturday and his signatures to them were almost illegible scrawls. Suspecting this fact would be noticed and arouse concern at Washington, I felt the time had

arrived to take a definite stand. Before leaving, I told Mrs. Hyatt in as kindly a way as possible that, unless he showed decided improvement by Monday morning, she should keep him at home in which case I felt it would be necessary to report his absence and condition to Washington. I pointed out that both he and I were already guilty of violating regulations, and that I could not afford to jeopardize my standing by continuing to violate them. She seemed to accept my verdict graciously and philosophically.

On that Monday morning, while engaged in drawing the weather map, I suddenly heard a commotion in the hall. On looking up I discovered Dr. Hyatt entering the doorway, supported on one side by his wife and on the other by the mail carrier who regularly served our building. The Doctor's feet seemed to be dragging on the floor, his weight was being supported by the two persons mentioned, his eyes were staring straight ahead, and he was mumbling incoherently. As they passed me I was able to distinguish the words he was trying to say and which he continued to repeat over and over. They were: "Church, don't report me". When they placed him in a chair the office force quickly gathered around. His face was as pale as that of a corpse and, when I followed the mail carrier outside to get his version, he told me that the Hyatts were getting off the streetcar in front of the building as he was about to enter. Dr. Hyatt fell down and could not get up even with his wife's assistance, so he went to their aid. Mrs. Hyatt staid near him that day and Alter and I took turns entreating them to consult a physician. We succeeded in obtaining their promise to do so and that was done on the following day. The doctor said it was a case of heart trouble complicated by Bright's disease, and recommended that he go immediately to a low altitude.

Dr. Hyatt, at my insistence, reluctantly signed a request for sick leave but asked only for 15 days which seemed ridiculous to me under the circumstances. It was arranged that he go to Los Angeles where a relative lived and with whom he could stay. Mrs. Hyatt did not go with him but put him on the train in the partial care of a friend who happened to be going on the same train. I later heard that he nearly succumbed in his berth while going over the high mountains. As soon as he was away I called on his physician to get what information I could about his true condition. He readily gave it to me when I explained that it was necessary to report the facts to Washington. A copy of the letter I wrote to the Chief is in the book of assembled official papers in my library. I emphasized that he might have to stay at a low altitude for some time to receive any lasting benefit, and asked that he be given every possible consideration. I was certain that he would have to ask for an extension of leave of absence, and my letter was intended to make more certain that it would be granted. My recollection is that he did request an additional 15 days, then returned home and to the office. His strength, color, and mentality gave clear evidence of some improvement and a portion of this gain was retained during the succeeding six months that I served at that station.

The Sad Story of Frank Gillam

An Exposition, or World's Fair, was held in Seattle, Washington during the summer of 1909. Frank Gillam, a chief of one of the Bureau's divisions in Washington, was delegated to set up a Weather Bureau exhibit at that Exposition. On his westward trip to Seattle he stopped off at Salt Lake City and spent a day or two at our office. I had never met the man but he was well acquainted with Dr. Hyatt. When he arrived I suspected that he might have been instructed to stop there for the purpose of checking and reporting Dr. Hyatt's condition. Later, I decided this probably was not the case and that he merely had a desire to see his old friend and possibly get a view of that beautiful city. After greeting Dr.

Hyatt, and meeting the rest of the staff, he sat down for a good visit with the Doctor. Of course it did not take long for him to sense the Doctor's physical condition and find that his mental state did not lend itself to an enjoyable visit with him. He soon came to see me, said that he had heard in Washington the Doctor was not well, but was not prepared for the shock it gave him to find Dr. Hyatt so much worse than he had expected. He asked me for full details and I gave a complete history of his case, including: the fact that I had carried his duties in addition to my own, watched over him to the best of my ability, and his persistence in keeping his condition a secret from Washington. I hoped, and may have hinted as much, that he would relay the information to Washington. We became very good friends during our brief visit, but he soon went on his way.

When I visited the Seattle Exposition later in the summer, I, naturally, went to see his exhibit and have a further visit with him. Becoming tired on a warm afternoon during my week's stay in Seattle, I sought a bench in the shade of a tree on the Exposition grounds. It so happened that Mr. Gillam was sitting on the bench as I approached it. We sat and visited together, exchanging views on many subjects, and enjoying the beautiful setting of the Exposition grounds, for a considerable time. Before we separated, he confided to me that he would greatly like to live in that part of the west on a farm, thereby escaping the monotonous and exacting duties of his position in Washington. In turn, I expressed a desire that I might find a way to escape the existing situation in Salt Lake and a more satisfactory and remunerative occupation somewhere in that Puget Sound Region.

When I was called to Washington from Indianapolis in the following year, I again met Mr. Gillum there. He invited me to his home for a Sunday dinner (the only Washington Weather Bureau official who ever extended an invitation of that kind to me). He had a very nice home in Chevy Chase, Maryland, which he said he could sell for $20,000, and was considering the idea of making the sale and investing the proceeds in a farm somewhere in the far northwest. He seemed so enthusiastic and happy over making such a change, I did not have the heart to discourage yet I felt he was taking a great risk. He was then middle-aged, had risen close to the top in his position, was receiving a comparatively good salary, had reared and educated a son and daughter, and had acquired a good home. I did offer a few words of caution about accepting the statements of western real estate dealers regarding land values, having observed numerous instances where advantage had been taken of gullible easterners.

Some months later, in a letter from him, I learned that he had purchased a commercial apple orchard of full-bearing age in the famous Hood River Valley of Oregon. They were located in a nice home on the property and his son and daughter were helping him care for the orchard. The purchase price was $40,000, one-half of which he had paid in cash and the other half in the form of a mortgage. He confidently expected that two or three crops of fruit would completely extinguish the mortgage because, with the help of his family, his outlay for labor would be small. How often our dreams of the future fail to materialize.

About three or four years afterward I read an item in a Bureau publication which indicated that he was then employed as an assistant in the Portland, Oregon Weather Bureau office. This aroused my curiosity and I wrote to him. He answered promptly and this was his story as nearly as I can recall it. "Unusual Weather" had been encountered and his first two crops of apples were near failures. In the meantime his daughter had married and moved to Portland to live. His son had contracted a serious disease and had died very suddenly. The shock of his death upset the mother and she became insane. This series of misfortunes prevented his

giving proper care to his orchard, nor could he obtain the necessary labor to do it. As a result, he was unable to meet his contracted obligations when due and lost his entire investment. Under these circumstances he asked for reinstatement in the Bureau and was given an assistant's position at a salary of either $1,000 or $1,200 per annum. As I left the Weather Bureau within a year of the receipt of his letter, his subsequent history was unknown to me.

Registering For Government Land Drawings

The Government decided to open portions of three Indian reservations, in 1909, to the public for settlement. these were located near Spokane, Washington; Missoula, Montana; and Coeur d'Alene City, Idaho. Registrations were to be made in each of these three cities during a designated two weeks in August. It was necessary to register in person, but unnecessary to be present at the drawings to be held shortly after the closing date of the registration. As a further inducement to registrants, the Government arranged with the railroads for excursion rates to the Seattle Exposition with stopover privileges at each of the registration points. This seemed a favorable opportunity for me to get a much needed vacation trip, and to see a portion of the United States in which I was interested.

Fred and Harriet Harker were still living in Cheyenne and I decided to urge Fred to make the contemplated trip with me. Before I found time to write a letter one from Harriet was received by us. In it she mentioned that Fred was thinking about taking the excursion trip to Seattle and the registration cities. I wrote to him at once and asked him to purchase his ticket via the Union Pacific and Oregon Short Line and have it routed through Spokane. I knew that his fare at the special low rate was only $40. for the round trip to Seattle and return. I explained that he could get to Salt Lake without additional cost by going to Ogden, then ask the Ogden agent for a free side trip to Salt Lake and return, which is permitted on all through tickets. I stated the approximate date that I could leave and suggested that he come a few days earlier, to visit and sight-see with the family while I finished my necessary work. As soon as he arrived we went to the local railroad agent so that I could purchase a ticket routed the same as the one he had obtained in Cheyenne. To my utter disgust, I learned that excursion tickets from Salt Lake to Seattle were routed only via Portland, Oregon and that a choice of routes was limited to only those coming from points east of the Rockies. I also learned that a ticket over the route desired would cost, at regular rates, more than double the rate from Cheyenne although a less distance by fully 1,000 miles. At Dr. Hyatt's suggestion and with a letter of introduction from him, I went to the office of the general passenger agent and pleaded for special consideration. He expressed sincere regret at the unusual situation but, unfortunately, the special rate and conditions were set up by the Western Passenger Association at Chicago, and he was not permitted to deviate from them. In sheer desperation I said to him that I believed my only recourse was to send to Cheyenne for a ticket similar to Fred's. He promptly and smilingly replied "If you do that, neither I nor my office would want to know anything about it". I had assumed this could not be done because travelers were required to sign the ticket in the presence of the agent from whom purchased, but his reply seemed to convey a tacit admission that such a course was a possibility.

It so happened that I was well enough acquainted with the Cheyenne agent to believe he would remember me. He was a fellow member of my Commandery and he lived only a block from our former home. In a letter to him I outlined the exact situation and the absurdity of being compelled to pay so much more than a Cheyenne resident for the same or even less service. I wrote a check for $45., had it certified at the bank, and inclosed it with the letter. I assured him that I

knew of the requirement for signing the ticket, and gave him my word of honor that I would attach my signature immediately upon receipt of it. I gave him the Form number and exact routing to correspond with Fred's ticket, and the proper ticket reached me by mail in less than three days. I tore off and destroyed the coupon reading "From Cheyenne to Ogden" and, when we started our trip, I bought a one-way ticket to Ogden at a cost of $1.00. On our return trip we separated at Pocatello, Fred taking the more direct eastward route instead of the roundabout way through Ogden. When I reached Ogden I obtained a side trip to Salt Lake and return without charge, thus reaching home for a total railroad fare expense of $46. I still had the unused ticket from Salt Lake to Ogden, and one from Ogden to Cheyenne, both good for at least 40 days afterward. A Government regulation prohibited the resale of tickets but this rule was constantly violated. Within a few days I saw an advertisement in the paper seeking a ticket to Denver. As the buyer was equally guilty with the seller, I felt there was little danger in such a transaction. I called the man and asked him to come to my office. The regular fare to Denver was nearly $20, so I offered him my tickets to Cheyenne for $7. and told him he could buy a ticket from Cheyenne to Denver for $3. This, in effect, would enable him to reach Denver at about half the usual fare. In this way I reduced the total transportation cost of the Seattle trip to $39. which, I felt, more or less evened the score with a railroad whose officials tried to foist upon me the inequitable charge of nearly $100.

Soon after dinner on a Sunday, Fred and I boarded the train and began the trip already mentioned. We reached Pocatello about 6 p.m. where our coaches were scheduled to be picked up by the through train from the east, but that train proved to be late. It had not arrived by 9 o'clock and we were beginning to be hungry. Leaving Fred to guard our luggage, I dashed up town, found a small store that was open where I was able to buy a sandwich and fried cake for each of us, then hurried back to our day coach. We ate this small lunch and washed it down with cold water, deplored its inadequacy, and little dreamed how fortunate we had been in getting even that small bit. We tried to sleep in those lowbacked seats but only succeeded in getting a few winks at intervals. When the train finally arrived it was broad daylight the next morning. It was a long train made up entirely of day coaches, every seat was occupied and some were standing in the aisles, the passengers being mostly men bent upon registering for the land drawings. No provision had been made for breakfast so we ate no breakfast, but were told that the train would stop 20 minutes for lunch at noon. When that hour arrived and the train halted, we dashed from the train and found ourselves in practically what was an open field. There was a small restaurant in a building which stood in the middle of a field and at least a block from the train. We moved toward it as fast as possible but there were hundreds ahead of us and behind us. When we got inside and up to the counter I asked what they had to eat, and the waitress said there was not a bit of food in the place. She told me that the first ones had grabbed loaves of bread, whole pies, cakes, and everything in sight. For obvious reasons we ate no dinner.

Our train pulled into Pendleton, Oregon about the middle of the afternoon where it was scheduled to stop for five minutes. Fred and I dashed across the street to a grocery but could buy no bread, cookies, pies, cakes or crackers there. The only other possible prospect in sight was a saloon which, we hoped, might be following the prevailing custom of those days--free lunches with purchased drinks. This place did not follow that custom so we ordered a glass of beer. Many of the "wets" contend that beer is a food. If so, we had one glass of food. As beer ordinarily retailed for five cents a glass, we threw down a quarter

and 25 cents was rung up. We bought two nickel cigars and threw down another quarter; again 25 cents was rung up. A lone man standing next to us was drinking a glass of beer. He heard us joking about the rates there and what had happened to us. He threw down a quarter and received no change, whereupon he asked the bartender what they charged for beer. "One beer for a quarter or two beers for a quarter" was the reply, so he shoved his empty glass across the counter and said: "Give me my other beer". We dashed back to the train.

About ten p.m. we arrived at Umatilla Junction, Oregon where we had to change to a branch line running to Spokane. Very few got off there as they apparently were going direct to Portland and Seattle on the main line. Our connecting train was not due until 2 a.m., so we inquired of the station agent where we could get something to eat. He peered out the window, then pointed to a faint light from an oil lamp in a window about a block away, saying that if we got there before the lady went to bed she might feed us. The night was black as ink and we stumbled over piles of drifted sand as we took a straight course, or intended to, towards the light which was the only one to be seen except a similar oil lamp in the station. The lady consented to cook a supper which was to break our fast of more than 24 hours. The food did not justify flowery comments but we did not choose to be choosey and ate it with relish. The coffee was as black as any ink I ever saw. We looked at it, then at each other, grinned and--drank it. When Fred asked for a refill of his cup I could not refrain from handing him a few razzberries.

My good wife insists that I tell how she tried to save us from the stark tragedy I have related. Before leaving Salt Lake she suggested that we carry a good-sized box of lunch to fortify our consuming needs during the trip. Despite her pleading we asserted that we wished to travel as aristocrats and not as immigrants even though we were on a land-seeking excursion. I have never been able to understand how some people can successfully exercise a sixth sense, while I have difficulty in handling the five that Nature provided for my use more than 70 years ago. In order to get over my skepticism about that sixth sense in others, it seems I have to learn the hard way.

We did not get away from Umatilla's dinky station until dawn, so our second sleepless night was spent on a straight-backed wooden bench in that dimly lighted, filthy, 10 foot square waiting room. Nor did we get any breakfast enroute to Spokane. We reached that city about one p.m. and hurried to a hotel where we registered and had a good dinner, our second regular meal since leaving home two days before. After a clean-up we indulged in a good nap, then fared forth in the evening to have a look at the business section. We had walked no more than a block when we discovered we were in front of the registration place for the Spokane Indian Reservation lands. The place was open that evening, much to our surprise, so we walked in and registered.

Visiting Jesse and Edna Harker at Missoula

After a good night's rest at the hotel and our business in Spokane having been completed the previous evening, we took the morning train eastward to Missoula, Montana. Fred's brother Jesse operated a shoe store in that city, and it was there that we found him on our arrival. We spent two or three days with him and his family and had a splendid visit, regretting only that Harriet, Cora, and our three little Church girls were not there, too. On one afternoon, Jesse rented a livery team and took us for a drive up the valley along the Big Blackfoot River and to various points within the City. Jesse had put up a tent in the backyard of his home where, during the warm mid-summer season, he and Donald, then a lad of seven, slept. He gave Fred and I the choice of sleeping in the house or in the

tent and, of course, we chose the latter. This gave us the opportunity of long visits late in the evening with Jesse, the conversation continuing late into the night until sleep overtook us. Before leaving the city we registered for the drawing in connection with the Flathead Indian Reservation lands. The portion of these lands to be opened had been occupied by the Flathead and Blackfeet Indian tribes. They were friendly, peaceable, and quite good farmers, and were to remain in the vicinity on reservation lands which they had already selected. This was the largest reservation of the three to be opened, and probably contained the best land for agricultural purposes.

To reach the third registration point we did not return westward over the same route we had taken from Spokane to Missoula. Instead, we elected a much more scenic but somewhat slower route. This took us over the mountain range that forms the boundary between Montana and Idaho. We left Missoula in the morning and the weather was quite warm. As we were winding our way through the mountains about noon it seemed decidedly colder and Fred remarked that the wind felt as if it was directly off a snow bank. We got our vests out of the suit cases and put them on under our coats. As we rounded a mountain peak a few minutes later there were banks of snow on both sides of the tracks. We were now across and on the western side of the divide, and could look far down into a basin-shaped valley a few miles in diameter. At one o'clock the conductor came into the car and stopped to chat with us. He pointed to a small town across and at the bottom of the valley, and said it was seven miles from us and that we would reach it in three hours. He then pointed out that the tracks circled this valley three times, and we could see they were several hundred feet apart on the steep sides of the mountains. Interesting canyons or draws were spanned with trestles, and there were several miles of snow sheds through which we passed. These were necessary as a protection against snowslides which are numerous wherever mountain sides are steep. We reached the little town about four o'clock and continued on down a narrow valley. The valley was so narrow that some of the towns had only one or two rows of houses on each side of the tracks, the perpendicular mountain walls forming the rear lines of the dooryards. About six o'clock we arrived at the City of Wallace where we remained over night, as we were to take a different route from there in the morning. The valley was nearly a mile wide at this point, and the city extended to the edges on both sides and even for a short distance up the sides where not too steep. The front yards of some houses were higher than the roofs of the houses directly in front of them. Some years ago we read in the newspapers of a series of great snowslides that occurred at Wallace and other towns in that valley. Many homes were buried and many people lost their lives. From my word picture of this region, perhaps the reader may better understand the serious consequences resulting from such a disaster.

We left Wallace in the morning and in two or three hours we arrived at a town named Harrison. This was on the eastern side and not far from the southern end of Coeur d'Alene Lake. Here we took a steamer for a two or three-hour ride up the lake to its northern end where the City of Coeur d'Alene was situated. This was a beautiful lake surrounded by pine and fir timber, and containing many small wooded islands. Coeur d'Alene City appeared to be an important lumbering town as there were a number of large sawmills along the water front and many logs in the water which had been towed up the lake by barges. We made our third and final registration in this city, then went on to Spokane via an interurban line in the late afternoon.

In addition to each of our three chances in the drawings, I also had my father's proxy and had made the three registrations for him also. This was pos-

sible because he was a Civil War veteran. He neither had to register in person nor live upon the homestead in case he was successful in the drawing, whereas Fred and I would have to live upon the land five years to homestead any claim that we might draw. This gave us a total of nine chances but the number of registrants was so large that we only had one chance in 300 for the Spokane reservation; one chance in 160 for the Coeur d'Alene reservation; and one chance in 30 for the Flathead Reservation. We subscribed for a Spokane newspaper in order to get the published lists of the winners in the drawings which were to be held about a month later. Washington, D.C. officials superintended the drawings and had a blindfolded girl draw names from a barrel. The first name drawn had first choice, the second name had second choice, etc., until enough names were drawn to equal the number of claims in the reservation. Some additional names were drawn to allow for those who failed to take their claims. After the drawings I scanned the long lists of winners for each reservation, but none of our names appeared in any of the lists so we had no worries about becoming farmers in that section of the United States.

The Seattle Exposition

Our trip from Spokane to Seattle was relatively uneventful. We passed through the famed wheat-growing region of eastern Washington, the important apple-growing section around Wenatchee on the Columbia River, and the Cascade Mountains. The site of the Fair was on an Island in Lake Washington, just at the outskirts of the City, and in a very beautiful setting. With the exception of two days, our week in Seattle was spent here. We spent one day looking over the business district of the city and doing a little shopping and one was utilized for a trip to the U.S. Navy Yard at Bremerton. This was located on the western side of Puget Sound and nearly opposite Seattle which is on the eastern side. The trip across the Sound, a distance of a dozen miles or more, was made by steamer. This is an exceptionally beautiful body of water and there were many wooded islands along its western shore. Behind these islands were bays of considerable size in one of which lay the course to the Navy Yard. Looking westward from the Sound nothing was visible other than mountain slopes thickly studded with fir timber, and there was nothing to indicate that one of our Country's largest navy yards lay hidden well beyond the islands in front of us. Bremerton was a nice, clean town spread along the bay shore. Back of it on an elevation were the homes of the navy officers, and numerous barracks at the edge of the town housed the sailors. We saw a large vessel undergoing repairs in one of the huge drydocks, and we were permitted to board and inspect one of the big battleships in the harbor. A fine marine band played on the deck during the noon hour. The decks and all the vessel's machinery were kept in spotless condition. The day spent here was highly instructive and one of the most pleasing of our entire trip.

Featured at the Exposition were the industrial and agricultural products of the Pacific states, Alaska, and the Western Canadian Provinces. The largest vegetables I have ever seen were on display there and were grown in Alaska; their enormous size was almost unbelievable. Canada's exhibits were unusually attractive and impressive, and that Country made strong bids for colonists and technically skilled labor. A railroad was to be built from Edmonton to the Pacific coast. At that time, Prince Rupert consisted of a couple of grocery stores, half a dozen saloons, a sawmill or two, and houses for its population of 200 people. It has one of the finest harbors on the Pacific coast and a very mild climate. As an inducement to obtain American engineers, Canada offered to pay their transportation, furnish board, and pay each twice the salary he was receiving in the U.S.A. The railroad was to be built through the Peace River Valley, a very rich

agricultural country yet to be settled and developed. On my return to Salt Lake, I immediately resumed my engineering course or that portion of it which related to mapping and surveying. I hoped, by so doing, to qualify as a surveyor by the following spring and be ready to apply for a position with that projected railroad. Canada's homestead laws were much easier than those of the United States, and it would not be difficult to secure an entire section of good land in the Peace River Valley. Also, was the alluring prospect of profitable investments at Price Rupert. Some years ago I read that City had a population of 30,000 and still growing rapidly. Whether good or bad, these intentions of mine were circumvented by a chain of unexpected events which occurred soon after my return to Salt Lake.

On our return from Seattle we made a 3-day stop in Spokane. Although we had spent two nights in that City, we had seen nothing of the interesting sights there. These three days gave us the opportunity to investigate some of the available business prospects, and to look over a city which offered many desirable features as a place to live. We visited the Weather Bureau office there and the official in charge gave us much information about the subjects in which we were interested. At the end of the three days we boarded the train and returned to our respective homes, feeling that we had spent 15 days in a most enjoyable and profitable way.

A TURN IN THE TIDE OF MY AFFAIRS--Chapter XXII

A short time before our trip to Seattle, probably early in July, 1909, an official from Washington arrived in Salt Lake. He was acquainted with Dr. Hyatt but I had never seen him before nor can I recall his name now. I believe he had a relatively high position in the Forecast Division. He was a bachelor and nearly 60 years of age. On his arrival at the office I showed him into Dr. Hyatt's room, and he visited with him for about an hour. He then returned to my room and began visiting with me. A man came in about that time to collect a bill from Dr. Hyatt and went into the Dr.'s office. When he did not return as soon as I thought he should I decided to investigate. I found he had signed the required voucher and sat patiently waiting for the pay which the Doctor had forgotten to give him. After straightening out the matter I returned to my visitor and explained what had happened. He had already given evidence of concern over Dr. Hyatt's mental condition, and I casually mentioned that I had to be continually attentive to his business affairs such as the case he had just observed. He was noncommital as to the purpose of his visit but I felt it must be to investigate the situation existing in our office. When noon arrived Dr. Hyatt called me into his office and said, that as he was physically unable to entertain our visitor, I was to take him to lunch at a good hotel and show him about the city for which he would reimburse me. Accordingly, I invited him to lunch with me but when we reached the street he insisted that he did not wish a heavy meal at a hotel but a light lunch at a small restaurant instead. We discussed, during the meal, the conditions at the office, and I gave him a historical review dating back to the beginning of the Doctor's illness more than a year earlier. He asked numerous questions but offered no comments as to his personal reactions. After lunch I invited him to go to Saltair with me which afforded a further opportunity for conversation and acquaintance. Because of his age and sedate bearing I was uncertain about suggesting a swim at this popular resort, but he readily assented when I timidly offered the suggestion. Later he told me he had enjoyed that afternoon more than any he had experienced in many years. Before his departure on the following day, I

told him I hoped he would not be too severe in reporting his findings of the unusual situation at that station. Even this brought no response as to which way the wind was blowing in his thoughts. I was hopeful but far from confident of what was in store.

Nothing was heard from Washington prior to my departure on the Seattle trip, but upon my return there was a notice of promotion waiting for me. It provided an increase in salary from $1,200 to $1,400, effective August 1, and my designation was changed from "Observer" to "Section Director". The new title implied that I was eventually to be placed in charge of the Mississippi Section Center located at Vicksburg, but other arrangements had since been made for that station (for which I was truly thankful). It stated further that I was to remain at Salt Lake as assistant until another opening developed, and that I was being made Division Editor of the 10th Climatological District. It had recently been decided at Washington that the Monthly Weather Bulletin no longer would be published by states, but by watersheds, instead. For this purpose, the country was divided into eleven districts corresponding to the major watersheds. The 10th District embraced the Great Basin, which included the whole or parts of eight states. This crazy and impractical idea involved the publishing of data for all stations within the district in one publication, which divided the data for many states between two or more districts, destroyed state averages, and caused many other disruptions. New tables had to be set up, and the various section directors had to transmit data and summarize for portions of their state to the proper District Editors. Thus I had the task of organizing this complicated system and prepare the tabular data and weather summary text for an entire District. I had only completed the organization and written one or two monthly summaries for the District publication when my transfer occurred. Portions of Indiana were a part of three different drainage districts and, after my transfer to Indianapolis, we sent area data and summaries to three different District editors in other states. Congressmen and other interested persons and companies frowned upon this innovation of the Weather Bureau, and the system was abandoned after an existence of only a year or two. Thereafter each State's reports were published as separate units, by the respective section directors, as had been done throughout the years before this brain storm hit Washington officials.

Dr. Hyatt's Retirement Ordered

For several months prior to these latest events Dr. Hyatt had permitted me to open the mail and attend to whatever business matters and instructions it contained. Each morning upon his arrival he would ask if there was anything of importance in the mail. Within a day or two of the time my August 16 letter arrived, a letter was received stating that he was being placed on half pay and required to work only three hours per day. (This was a sort of retirement plan adopted by the Bureau in the absence of any official Government provision for retirement). The letter also stated that I had been placed in charge of the Salt Lake office in his stead.

I showed the letter to Alter and told him he was to take Mrs. Hyatt, in case she came with the Doctor, into his office, close the door, and break the news to her as gently as possible. I did this because of her tendency to become hysterical over anything affecting their financial condition, Alter's greater influence with her, and of my desire to have the Hyatts separated until the first shock had passed. They arrived within a few minutes and Alter proceeded promptly to carry out my instructions. The doctor, in his customary breathless condition, slumped into the nearest chair in my office. When he had recovered his breath he made his usual inquiry about the mail and I handed the letter to him. He read it

through very slowly then said: "I have been expecting this". That was his only immediate comment and he appeared to be quite resigned to this sudden turn of events. I even suspected that he really felt relieved to be freed of official responsibility. A moment later Mrs. Hyatt burst into the room, sobbing: "Oh Papa! What will we do now and what is going to become of us?" The Doctor turned his head in her direction and drily remarked: "Maybe we can set up a peanut stand down on the corner". This brought a laugh from Alter and me and served to relieve the tenseness to a considerable extent.

My Transfer to Indianapolis Ordered

The rapid succession of events I have related was not yet at an end. On or about August 31 a telegram was received from Washington reading about as follows: "Your assignment to Fresno in letter___date cancelled. stop. Upon being relieved by A.H. Thiessen you will proceed to Indianapolis and assume charge of that station". An atom bomb could have been more disastrous but little more exciting than that telegram to me. The letter notifying me of my assignment to Fresno did not arrive until two or three days after receipt of wire cancelling that order. I felt the Fresno station would have been desirable, it being the center of the commercial grape-growing section of California, well situated from a climactic standpoint, and having a grade eqivalent in salary to the one I had just attained. However, Fresno was not a section center, which would not have fitted with my new title of section director, nor with my several years' experience at section centers. I had never entertained any hope of becoming the official in charge at Salt Lake city because its rating was still two grades above my recent promotion, but more mystifying now was the fact that I was being placed in charge of a station of greater importance than Salt Lake and which carried a rating three grades above my own. a reasonable interpretation of this action lent encouragement to the possibility that my advancement in the future would be more rapid than it had been in the past. A letter confirming the wire and giving further instructions was received two or three days later. Because of the much higher freight rates on household goods from western to eastern points compared with similar shipments in the opposite direction, and because our furniture had suffered much in our numerous moves, we decided to sell it in Salt Lake. Furniture was much higher in price there than in the east, and we found ready sale for the most of it at very good prices. A few pieces brought even more than we had originally paid for them.

The announcement of my transfer and advancement to more important responsibilities resulted in generous writeups in the various Salt Lake papers. Immediately afterward, while delivering the daily weather report to one city editor, he asked for a recent photograph of myself. I told him that the only one I had was unsatisfactory to me, and asked for a little time in which to have a new one taken. He said he could not wait because he had received a request for it by wire from an Indianapolis paper. When I continued to plead for further delay, he told me that if I failed to supply him one on the following morning he would substitute another's picture that would bear some degree of resemblance and send it instead. I lost no time in getting my only available photograph to him the next morning. Later, I obtained a clipping of the story in the Indianapolis paper. It was an excellent one and is still on file somewhere among my possessions. Immediately after the arrival of my successor, we bid farewell to our Salt Lake friends and boarded an eastward bound train.

A FEW COMMENTS ABOUT THE MORMONS

Many books have been written concerning the origin, history, and beliefs of the Mormon people. There are at least three of them in my library from which a reader can obtain much information on the subject. One or two others were loaned to friends and never returned. I do not have the time, capacity, or inclination to discuss this almost inexhaustible subject and its lurid ramifications, so will limit myself to a few random remarks inspired by vocal and printed statements during our residence in that Mormon city. I scarcely heard any statements on the street tinged with religious prejudice. Mormons and Gentiles outwardly appeared to live and transact business together in harmony. As I became better acquainted I found occasional instances of smouldering fires of antagonism. Within a few weeks after my arrival in the City I attended a Masonic banquet. There were several hundred present and a number of prominent persons were slated to speak on the afterdinner program. I was somewhat surprised to hear these speakers vehemently denounce the Mormons. At the conclusion of the meeting I inquired of a member near me why this feeling existed among Masons against the Mormons. His explanation was that one or more members among the founders of the Mormon faith, possibly Joseph Smith or Brigham Young, had been a member or members of the Masonic Lodge in some eastern state before coming to Utah, had violated their Masonic pledges by appropriating many of the secret rites of Masonry and using them in a Mormon secret order known as the Endowment House. He also told me that some of the principal Masonic emblems could be seen on the stone work of the Mormon Temple, and these were later observed by me.

A few months later, Jesse and Edna Harker came from Missoula to visit us. Jesse was deeply interested in Masonry and was active in the Commandery at that time. I told him what I had heard of the traitorous conduct of the unknown founders of the Endowment House, and also that I understood a complete expose of the Mormon secret ceremonies had been published a few years earlier. Jesse was much interested and requested me to locate a copy of that expose and, in case it could not be bought, to hire a typist to make a copy of it at his expense. Upon inquiry I learned that it had been published by the Salt Lake Tribune in booklet form. I went to the office of that paper, found that only a single edition had been printed, and that the supply had been exhausted some ten years before. When I mentioned the matter to Alter he informed me he had a copy but that he would not part with it for any sum of money. However, I obtained the loan of it and transcribed its entire text at home on my own typewriter, making several carbon copies. One was sent to Jesse and the others are in my desk. Appended notes established the authority of the text by quoting its source. Any reader, if he be a Mason, can decide for himself the degree of plagiarism involved and the reasons for excluding Mormons from Masonic lodges.

When Tullsen moved to Salt Lake, he rented one side of a double house, the other side being occupied by the owner, a Mormon. While cleaning a clothes closet, preparatory to occupation, Tullsen found a bundle left by the previous tenant. It contained a black robe apparently of some value, so he turned it over to the house owner and suggested he deliver it to the former tenant. When he saw the garment he remarked he was glad to have it in his possession because the owner of it would certainly return when the loss was discovered He told Tullsen that it was the Endowment House robe which was supposed never to leave the owner's possession, lest he meet with calamity or evil, and he proposed to hold it until some unpaid back rent was forthcoming.

Tullsen was a voracious reader and possessed a thirst for knowledge. He

bought an anti-Mormon book and, after reading it, asked me to read and give my opinion on its contents. It described so many terrible and criminal acts perpetrated by the Mormons that it was difficult for me to believe, so I suggested that he and I make some inquiries of old residents. I recalled that the lady who kept the rooming house where I staid during my first weeks in the city had intimated that she knew a great deal about the Mormons as she had lived her entire life in the City. I went to see her and questioned her about the things I had read. She verified all of them and added many missing details. She said her parents had owned the entire block upon which the rooming house stood, but Brigham Young appropriated it to himself without payment being made. According to statements in several books I read, he took any real estate or other property he desired. She also verified the incident of the Mormons parading and dragging the U.S. flag in the mud some 15 years before. I asked her whether Bill Hickman had been a real person or merely a legendary character. She stated that many persons in Salt Lake had known him well, that his brother had been their family's physician, that he was still alive and practicing in a small town near Salt Lake, and that he was a fine man. According to the books I had read, Bill was Brigham's agent in disposing of aggressive enemies and doing any other dirty work ordered by him. Bill had been a keen horse trader, and often acquired a fine driving horse. Brigham liked that kind of horses and admired one that Bill was driving; so Bill promptly presented it to him. Afterwards, when Bill acquired a particularly fine horse Brigham would order it placed in his private stable without paying for it. After this happened several times, Bill finally demanded payment for the horses and was bluntly refused. He then broke with Brigham and immediately became the hunted instead of the hunter. Very soon the U.S. authorities arrested Bill on a murder charge and he was confined at Fort Douglas. He made a statement to the Grand Jury of all the crimes he knew about thus involving many persons. Thereafter he was content to remain at the Fort and be safe from reprisals of enemies thus made. I cannot recall his ultimate fate, but he wrote his personal history while confined there. He had become very friendly with the officer in charge and turned his manuscript over to him, with the request that it be kept confidential while he lived and published after his death. This was done, the book being entitled Brigham's Destroying Angel. A copy of it is in my library.

The Salt Lake Tribune was a distinctly anti-Mormon newspaper. Not only did it publish whatever news might be derogatory in the Mormon church and hierarchy, but its first editorial each day was a blast at Mormonism. A cartoon on the editorial page daily depicted the short-comings of that institution. I understood these had been daily features of that paper since it was founded. Before leaving Salt Lake I learned the reason. Many years before the editor had published a paper in Kansas City in which he berated the Mormons before they were driven from Missouri. This incensed the Mormons and his son suddenly disappeared. After a time his body was found in a creek weighted down with stones. The father then vowed he would devote the remainder of his life to crusading against the Mormons.

There were two political parties in Salt Lake City. The Mormons comprised what was termed the Republican Party, while the Gentiles were known as the American Party. While we lived there, the latter had a slight edge over the former in numbers hence the city administration was in the hands of the Gentiles. However, the Mormons controlled the county and state offices which included all of the courts excepting only the municipal and police courts. There were some prominent Mormons in the City who continued to practice polygamy and maintained two or more separate households. Aggressive city officials caused some of them to be arrested

for that offense, but when taken to court they faced a Mormon judge and a Mormon jury, hence there were very few if any convictions. I asked a number of Mormon acquaintances about their views on polygamy. The almost universal answer was that they firmly believed in it but did not practice it because it had been decreed in the statutes as unlawful. We took our visiting friends to the Tabernacle on numerous occasions to see its interior and to hear the great organ. On one occasion there was a considerable group of tourists who, with ourselves, were shown through the building and its principal features pointed out by the guide. He then seated us in a group, gave a history of the Tabernacle's and organ's construction, and added some glowing compliments for the Mormon faith. Then he invited his audience to ask questions. One lady, evidently from an eastern state, boldly asked how they could defend the theory of polygamy. He quickly and sneeringly answered that Mormons believed in caring for their wives, while, in other parts of the country, men had just as many wives but supported only one. Much of the Mormon lay membership was above reproach, but it is the system and its leadership that cannot be condoned by us.

INITIAL EXPERIENCES AS A SECTION DIRECTOR--Chapter XXIV

Our departure from Salt Lake was accompanied by mixed feelings of regret and pleasure. We had come to love the west--its people, its local customs, its wide open spaces, its splendid climate, its beautiful scenery--which made it difficult for me to turn my back upon these abundant blessings. Facing the east, we could envision improved social, economic, and educational opportunities, and live much nearer to relatives and long-time friends.

We chose the Denver & Rio Grand route to Denver in order that we might see the almost continuous mountain scenery through Colorado including the famous Royal Gorge. We had a tedious wait at the Salt Lake station because our train was several hours behind schedule. It continued to lose time as we proceeded, so, instead of arriving at the Royal Gorge in the late afternoon as expected, we passed through it between 11 p.m. and midnight. I tried to get a glimpse of it from the window of our berth but could distinguish nothing in the gloomy darkness. Near noon of the following day we crossed the great divide at Tennessee Pass at an elevation of 10,200 feet. We stopped a short time at this point. Although it was early September and distinctly summer weather, there were a few inches of snow on the ground and many of our fellow passengers indulged in a snowball battle. I was well content to remain in my seat because of the altitude's effect and doctors' warnings. We did not reach Denver until the following morning which stretched the 24 or 26-hour trip into one of nearly 40 hours, and requiring two night on the train instead of the usual one. To add to the discomfort our trio of girls was car sick which kept us, the porter, and dining car waiters more or less occupied with nursing duties.

At Denver I reluctantly parted from the family; Cora and the children going north to Cheyenne to visit Fred and Harriet and then eastward to visit her relatives in Iowa; while I continued eastward to Indianapolis.

The Indianapolis Office and Personnel

The Weather Bureau occupied a suite of five or six rooms on an upper floor of the Majestic Building. The ground and adjacent floors were occupied by the Indianapolis Gas company which owned the building. The weather instruments were located on the roof of this 10-story building and offices occupied one-half of the 9th floor. We were far above surrounding buildings and the rooms were light and airy while the building itself was within the edge of the main shopping dis-

trict. There was a chandelier containing both gas and electric outlets in each of our office rooms. One had been used for lighting purposes over a long period of years, but a shift to electricity had been effected, not more than a year or two before my arrival, in response to needs for individual desk lights. Evidently this shift was resented by the gas company, for, instead of installing the usual wall plugs, it simply had attached drop cords to the chandelier sockets and suspended the cords over the desks by means of strings attached to screw eyes in the ceiling. When one looked down through the suite of rooms, there was an apparent similarity to a group of clotheslines strung in an attic. It is certain there were enough of these electric cords to accommodate a two-weeks wash for an oversized family. Before I had been in the office more than an hour or two, I announced that these cords would not be allowed to remain very long. Within a few days I called upon the gas company's manager, asked that the cords be removed, and that wires be installed in the walls and connected with wall plugs near each desk. He displayed extreme reluctance toward my request and gave only a very weak promise to consider the matter. When three or four weeks had passed without any visible action on his part, I sent an official letter to the gas company, demanding compliance with my request and stating that failure to do so would be a violation of the terms of our lease. This brought the manager to my office in a hurry. When he demanded to know in what way the lease would be violated, I read a section from it that guaranteed the office would be maintained in a condition comparable to that ordinarily prevailing in modern offic buildings. I realized I was placing a very narrow interpretation on a rather broad statement, and that no court would likely decide favorably to my argument. However, it had the desired effect, the wires came down, and boxed-in conduits were run from the tops of the chandeliers along the high ceilings and down the walls. Some changes in the arrangement of desks and tables were made at the same time which improved the appearance and convenience of the office.

The office staff consisted of the following: Albert V. Randall, First Assistant; H. Merrill Wills, Second Assistant; Lawrence L McWhorter, Printer; Fred Ackelow, Messenger; Laura M. Day, Stenographer; and Wm. T. Blythe, a half-pay half-time employee in a retirement status similar to that of Dr. Hyatt at Salt 1Lake.

Randall had been in the service about ten years, a trifle slow but dependable in his work, and would rate as having average ability. He had reached the $1,000 grade a few years earlier and felt keen disappointment because he had not been accorded further advancement. He was about 40 years of age and a bachelor. He was resentful against receiving direct orders, and inclined to be somewhat crusty and short spoken in demeanor. Perhaps my higher status at a lesser age and shorter service was no inducement towards improving his disposition. We managed to get along together very well and never had any serious arguments.

Wills had been in the service only about six months and had acquired considerable knowledge of the work. About six months after I assumed charge of the station he was transferred to Peoria, Illinois. Later, he was sent to New York City where he remained for a number of years. After the death of Dewey Seeley in East Lansing, Wills became the Section Director for Michigan and is still serving in that capacity.

McWhorter was a good printer, a likable fellow, and possessed average ability. He printed the Monthly Weather Bulletin for Indiana, the daily weather map, forecast cards, and whatever special forms we used. In addition, he assisted with the observations and keeping of records. He retired several years ago at the age of 70 and then set up a small printing business of his own to supplement his re-

tirement income. Fred Ackelow, a German boy, had served as messenger for a number of years. He was an excellent and willing worker and could perform any and all of the various office duties. He sought every opportunity to go on personal errands for us and do any other possible favors. He was afflicted with a pronounced inferiority complex that reached painful proportions at times. I encouraged him to prepare for and take the Civil Service examination for Observer. This he did and became our second assistant. He is still in the Indianapolis office and will have had nearly or quite 50 years of service if, and when, he reaches the retirement age of 70. I appointed his successor as messenger in the person of John Jacob Joseph Smith, a bright Catholic boy in knee pants. He proved to be an excellent employee and is still connected with that station. He is now the official printer and, at the last count, had a family of five children.

The Weather Bureau, at that time, did not provide stenographers in field offices. Officials were expected to type their own correspondence and reports, and this I had done throughout my years of service. Naturally, I was somewhat elated at the prospect of possessing the only stenographer in the service outside of the Washington office. No doubt this fact magnified the shock of the disillusionment I was destined to experience. Miss Day had obtained an appointment in the Weather Bureau back in the nineties through political influence and outside the Civil Service. She had previously picked up a knowledge of stenography but, the Weather Bureau, having no authority for stenographers in the field service, was given the title of Messenger. She had served on several important stations where the officials in charge could utilize stenographic services to good advantage. It became apparent, however, that each of these officials had shunted her to some other station as soon as possible. She had been in the Indianapolis office several years, perhaps having been assigned there through a request from Mr. Blythe for a stenographer as he was not a typist himself. She was slow and erratic in taking and transcribing her notes, and her letters were far from creditable. She was around 50 years of age, sharp-tongued, crabby, complaining, and all other adjectives in the dictionary. she continually nagged me to get an increase in salary for her, but the other members of the staff agreed wih me that, although she received only a messenger's salary, it was all or more than she was actually worth.

Mr. Blythe was a gentleman of the old school and a character unto himself. He was a veteran of the Civil War having served as a telegraph operator in the Signal corps. He was with General Grant in the Mississippi campaign and took part in the siege of Vicksburg. I believe he held the rank of Captain when the war ended. He continued with the Signal corps and, when the Weather Bureau came into being about 1870, he was transferred to that branch because of his telegraphic ability. He had been in charge of the Indianapolis office for many years and had attained a salary rating of $2,000. which, at that time, only a very few other Section Directors had reached. He and Randall had clashed on numerous occasions, perhaps as a result of somewhat similar personalities. Their differences reached the ears of Washington officials, and resulted in some black marks being entered on Randall's record and the retirement of Mr. Blythe. The arbitrary removal of the latter from his position of responsibility seemed rather drastic in view of the fact that he was only about 65 years of age and in good health. Therefore, it was with some trepidation that I assumed charge of the station he was involuntarily relinquishing but with which he was to retain a connection. Neither was it lessened when I learned that all except two of the staff were older, both in age and length of service, than myself. However, Mr. Blythe greeted me with cordiality on my arrival and our relations were harmonious throughout the five years

that we were together.

Upper Air Research

Prior to my arrival, the Indianapolis office had been notified that it was to participate in a series of experiments with sounding balloons in upper air research. Mr. Blythe already had arranged with the city for the use of a small building in one of the public parks for storing supplies and equipment, and permission was obtained to conduct the experiments from that location. Two men from Mt. Weather, Virginia arrived about October 1, to handle this task; one was H.A. Marks, and the other a Mr. Sherry. As I had been in the city only three weeks and my family was not expected to arrive until November, I was staying in a down town rooming house. I worked each afternoon at the park with these men and, as they were near my own age and had a room not far from my own, we spent our evenings together and became very good friends.

The basic plan was to send up a balloon at three points: Mt. Weather, Indianapolis, and Omaha, each afternoon that the weather was satisfactory at all of these three places. This made it necessary to have the balloon filled and ready for dispatching at 3 p.m. each day. However, they were not to be released unless an order was received by wire from Washington. This was to avoid wasting equipment if weather conditions were unfavorable at another cooperating station.

The balloons were made of high grade rubber and were capable of being inflated to a diameter of eight feet or more, but, as the opening was to be closed before launching, they were to be inflated only to a diameter of six feet thus allowing for expansion in the rarified upper air. The gas used for inflating purposes was hydrogen which we manufactured by mixing iron pyrites with acid. After securely closing the opening in the balloon a small parachute was attached to it. A wicker basket was suspended by the cords of the parachute, in which was carefully packed a barograph to record the atmospheric pressure and other instruments to record temperatures. The balloon was to carry the instruments upward until the air became so rare that that pressure of the expanding gas would burst the balloon, and the parachute was to bring the basket of instruments gently and safely back to earth. a theodolite was used to determine and record the course of the balloon. It consisted of a telescope mounted on a tripod with vertical and horizontal scales. One person kept the telescope trained on the balloon while another read and recorded the altitude and direction in degrees. The first read-ings were made at intervals of one minute but, when the balloon had reached a distant position and variations in readings became slight, they were made less frequently. The balloons usually remained in view for at least an hour and a few could be followed for two hours or more. Of course the unaided eye lost them in much less time. Strange to relate, more than 90% of the instruments were ultimately recovered. A very few came down in Indiana but the majority went much farther eastward. One of ours came down in Virginia and another in New Jersey, both not far from the coast. A card in each basket instructed the finder to forward the basket to Washington by express and he would receive a reward. When I was in Washington the following year I asked to see the records obtained from these experiments. They disclosed that one Indianapolis balloon, not only attained the highest record for the three stations, but had made a new world's record up to that time. According to my best recollection the altitude reached in that instance was more than 13 miles. While the ground temperature was between 70 and 80 degrees, three miles above it was below zero, and at the extreme height reached it was 30 degrees below. I regret I was unable to find the printed official report of those experiments during a recent search of publications in Weather Bureau files, hence the facts may vary slightly from the figures given.

Those experiments produced the first authentic information concerning upper air conditions, yet, when compared with present day experiments with greatly improved equipment, they seem trivial and sadly outmoded. From the data we obtained, some keen scientists predicted that the cold layer of air probably extended a distance of 30 to 50 miles upward, beyond which there undoubtedly was a layer of much warmer air. Just in recent weeks, a newspaper account of recent experiments with rockets carrying instruments and automatically radioing the readings to persons on the ground, it was found that the maximum cold was at a height of 35 miles and above 55 miles the air suddenly became much warmer. I believe one rocket reached an altitude of 110 miles where a temperature of 170 degrees was encountered, while at 35 miles it was 70 degrees below zero.

Membership in the Chamber of Commerce

Soon after my arrival in the City a friend took me to lunch at the Indianapolis Commercial Club. The membership consisted of several hundred business, industrial and professional men. It owned a fine large stone building of which it occupied two floors and leased the others which produced a very substantial income. The greater part of one floor was used as a dining room where its members ate their noon meal quite regularly. The food was excellent and table service was by colored waiters. To my surprise these full meals cost only 35 cents. Unlike similar organizations in other cities where I had lived that charged membership fees of $100. and annual dues of $50. or more, a membership here cost $15. plus a $10. share of stock and annual dues were either $10 or $15 a year. Mr. Blythe wanted me to buy his share of stock as he no longer needed to get down town or maintain a membership under his changed status. I bought his stock and became a member and continued it throughout my stay in the city.

The membership grew rapidly until it was decided to break it up into groups such as industrial, wholesalers, retailers, professional, etc. The name was then changed to the Indianapolis Chamber of Commerce. At the annual election of directors, the city's voting machines were used and there were some lively contests. A director chosen as chairman of the membership committee managed to double the membership, from 400 to 800, during his year in that position. As a reward for that feat he was promptly elected president of the Chamber for the following year. The chairman who succeeded him determined to do likewise. He succeeded in bringing in the 800 new members and likewise was advanced to to the presidency. In the following year Oscar Pond, and excellent attorney and a close friend of mine, was elected chairman and he insisted that I serve as a member of his committee. I asked him if he intended to again double the membership and he said he was going to make a desperate effort to do so. However, the high pressure methods used during the preceding two years had resulted in some loss of membership, so that the total membership at the beginning of our year was 1,250. The committee was divided into pairs, each pair going together to interview prospects. I was paired with Oscar himself and through those interviews I met and became acquainted with many men of varying degrees of prominence. One of our early prospects interviewed was Carl Fisher, president of the Prestolite Company, owner and promoter of the Indianapolis Speedway, and presumably worth many millions. We had no difficulty in securing an interview but were less successful in convincing him that a membership in the Chamber of Commerce would be to his advantage.

The master of my Masonic lodge in 1909 was the secretary of the Chamber of Commerce. Many of my lodge brothers, being business and professional men, were also members of the Chamber of Commerce and dined there quite regularly. We fell into the habit of taking seats at a certain large table which accomodated about 20 people. We dubbed this the Landmarks table after the name of our lodge and all

the chairs were usually filled by its members each day. While some of the faces were different from day to day, we were all acquainted with each other and enjoyed these noon hours together. Nowhere else in my travels did I ever find such good and wholesome fellowship. Once a week each group adjourned to a private room after lunch and listened to some prominent speaker. On one occasion our group had Tom Marshall for its speaker. He was Indiana's governor at the time and later became Vice-President of the United States. He was a Mason and an all-round good fellow. He told us that day that he might not be able to recognize or call each of us by name, but asked that whenever we saw him on the street or elsewhere he wanted us to walk up and speak to him. Indiana had no Governor's mansion at that time but paid about $250 per month rent for a large house instead. When Tom came to Indianapolis he rented a small apartment for $75 a month and refused to accept any rent from the State, saying he saw no reason for it to pay his rent bills. He also is the one who said what America needed more than anything else was a good five-cent cigar.

Our Home In Indiana

When the family arrived around the 1st of November, 1909, I had already rented one side of a double house on North Illinois St. near 35th St. Our first task was to select and install new furniture. I asked Mr. Blythe to recommend a reliable and reasonably-priced furniture store. He, being an Irishman and a Catholic, recommended Feeney's of like nationality and religion. We made our purchases there from a clerk whom I discovered was a Mason. He invited me to attend his lodge and was introduced to the officers and many members by him.

Within a few months we decided to buy a home, and I found a suitable location in Meridian Heights that was for sale. The owner wanted $4,000, a price that I felt was much too high and refused to consider it. Finally they offered it to me for $3,600. and again I refused. When pressed by the real estate agent to name my price, I mentioned $3,000. After a lapse of two or three weeks he managed to get the owner's offer down to $3,200, then I offered to split the difference. Finally, my offer of $3,100 was accepted and the deal closed. This was a 7-room square house of frame construction, situated on a slight rise of ground, with a considerable number of vacant lots around it. Our lot was an acre and a quarter in size, had about 20 bearing fruit trees, a chicken house, and ample garden space. It was five miles from the office, one block from a streetcar line, and within three or four blocks of several stores. There was a 2-story brick school house and a nice brick church within three blocks. This local community probably had at least 1000 people at that time, and was located just outside the city limits. Reverend Alfred Martin was the minister at this church and we liked him very much. A good choir was organized and a director was employed. I sang in the choir and Cora alternated with Mrs. Dr. Dow as church organist during most of the four years we lived in that community. We acquired many good friends and thoroughly enjoyed our stay in that fine neighborhood. Riding the streetcar daily my neighbors enjoyed razzing me about the weather in good fun, and I became known to most of the patrons as the "Weather Man". In this way I became acquainted with hundreds of fine people along the entire route even though many of them lived several miles distant. On numerous occasions I saw James Whitcomb Riley while being driven by his chauffeur in the vicinity of our home. He had suffered a stroke only two weeks after my arrival in the city and never made any public appearances after that. He was greatly loved by the people of Indianapolis and his birthday was celebrated each year by the schools. I believe two children were selected by each school and these went together in a group to his home on that day and paid their respects to him in person. When Jessie was in the 8th grade

she was one selected for that unusual honor. She and many others in the group each wrote a verse as a card and presented it to him. a few days later each received a card with a verse engraved on it over his signature as a return favor.

Organizing a Building and Loan Association

One of my good friends and a close neighbor was Carl Dow. He operated a loan office in the city and loaned money only on real estate second mortgages. The interest rate on such mortgages was not limited by law hence a much higher rate could be charged than the legal rate on first mortgages. In addition, a commission could be charged for making them and, as they were made payable in monthly installments, the returned installments provided additional investment capital and further increased the interest earned through its compounding effect.

Carl suggested that we organize a neighborhood building and loan association, as he could provide us with selected first mortgage loans from among the applications coming to his office. Accordingly, we organized the Meridian Heights Building and Loan Association with Carl as president and myself as secretary. When enough money had been accumulated through monthly deposits we loaned it on a first mortgage. Carl made out the necessary papers without charge and also turned into the treasury of the association the commission he had collected for making the loan. This enabled us to pay a dividend to our stockholders at the end of the first six months of business, an almost unprecedented action among such associations. The state inspector of building and loan associations gave us the needed information for setting up the proper accounting system. He inspected my books at the end of each year and always found them in correct order. The Association grew rather slowly as none of us had much time to solicit members, but we were able to continue the dividends regularly, and I retained the position of Secretary until we left the city. While thus intimately associated with Carl I had the privilege of presenting his application for membership in the Shrine. He was elected to membership and I had the privilege of witnessing him "Cross the hot sands of the desert". He remained a member of Murat Temple, as I have done, and in the last issue of its monthly magazine, received only a week before this is being written, I noted he had joined the "Black Caravan" and "Passed through the Unseen Portals".

My First Trip to Washington, D.C.

Late in April, 1910, I received orders to report to Washington "for practice forecasting and study of Central Office methods", for a 3-week period. In succeeding paragraphs, where my experiences are described, the reader is welcome to draw his own conclusions as to how nearly the quoted purposes of the visit coincided with the facts. Up to this time, although having served in the Bureau for more than eight years and risen from the lowest rank to the supervision of the work in an important state, I had never been in Washington, had never met the Chief, nor more than two or three other officials from the Central Office. Incidentally, my orders provided an allowance for actual expenses while in Washington up to $3.00 a day. That is quite liberal, don't you think, for hotel room, three meals, tips, transportation, etc.?

I found the office located far out on Pennsylvania Avenue, N.W. near Georgetown. It was a large two-story brick building set far back from the street and had the suspicious appearance of having been converted from some ancient aristocrat's enormous mansion into a pseudo office building. Within the outer door sat a colored man ostensibly to guard the inner door. When I entered, he stepped pompously forward and asked who I wished to see. I gave him my name and told him I had been ordered to report there for duty. He said he would take me to the chief clerk's office where I met that individual for the first time, although I had

addressed hundreds of letters to him and had received at least as many from him. While he greeted me in a rather friendly way he immediately afterward assumed an air of austerity. He promptly told me I was to report at eight o'clock each morning for duty, come to his office first for my mail and any orders he might have for me, then go to the ante-room of the forecast office and wait there until called into the forecast room. After making my practice forecasts, which would require my time until noon, I was free for the remainder of the day. He then dismissed me, but, before leaving I made bold to ask if it was the proper courtesy to pay my respects to the Chief that day. His reply was: "No, when the Chief desires to see you he will let you know". I did not see him, nor obtain even a distant glimpse of him, until two weeks later.

Five other field men had been called to Washington at the same time as myself and my first contact with them was in the anteroom mentioned above. During our wait there, which was from two to three hours each day, we had the opportunity of conversing together and become acquainted with each other. The purpose of herding us together in this one room early in the morning was to prevent us from picking up any telegraphic weather reports coming in from the field stations. During the long wait, the official forecasters in the next room were making the weather maps and dispatching the forecasts to outside states. When their work was finished, every piece of paper containing forecasts or weather notes was removed from the room and all waste baskets emptied. We were then escorted, one at a time, into the room and up to a standing desk on which was the weather map for that day drawn in pencil. We were given a form on which was printed the names of all the states with blank spaces opposite each state in which to enter our forecasts. We were required to make both a temperature and a weather forecast for each state. We were compelled to work fast because the six of us had to take turns at the map, and the officials in charge of us wanted to get away for lunch at noon. This meant that we had to make two forecasts for each of the 48 states within a period of 15 to 20 minutes.

As I was anxious to acquire all possible information about forecasting, I went back to the forecast room on several afternoons and engaged the forecasters in conversation. Standing by the weather map, I would comment on the conditions shown there and try to elicit comments from them as to their methods of analysis. My efforts in that direction were futile as none would offer either instruction or helpful suggestions. One of our group of field men was George Willson of the San Francisco office, a big Irishman who saw fit to chum with me during our entire stay. We discussed the situation together and marvelled at the seeming inconsistency on the part of the Washington officials. One afternoon Willson happened to go down to the verifiers' room in the basement and, when he saw me later, he suggested that I do likewise as he had found they were willing to talk. These verifiers were two old men clerks of rather mediocre ability who, because of their age, had been given the comparatively simple task of verifying the daily practice forecasts we sent in from the field. They seemed to have no work in the afternoon and were willing to talk. They gave me many pointers on how to improve my forecast rating, or, in other words, how to beat the game where possible. Like most old men who had never gained important advancement and who were nearing the end of their public service, they displayed no love or particular loyalty to the service or to its officials. Noting this fact I asked them why, when we were brought in ostensibly to study forecasting methods and thereby improve our ability, the officials gave us no help whatever. Their reply was: "They consider that is their bread and butter". When I asked if they meant that those officials were jealously fearful that some of us might develop equal or superior ability as

forecasters, they replied that was exactly the case. I have never been able to understand why such a high degree of narrow-minded selfishness existed.

The bright spots of my stay in Washington were contributed by two Division Chiefs whose humane behavior was in sharp contrast to that of the others. One was an invitation to a Sunday dinner at the home of Frank Gillam in Chevy Chase, as already mentioned in the Salt Lake section of my story. The other was an invitation from Henry Heiskell to the six field men for a sight-seeing trip about the city. He hired a team and a surrey (with fringe on the top) and drove us about the city during an entire afternoon. Although it rained most of the time we were able to see for the first time some of the city's attractions, and his friendly gesture was duly appreciated.

Further Experiences at the Washington Office

About the end of the second week, when I made my daily call at the chief clerk's office for my mail, I received a sealed envelope. It contained a formal request from the Chief that I report to his office at a specified time on the following day. The extreme formality slightly disturbed me because it might presage trouble, but when I found that each of the other field men had received an exact duplicate I felt at ease. When I reached the Chief's outer office door, I was met by an employee who kept me standing in the main corrider until all of the other five had arrived. We were then escorted into a small reception room and arranged in a straight line, similar to my oral spelling classes when attending the district school many years before. The attendant then announced our arrival to the chief and he stepped forth from his private office. He passed along the line and shook hands with each of us, after which he stated he had called us into his office to express his approval of the quality of our work and which he wished to recognize with a promotion. Beginning at the head of the line he handed a promotion paper to each until he reached me. He said he had none for me for the reason that I had received one recently. This was true, as my promotion to the $1,600 grade became effective April 1, exactly eight months after being raised to the $1,400 grade, and not more than a month before this trip. He then dismissed us by saying: "That is all, gentlemen". I doubt if we had been in his presence more than five minutes, during which there had been not a word of friendly conversation.

One afternoon the visiting field men were sitting in the forecast room conversing with some of the forecasters. Among these was Professor Edward B. Garriott, the chief of the forecast division--a very modest and friendly man. He was in a reminiscent mood that day and recounted to us many of his amusing and interesting past experiences. The time passed swiftly and we remained together until 5 o'clock, an hour past the regular closing time. While eating breakfast the next morning and scanning the daily paper, I was shocked to read that Professor Garriott had died the previous evening, within three hours of the time we had left him. We who were from the field agreed it was our respectful duty to attend his funeral. It was held in a church near his home and after all were seated I counted them. The total attendance was approximately 40 people. Here the last respects were being paid to a man who was around 60 years of age, perhaps the foremost scientist in his particular field, the writer of the only book known to me on the principles of weather forecasting, and who had lived and worked in the Nation's Capitol for more than 30 years. The funeral group appeared to consist of two or three family relatives, three or four neighbors and their wives, while the remaining 30 were from the Weather Bureau. Of this 30, six being from the field, left only two dozen officials and employees, including a few wives, to represent the Central Office. Of the many funerals I have attended during my

lifetime I believe this ranked first in minimum attendance. Had his efforts been directed into some other field of scientific research, his accomplishments, like those of Thomas Edison and Henry Ford, might not have been so quickly forgotten; or, had he been a notorious gangster like Al Capone a multitude might have flocked to his bier in the midst of elaborate funeral ceremonies. Let us fervently hope that the Angels of Heaven bestow upon him and other equally deserving men their merited rewards; otherwise, I fear they may be short-changed by an unappreciative public.

Meeting the Secretary of Agriculture

My 3-week assignment would come to an end on a Thursday. Two or three days before that date was reached, I told the chief clerk I would like to remain in Washington until after the following Sunday. He replied, somewhat peevishly, that my three weeks expired on Thursday which meant that I would leave Washington on that day. I was both disgusted and disappointed, so went at once to the city ticket office, made my reservation for a Pullman berth, and procured my railroad and berth tickets. On the day before I was to leave I received a note from the Chief requesting me to be in his office at a certain time on the following Saturday morning. I pointed out to the chief clerk that he said I was to leave on Thursday, yet the Chief indicated I was to be there on Saturday. When I asked what I was to do with my conflicting orders, he curtly replied in effect that I was to obey the Chief's order. I told him I already had my reservation and tickets but he said I would have to have them changed to the later date. The other five field men were also held over, the reason for which none of us knew.

When we reached the Chief's office on Saturday morning, he informed us that he wanted us to meet the Secretary of Agriculture with whom he had arranged an appointment for 11 o'clock. He told us to be in front of the Department of Agriculture building in ample time and he would meet us there. We had just ridden the streetcar from downtown out to the Weather Bureau, now we would have to return over the same route then walk out 14th St. to the Department of Agriculture building on the Mall. Upon meeting there we were led by the Chief to the Secretary's office where we were informed by the clerk that the Secretary was away from his office. After some telephoning it was arranged that he would meet us at 3 p.m. After the six of us had eaten our noon lunch on Pennsylvania Avenue, we returned to the Mall and sat on the grass in front of the building awaiting our appointment. When the Chief drove up in front of the building he was wearing a stovepipe hat, dress coat, and white gloves. The team was driven by a butler and when the Chief stepped out of the carriage we joined him. The Secretary, James Wilson, was on hand this time and greeted each of us cordially. He had been Secretary for many years, wore a full beard, and called himself an Iowa farmer. In the newspapers he was referred to as Uncle Jim or as Tama Jim. He slapped us on the back and I do not believe we were there more than ten minutes. After we left the office, the chief told us we could return to our respective homes. This bit of nonsense, purely for the aggrandizement of the Chief, cost the Nation's taxpayers two days' salary and expenses, from which no benefit was derived, for each of us.

Trip to Mt. Weather, Virginia

The six of us from the field, accompanied by one of the Washington officials, made a trip by train to Mt. Weather. This station was located about 60 miles west of Washington at the edge of the Blue Ridge Mountains, having been established a few years before for weather research purposes. It was situated on the top of a rather high hill, and consisted of a good-sized two-story brick building and a few small buildings. The technical work was performed in the main

building, and the staff of 15 or 20 people had living space in it also. These were young men except the officer in charge. A cook prepared the meals and a servant or two made the beds and cared for the rooms. Here I found Marks and Sherry who had conducted the balloon experiments at Indianapolis the previous autumn. Their principal work at the time of our visit was sending up large box kites each day with meteorological instruments attached to them. These kites were kept in the air nearly all of each day if possible. Piano wire wound on large wooden drums was used in flying them. I believe there were two or three miles of wire on a drum but it required quite stong winds to lift the kite and the full length of attached wire, hence, on many days, the kites would support only a fraction of the wire on the drums. A crank on each drum was used to rewind the wire and haul down the kites.

I failed to discover that any outstanding contributions to science had been made up to that time. Although this project was a grandiose scheme of the Chief, there always was some doubt whether the results obtained justified the expenditure. Congressmen were skeptical about it and, I believe, finally cut its appropriations to the extent of materially reducing its staff and activities. Some years later, according to my vague memory, the buildings caught fire and burned. Whether this happened before or after research work there had been abandoned I do not recall. There was considerable caustic comment in the newspapers during its existence and the chief's prestige suffered in consequence. Marks was transferred to the Grand Rapids, Michigan office and Sherry was sent to a western station.

ADMINISTRATION OF THE INDIANAPOLIS OFFICE--Chapter XXV

I have already mentioned my promotion to the $1,600 grade on April 1, 1910, only eight months after my last previous one. My next and final one in the Weather Bureau became effective July 1, 1911. thus, in a period of 23 months, I had advanced from the $1,200 to the $1,800 grade, whereas my salary had risen only $360 in the first five years and five months of service. Within a few days after taking charge of the station, I called the entire staff into my office and outlined the policies I had in mind for the conduct of the office. I discussed how I thought the work should be distributed between them and other details of a similar nature. I strongly emphasized only two points, one of which related to the antiquated Bureau rule that employees must wear their coats while on duty. I told them I had generally observed that rule in other offices but hereafter would work in my shirt sleeves whenever I preferred to do so, and told them they were free to do likewise. I assured them I would assume the entire responsibility if the Washington office or the inspector made trouble, because I would insist on a showdown and carry the fight to a finish. The other point I stressed was in regard to the care of the office. I told them about the sloppy conditions the inspector found in the Salt Lake office and how worried the official in charge was over an inspection. I also pointed out the other extreme encountered at the Chicago office where the official in charge insisted that every scrap of paper, pin, match, etc. found on the floor must be immediately picked up. I said my solution was very simple; which was to maintain the office at all times in such a condition that we could conscientiously welcome the inspector any day in the year. With this brief but forceful admonition I dismissed them.

A Visit from the Inspector

I assumed that my office probably would be inspected very soon after I had taken charge in order that my particular brand of administration be investigated

and evaluated. Then, too, with one inspector stationed at Milwaukee and the other at Detroit, their nearness would make it easy and inexpensive to pay me an official call. However, more than a year passed before I was honored with such a visit. I was standing in the main office room, in my shirt sleeves, idly talking with an assistant, when Mr. Conger entered the door. I shook hands with him and remarked that I was very glad to see him. He cocked one eyebrow and said: "Are you?" I replied that I certainly was, that I had been looking for him over many months, and was becoming fearful that he had completely lost interest in me. After a brief chat in my office I said: "Mr. Conger, whenever you are ready to begin your work here you are welcome to investigate everything in the office and to call upon any employee to give you any possible assistance. When you are through I want you to tell me all that you may find to criticize and any suggestions you may be able to offer for improvement." Randall was keeping the weather records at the time, and in them he found some points to criticize. Conger casually mentioned them to me before he left, and said he had instructed Randall to make a few changes which the latter was inclined to resent. Conger was very gracious and pleasant throughout the inspection and even wrote his official report to Washington in my office and on my typewriter, all of which was unprecedented in the light of my previous experiences with him. I felt no worry or concern at any time about what his report might contain, but the fact that he wrote it openly in my presence confirmed my belief that it must be a favorable one. I constantly pondered the changed attitude he had assumed, and the entire absence of sneering and critical questions and remarks such as he had universally used in my previous contacts with him. After he had dropped his confidential report in the mail box, I asked him what had produced this remarkable change in him. He simply replied that he had learned a better way in which to perform his duties. (A year or two later I learned through other sources it was due to his having become a Christian Scientist).

His report had been written during the afternoon of his second day in the office. As his train did not leave until late in the evening I invited him to have dinner with me at a downtown hotel. He said that, having fulfilled his duties there, he was at liberty to accept my hospitality. During the evening he brought up the subject of Randall's attitude and behavior and asked my opinion about him. I told him that we had gotten along quite well together because we had found it necessary to forego criticism of his work or issuing orders to him. I said further that it was an unpleasant situation for me, but that I did not blame Randall too much because he felt hurt at not being advanced after his long service. When Conger asked what my solution of his case would be, I told him that it would be to place him in charge of some small, one-man station, where he would be a law unto himself. I felt he would appreciate the honor of such a recognition even though it included no increase in pay. The facts were that Randall had recently married one of the old maid daughters of a widow who owned considerable property. She depended somewhat on Randall to manage her property and this fact rendered him less dependent upon his salary. Conger appeared to approve my suggestion and promised to pass it along in the Washington office.

Randall Replaced by Clinton M. Norquest

Devils Lake was a small station in an isolated northern North Dakota region where it becomes extremely cold in winter and correspondingly hot at times in summer. Norquest had been in charge there for some time and had requested a change in order to get back into civilization, have better school facilities available for his children, and a better prospect for promotion. Not long after my talk with Conger, orders were issued transferring Randall to Devils Lake and

Norquest to Indianapolis, both of whom were pleased with their new assignments. Norquest, of Swedish descent, was a native of Indiana and a graduate of DePauw University.

Norquest was only about two years younger than I, had served at Spokane, Washington and Portland, Oregon, had been in the service several years, and proved to be unusually capable. Moreover, he possessed sound judgement and a very friendly attitude toward everyone he met. He worked with me virtually as a co-partner rather than as a subordinate. I consulted with him on every important matter and was benefitted by his advice and counsel. He relieved me of much administrative responsibility and always assumed his full share of the work. Without exception he was the noblest character among all my acquaintances in the Weather Bureau.

He rented a house in Meridian Heights only two blocks distant from our home. Mrs. Norquest was just as gracious as he, and their two children, Kenneth and Elouise, were nearly the same age as some of our children. The two families spent many evenings, Sundays, and holidays together, and these associations were as enjoyable and intimate as if we had been the closest of kin.

Preservation of the Family Name

My Grandfather Church's family consisted of six sons and three daughters, as follows: Louisa, who married Joseph Bain; Emma, who married C.C. Osgood; Mary, who died in infancy; Horace, who volunteered for service at the beginning of the Civil War, contracted tuberculosis, and died in an army hospital in 1863; Eustace, who was Lena's and my father; Calvin, whose children were all daughters; Dayton and George, neither having any children; and Jarvis, who never married, and who died of pneumonia while employed as a school teacher. As I was the only descendent bearing the family name, its continuance depended upon the makeup of my family. After three additions of the feminine gender had successively arrived, the future for the Church name began to grow dim. All this was changed when Lawrence Allen put in an appearance on August 27, 1910. Dr. William Dow, a brother of Carl and a near neighbor, officiated at this notable event. Now that Lawrence is the father of a son there is a possibility that the family name may be further maintained.

Installation of an Automatic River Gauge

The Washington office was interested in extending its flood Warning service to include all river systems where floods were likely to occur under certain conditions. Such a service had been in operation for many years on the larger rivers, and it was proposed to expand it by including many lesser rivers even though they might not be important navigable waterways. As a first step for such a service on the Wabash River system in Indiana, it was decided to install an automatic gauge on the White River at Indianapolis, the largest branch of the Wabash. I was directed to select and procure a suitable site and, having had no experience at any station where such a service was in operation, sought the needed engineering advice. It so happened that a neighbor and very good friend was an engineer for the Indianapolis Water Company so I applied to him for counsel. He suggested that the gauge might be installed on the property of the water company, and later reported that the company was willing that it be done. The water plant was on the south side of West Washington St., and at least 200 feet from the river bank, the intervening space having been filled in and made into a nice little park. However, the company was unwilling to have a pipe laid from the river, across the park, and into the plant if the instruments were to be housed there, because it would involve an excavation 20 feet or more in depth. The only logical alternative was to erect a small building within 30 feet of the river to house

the instruments. The company would give free use of the land but insisted that the Government erect the building and that it be in accordance with plans specified by the water company. The engineer drew the plans and specifications for a building six feet square, with Indiana Bedford stone for the base, glazed brick walls, and a slate roof.

After securing approval of the plans at Washington, I went to an architect friend for names of contractors who might be interested in bidding on the construction. He gave me some names and then asked permission to bid on it himself. His bid proved to be the lowest and I awarded the job to him. He was slow to start the job and, what was worse, failed to show up on the job at three different times he had promised to begin work. After making the three needless trips to the site, I asked the engineer to keep tab on the work and make sure it was satisfactory. Three or four days later he called me and asked me to come down. When I arrived I found the building not only started but completed. The engineer asked me to carefully measure the building, and I found that the brick work was more than two inches wider at the top than at the bottom on one side. Standing a few feet away, the bulge outward of one corner was plainly noticeable. It was a shameful piece of work with such high grade and high priced materials. The engineer was dissatisfied and I was disgusted. I called the contractor and ordered him to come down there at once. When he arrived I pointed out the reason for calling him and asked what he intended to do about it. He readily admitted it was a poor job by his workmen and said he would have four or five layers removed on that one corner and relaid. While that would remove the noticeable portion of the bulge, I knew that the bulge actually had begun near the bottom, and that a shift in the top layers would create an offset that would be very noticeable. Therefore, I ordered him to take the entire building down to the stone base, clean all mortar off the bricks, and then relay them as they should be. He demurred, pleaded that it would cause him a loss on the job, and that the bricks would be damaged in removing the mortar. I told him the Government would accept and pay for nothing less, that any loss he sustained was his own fault through hiring cheap and incompetent labor, and that he must replace all damaged and defaced bricks with new ones of the same kind. It took one man several days to clean the hard mortar from the bricks, and an occasional chipped brick showed after relaying the walls, but they were so few that I accepted the job.

The water company laid a horizontal pipe from the bed of the river to a point directly beneath the building, and connected it to an 8-inch vertical pipe that projected up through the floor. The recording instrument was a brass cylinder around which a sheet of paper was fastened. Vertical rulings on the sheet marked the hours, and the horizontal lines were in feet and tenths. A pulley on the end of the cylinder carried a brass tape, one end of which was attached to a float in the vertical pipe, while the other end supported a counter-weight. The float rose and fell according to the changes in the river level, turned the cylinder back and forth, while a pen traced the record in feet and tenths. A clock caused the pen to move lengthwise of the cylinder at a uniform rate. Each sheet held a week's record so it was necessary to make only one weekly trip from the office to change it. This record showed all the changes in the river stage, and the exact time of their occurrence. The water company also kept a record of the data obtained from these sheets.

Installing a Weather Kiosk

The Weather Bureau had installed a kiosk in several of the largest cities of the country, some of which had been in use for several years. Other cities were added to the list as funds permitted, and one was allotted to Indianapolis

not long after my removal to that city. For those who may not have seen one I will try to give a description. It slightly resembles a monument in general appearance, and is about three feet square and eight feet in height. It's framework, top and lower portion were made of steel, ornamented, and painted an aluminum color. Each side had a recessed space covered with plate glass. In the one on the north side were thermometers to show the current, maximum, and minimum temperatures at the street level which differ somewhat from those recorded by the official instruments exposed on the roof of a tall building or over sodded areas. Other meteorological instruments were used to fill the remaining space on that side. On the other three sides were displayed weather maps, forecasts, and the various other publications issued by the Weather Bureau. These kiosks usually were set at the edge of the sidewalk on a street where pedestrian traffic normally was heavy and where it was easily accessible to passersby.

I was instructed to make the necessary arrangements for a suitable site and the erection of the kiosk. It being preferable to locate it on postoffice building grounds, already owned by the Government, wherever possible, I called upon the custodian of the postoffice building. The building was owned by the U.S. Treasury Department and he was an official of that Department. It extended an entire block from east to west, and also a full block from north to south except for a strip of lawn on those two sides. I made known to the custodian my ideas on the most favored location, and he agreed to submit my request and suggested plan to his department in Washington. Within a few days he called me to his office and said the necessary permission had been obtained but with certain requirements.

Between the lawn and the sidewalk was a curb eight inches wide and six or eight inches high. Each block of the curb was four feet in length. My plan was to cut a notch in the edge of the lawn exactly at the mid-point of the block on the south side of the building. This notch was to be semi-circular in shape with a 10-foot radius. The kiosk was to sit with its south side flush with the inner edge of the sidewalk, and at the center of the semi-circle east and west. The sidewalk was to extend around the kiosk and be bordered by a circular curbing. This arrangement was not only symmetrical but provided a 10-foot walk on all sides of the kiosk. The custodian was agreeable to my plan but specified that the curbing be extended around the semi-circle and that it be of the same material, color, and dimensions as that already in use.

I succeeded in obtaining three bids for the construction job. One was $400, another $800, and the third was $1,200. I accepted the lowest bid but was puzzled as to why the other bids were two and three times as much. What neither the successful contractor nor I knew was the nature of the curbing and the difficulties involved in duplicating it. When the custodian looked up the original specifications for the postoffice building, he found that each 4-foot length curbing block, although extending only six or eight inches above the sidewalk, actually had a height of 30 inches. Also, they were of Barre, Vermont granite such as generally used for cemetery monuments, and only obtainable from that particular mine. The straight blocks were cut to the proper size at the mine with saws, but these curved blocks had to be cut by hand with chisels from 4-foot square blocks of granite. This laborious process was costly and time consuming, delaying the job for more than a month, and caused the contractor to lose considerable on it. However, the job finally was completed and was satisfactory in every detail. We installed the instruments in the kiosk, and posted our bulletins each day. The kiosk attracted hundreds of people daily, and was still in operation when I resigned from the Weather Bureau.

Establishing Rainfall and River Gauging Stations

As a prerequisite for a river and flood warning service in Indiana, it was necessary to install rain gauges and river gauges at strategic points along the Wabash and White River systems. In the fall of 1910 I was instructed to visit a selected list of towns and cities along these rivers, arrange for the installations, and appoint an observer at each place to make daily readings and forward a copy of his records to our office at the end of each month. He also was required to telegraph his observations on any day that the rainfall exceeded one inch or the river rose more than a certain amount. For his service he was to receive $10 a month. This was a sufficient inducement to bring forth a number of applicants at each place; my only difficulty being to select the best one among people who were entire strangers to me. The river gauges were not automatic, like the one at Indianapolis, but merely a stout plank placed in a vertical position and usually attached to the straight side of a bridge abutment. The plank was painted white and the scale of feet and tenths of a foot were marked in black. The zero point of the scale was set to coincide with the bed of the river, and a survey was made to determine the exact height it was above sea level. For rainfall measurements a standard rain gauge, such as used at all weather stations, was set up at the home of the observer. For the State as a whole there were approximately eighty co-operative weather stations that kept daily readings of temperatures and rainfall, but these special river and rainfall stations provided increased information on the rains that fell in the portions of the State included in the watersheds of the two rivers. I assumed that the Washington office would supply me with a formula for forecasting river stages from the amounts of rain that fell over this watershed. As no formula was received it seemed logical that records of rainfall and river stages over a period of time was needed in order to make a study of the effects of the former upon the latter. Although I remained at this station for three and a half years after these records were begun, I neither received such a formula from Washington nor instructions enabling me to get it up for myself. I was confident that I could work out such a formula but, knowing the resentful attitude on the part of Washington officials towards ideas originated in the field, I resolved not to stick my neck out in this matter. I believe river forecasts were inaugurated shortly after I left the Weather Bureau, perhaps as a result of the unheralded disastrous flood which occurred more than a year before and which I will describe in a later paragraph.

Inspecting Co-Operative Weather Stations

Each Section Director was expected to visit and inspect some of the co-operative stations each year in his State. Money allowances for this work were so niggardly that rarely more than a dozen stations could be inspected in any one year, so that six or eight years were necessary to make a circuit of all stations. I had no previous experience in this work because each section director with whom I had been associated craved every opportunity to do a little travelling and get away from the monotony of office routine. Now it was my turn and I determined to do as much of it as funds would permit. Indiana had an extensive network of interurban lines as well as railroads and rates were relatively cheap. Schedules were convenient so that more inspecting could be done for a given amount of money than in the majority of other states, and I succeeded in visiting the most of my 80 stations in the less than five years that I served in the State.

It was a pleasure to meet these voluntary observers who were content to render their services to the Government merely for the pleasure of doing so and for the slight honor of being a local Government representative. Nearly all were

highly intelligent men and leading citizens although, occasionally, an eccentric character was encountered.

One of the latter type was found in a small northern Indiana town. Learning that he was a storekeeper I went to his place of business after registering and eating my supper at the hotel. When I approached the store it appeared to be closed as it was dark while adjoining stores were well lighted. Seeing a very dim light in the rear end I tried the door and found it unlocked. I made my way as best I could through the darkness towards the light. Suddenly an old man appeared out of absolute darkness, picked up the small kerosene hand-lamp, and came forward to meet me. He had a long flowing white beard and greatly resembled the pictures we have seen of the patriarchs of old. When I had introduced myself and explained my mission he greeted me cordially and led me to a seat in the semi-darkness in the rear of the room. We spent the entire evening visiting together during which I tried mentally to solve the mystery surrounding this unusual character but my attempts were fruitless. Only one customer, a lady, entered the store and made a small purchase during the entire evening.

I returned to the store the next morning and the daylight enabled me to get a view of the store and its contents. A few articles displayed in the front windows had the appearance of having been placed there some years before and not disturbed since. Dust on the floor, shelves and merchandise had not encountered a broom in many moons. The owner had no bother from customers and gave me his undivided attention. I inspected his meteorological equipment and found it in reasonably good order. After we returned to the store he seemed loth to have me depart and said he wanted to show me something. He led me into a back room which he apparently used as a work shop. He had constructed a full scale model of a railroad crossing, consisting of two pairs of railroad rails set at right angles to each other. The rails in one direction were continuous and designed to permit a train to pass over them without the usual jolt experienced at ordinary crossings where the rails must have a space between the ends to allow the flanges of car-wheels to pass through when trains cross the intersection. His model was designed to be lifted by hydraulic air pressure, given a quarter turn, then lowered into place to accommodate trains passing at right angles to the previous setting. It worked perfectly and fully accomplished its purpose, but involved this shift in position whenever a train was to pass at right angles to the last previous train. He had spent many years in developing and perfecting his invention, and it was evident that the most of his time, energy, and hopes had been concentrated on it. He told me that the officials of one or two railroads had inspected it, were convinced of its workability, but had refused to even give it a trial. His keen disappointment over his inability to obtain a buyer for it evidently had greatly increased his predisposition towards eccentricity. His failure to achieve a cherished ambition was no different than that of thousands of others.

At a station in another part of the State, I noted the monthly reports showed the daily minimum temperature readings were consistently about 10 degrees lower than recorded at the nearest surrounding stations. This seemed improbable because, as far as I knew, the difference in topography was insufficient to explain such a discrepancy as was sometimes found in the mountains of the west. I decided it was more likely that the thermometer was out of order or that the observer did not reset it properly after each reading, and that I would have to visit the station to acertain the trouble. When I arrived and told the observer about it he was greatly disturbed and assured me that he understood the mechanism of the thermometer and the proper way to reset it. Right here it is necessary for

me to describe the instrument and its operation. The minimum thermometer used by the Bureau contains alcohol instead of mercury. In the tube is a small pin with a head on each end of it that have diameters only slightly less than that of the tube itself. The thermometer is mounted in a horizontal position so that the pin, which is immersed in the alcohol, will not shift position unless propelled by a slight force. To reset the thermometer the bulb end is raised until the force of gravity causes the pin to move toward the upper end of the tube. When the upper end of the pin reaches the surface of the alcohol it stops there, being held by the surface tension of the liquid. The bulb end is then lowered to its original horizontal position and the thermometer is in position to record the lowest temperature up to the time of the next resetting. When the temperature drops, the surface tension of the receding alcohol pulls the pin along with it. When the temperature rises the alcohol flows past the pin without moving it. thus the upper end of the pin registers the lowest point the temperature reaches since the previous resetting. The observer described to me how he made the readings and reset each of the thermometers, all of which were correct, and left me at a loss to understand what was wrong. When we went to the instrument shelter I found the instruments in proper order and apparently registering correctly. It was when I asked him to give me the minimum temperature reading from the thermometer, that I discovered he was reading the lower instead of the upper end of the pin. On the thermometer scale the pin was almost exactly ten degrees in length, and the mystery was solved.

A Ride on an Ohio River Packet Boat

In the fiscal year beginning July 1, 1911 I inspected only a couple of stations during the first half which left the major portion of my annual travel allottment of funds for use during the last half. I asked and secured authority to inspect 16 stations in the southeast quadrant of the State, which included all in that area except a few which I had inspected in previous years. One particular station I wished to visit, for reasons which I will explain a little later, was located at Vevay, a small town on the Ohio River to which there was no convenient transportation. While inspecting a station in the southeast corner of the State, I learned the best way to reach Vevay was by steamer on the Ohio River. To do this I went a few miles to Aurora via interurban. This was a small port town at the extreme southeastern point of the State. Arriving there in the late afternoon I found that the large passenger steamers did not stop at these small towns, and that a small local passenger steamer which made only one trip a day had already left Aurora. Not wishing to wait nearly a whole day for the next one, I decided to take a small packet steamer that passed Aurora late in the evening. This boat carried freight and distributed it at any and all points along the river. The freight handlers were negroes and only two or three white men comprised the boat's navigating crew. As soon as we left the dock at Aurora the Captain suggested that I lie down on a bunk in the cabin, as they had several stops to make and it might be several hours before we reached Vevay. He agreed to call me when the boat arrived there and I accepted the offer. I managed to get a few brief naps but was aroused by the noise of the freight handlers at each stop. Peering out of the porthole I could see that the prow of the boat had been run up to the river bank, and a bale or two of hay or a few sacks of grain dumped on the ground in any open space among the bushes. I do not believe there were any towns enroute. Although the distance from Aurora to Vevay probably was no more than 20 or 25 miles, we did not reach the latter until after two o'clock in the morning. As I walked up the street of the small town, the only light to be seen was on a porch at the far end. It proved to be the hotel, and the only sounds to be heard

were the barking of dogs in the vicinity. I rapped loudly on the door and soon a head protruded from an upstairs window and a voice asked what I wanted. When I replied that I was seeking lodging, the proprietor came down with a kerosene lamp in his hand and let me in.

When I took charge of the Indianapolis office, the observer at Vevay was an old man who had served in that capacity for a great many years. I believe he was past 90 years of age, yet, his monthly report of daily observations was always accurate in every detail and perhaps the best in the entire State. He died a couple of years later and newspaper accounts seemed to indicate he had been a man of some importance. That I might satisfy my curiosity and learn more about him, was the reason for my desire to visit this out-of-the-way little town. On the morning following my arrival I went to his former home, as his daughter was serving as observer since his death. She was unmarried, probably about 50 years of age, and had kept house for him during his later years. She was a college graduate and was highly intelligent. She gave me a history of her father's life and, although it was merely a brief sketch, many of the facts have faded from my memory. He had been a professor at one of Ohio's leading colleges for many years and, upon his retirement, had settled in Vevay to spend his remaining days in peace and quietness. One of his hobbies had been the keeping of weather records and studying the weather. His records began during or prior to the Civil War with instruments he had purchased himself. When the Weather Bureau established its first co-operative stations he was one of the first observers appointed and was supplied with a set of official instruments. This was in the early eighties, probably, as I believe the publication of the Monthly Weather Bulletin began in 1887. Thus he had maintained daily weather records continuously for more than 50 years, perhaps the only instance of its kind in the entire United States. I planned to procure a copy of those records for the Bureau's archives, but left Indianapolis before getting the project under way.

From Vevay I proceeded down the river to Madison, a larger and more progressive town. After inspecting that station I boarded a large passenger steamer, continued down the river, and landed at Jeffersonville. I had maintained the schedule as planned in advance, which was to reach this point on Saturday. After inspecting the station I crossed the river to Louisville, Kentucky, where I remained over Sunday at the home of Fred and Bertha Thwing. The former was a cousin of Cora's and professor of mathematics at the Manual Training High School. After a very pleasant weekend visit there I resumed my inspection trip on Monday morning to stations northward along the route to Indianapolis.

A Collection of Butterflies

The Observer at Bluffton was Mr. C.C. Deam, and his reports and correspondence indicated he was a man of more than ordinary ability. I had a desire to meet him and, incidentally, to have a look at the manufacturing plant in Bluffton that was purchased by our ill-fated manufacturing concern at Toledo several years before. I found Mr. Deam was a druggist and I called upon him at his store. After a short visit he insisted that I go to his home with him. I did not see any particular reason for doing so and pleaded lack of time, but he assured me that it would not require more than an hour. It proved to be a rather large old-styled mansion. After meeting the family he led me through a door into a large room that had been designed originally for a parlor. Every available wall space in this room from floor to ceiling was occupied by cases with glass doors. In these cases was a display of mounted butterflies such as I have never seen elsewhere either in volume or variety. Each specimen had its name and classification just below it, and the display represented a vast amount of painstaking work. In an adjoin-

ing room, which he apparently used as a study, book cases lined all of the walls. These cases were filled with books on butterflies, and he told me that he had every book on that subject as far as he had been able to locate them.

I had recently read some of Gene Stratton Porter's novels in which she had referred to various species of butterflies she had collected and identified, and recalling that her home was in a nearby county, I asked him if he knew her. He said he had met her and seen her collection, but that it really was quite limited in extent, and intimated that she was something less of a butterfly collector than indicated by her writings.

Within a year or two afterward, Mr. Deam was appointed State Forester and moved into that office in the Capitol Building at Indianapolis. He dropped in to see me occasionally and on one occasion asked that I write an article to be included in his Annual Report which was to be published in book form. I spent considerable effort in preparing what I believed was a pertinent and readable article and sent it to him. When I received my copy of the book I was disappointed to find that the article had been omitted. He later apologized to me for its omission, but I felt his excuses were a trifle lame. My suspicions were that the theories I expressed, although in strict conformity with the Weather Bureau's announced stand on reforestation policy in relation to rainfall distribution, did not coincide with his beliefs. Recently I found a copy of the article among my possessions and reread it. I was slightly surprised to find it was much better written than anything I am capable of writing today and how prophetically accurate it was in the light of developments during the more than three decades since it was written.

Experiences in Other Inspections

Hammond and Whiting are cities in the extreme northwest corner of Indiana, and I had occasion to inspect the station at each of these places. The observer at Hammond was in charge of the railroad switch tower, one of the largest of its kind in the United States. It was close to the Illinois state line and only a short distance from Chicago. Around this tower was a network of railroad tracks almost as far as one could see, and switches for all of them were operated from this tower. The switch levers were only a few inches apart and there were rows of them extending the entire length of a long room. While I visited with the observer he moved back and forth throwing levers constantly to keep the many trains moving through the yards without delay. I marvelled at his calmness in carrying such a terrific responsibility and had no desire to exchange occupations with him.

I arrived at Whiting in the middle of the afternoon and asked several different people on the principal business street for directions to the street on which the observer lived. Each one waved his hands and muttered unintelligibly to indicate he could neither speak nor understand the English language. While meditating over this unusual and unexpected problem, I saw a fire station. The firemen were sitting in a group around the door and some of them appeared to be Americans. I secured my information there and went to the observer's home. He had not returned from his work but I was invited to return in the evening. Not being able to find anything that looked like a decent hotel, I went to a restaurant and managed to eat the supper they gave me although I retain no complimentary impressions about it. I found the observer at home in the evening and learned that he was a chemist at the Standard Oil refinery, the largest of its kind in the world. Although I finished my inspection work that evening, he insisted that I should come to his office in the morning and I reluctantly agreed to do so. Before leaving he asked where I was staying for the night, and when I told him I had been

unable to find a suitable place he recommended a boarding house around the corner. He went with me and I obtained a room and breakfast there. The people were Irish but respectable and accomodations were satisfactory.

The next morning he first showed me through his chemical laboratory where all of the various refinery processes were conducted in miniature. Then he took me through one of the large refinery buildings where the first step in refining was done. When we left this building he pointed to a half dozen others which were exact duplicates of the one we had just left, then passed on to a building where the second step was performed. When we left there he again pointed to a group of buildings where, he said, this second process was the same as we had just seen. We continued on through all the various processes going through only one of each group as already described. I can recall only a part of the plant's products--benzine, gasoline, kerosene, fuel oil, vaseline, wax, candles, lubricating oils, axle grease, and others. The thick, black liquid residue, after all valuable ingredients had been removed, was used as fuel in the steam boilers of the power and light plant. After we had tramped for miles through only a fraction of the buildings, my guide looked at his watch and found it was 12:30 p.m. He said he must go to lunch and then get back to his work. Before leaving me he pointed to an area in the distance beyond some railroad tracks and aplogized that lack of time prevented us from visiting 40 acres of buildings located there. I was very grateful for the opportunity of seeing the essential part of this great institution and for the knowledge gained of its processes.

I had recently appointed a new observer at LaPorte and decided to make an inspection in order to make sure that the equipment was in good order and properly exposed, and that he fully understood his duties and the correct method of executing them. He proved to be an energetic, college-trained young man who had recently inherited a large commercial apple orchard lying partly or wholly within the city limits. He intended to make it his career and had already taken over its operation. He had a prospect of only a partial crop that year as cold weather late in the spring had greatly reduced the set of fruit. He asked my opinion about the success of his venture and whether the use of orchard heaters would be practicable. I saw fit to encourage him as the orchard was in good condition, made up of good commercial varieties, located only about 15 miles south of Berrien, Michigan's leading fruit county, and near enough to Lake Michigan to receive some benefit from its protecting influence. As orchard heating had proven fairly successful in the far west, I suggested he might give it a trial at least in a small way.

The following winter he came to my office and asked me to supply him with warnings of frosts and freezing temperatures during the critical spring period, at his expense. He had purchased a quantity of orchard heaters and several hundred barrels of crude oil to be used in an attempt to protect his crop. I was deeply interested and went so far as to suggest that I would intercede with the Washington office in an effort to have it made an official Bureau project. In that way, the bureau would stand the expense of the telegraphed warnings and possibly provide additional thermometers for obtaining temperature readings in the orchard both within and outside the heated area. In return, he was to record all required temperature readings. supply me with a copy of them, and make a final written report of his heating operations, the attendant weather, and the final results obtained. He readily agreed to my proposition and I sought and obtained an authorization from Washington for the necessary expenses involved. Just as the apple blossoms began to open a severe storm developed and I promptly sent him a warning of freezing temperatures and strong winds. The conditions he

had to meet proved to be even much worse than the weather map indicated. The storm lasted for several days, the winds reached velocities up to 40 miles an hour, and the temperatures remained continuously below freezing for three days. There were snow squalls and the minimum temperature finally fell almost to 20 degrees, so the storm practically reached blizzard proportions. His well-written report was a sad story of defeat. He had to keep the smudge pots burning continuously day and night. When my followup warnings offered no relief, he wired Chicago for additional fuel but was unable to obtain as much as needed to successfully combat the unprecedented and prolonged spell of unfavorable weather. Despite his handicaps he held the temperature in the orchard above freezing for three days although the temperature outside the orchard fell to as low as 24 degrees some of the time. He exhausted his available fuel supply on the fourth day and was forced to abandon further efforts. The storm continued unabated for at least two more days and his crop for that year was completely ruined. Notwithstanding his heavy loss, he was convinced the crop could be saved under any ordinary weather conditions.

When Mr. Norquest had been with me some little time, he wished to take a vacation and visit his old home in the Western part of the state. I suggested that he might inspect the stations in that area and thereby save the major portion of his personal cost of travel. I laid out a practical route to accomplish the inspections and obtained the necessary authorization for the trip. When inspecting a station in a small town near Terre Haute he found that by going into that city, which was at right angles to his authorized route, he could catch an earlier train and thus save several hours of precious Government time. This slight deviation involved a cost of only ten cents which he later included, properly, in his expense account. Some ambitious clerk in Washington spotted this item while auditing his account and promptly suspended it. Norquest was very much disgusted with this petty action and was not disposed to make another claim for it. However, I insisted, merely as a matter of principle, that he send a letter of explanation and with it a reclaim for the suspended item. I put a strong endorsement on his letter and forwarded it. In due time he received a Government check for 10 cents but vowed he would never cash it. He said he intended to frame it and hang it up as a symbol of Government pettiness. After a lapse of six months or more a letter was received from Washington, stating that it had been noted he had not cashed the check and ordering that he do so at once. As in the case of all positive Government orders to employees, it was obeyed. The time involved in preparing the correspondence that passed to and from Washington concerning this trivial matter cost the Government many times the original suspended amount.

Weather Bureau Treatment of Suggestions From the Field

Although the Bureau made frequent promises that promotion would be awarded to those who made an outstanding contribution of any kind in the Bureau's welfare, older men in the field service treated such promises with derision. They cited numerous instances in confirmation of their expressed opinions. A field man invented the automatic river gauge yet he received no credit for it. Another invented the self-recording rain gauge with no better result. A few minor changes were made on each of these at Washington and they were issued to field offices as Marvin's invention. Marvin was the Bureau's official instrument maker for many years and, upon Willie L. Moore's removal as chief, was appointed as Chief of the Bureau although he demonstrated no particular ability as an executive. He had occupied that position about a year at the time of my resignation from the Weather Service.

The Bureau issued a weekly bulletin containing snow and ice reports, river data, and other similar information. It was printed on one side of a large sheet about 24 X 30 inches in size, and was originally designed and required to be posted in a wooden frame, supplied by the Bureau, by such business firms as desired to receive it. In later years the practice of posting it for public benefit had become a dead issue. I was of the opinion that most firms merely wanted the data on file for historical reference as might be needed. When the published data exceeded the available space on one side of this cumbersome sheet, the practice of printing the excess on the back of the sheet was started. When this happened I decided to offer a suggestion. In my letter I stated that printing a portion on the back of the sheet precluded its being posted as originally intended, and that the recipients would prefer to have it in a form suitable for convenient filing. The idea I presented was to print it in bulletin form of the same size as the Bureau's other publications, which would permit filing in an ordinary letter file without being folded. Moreover, the number of pages would be governed by the amount of data available for each particular issue. six weeks or more elapsed before my letter was acknowledged and in that letter of acknowledgement the contents read about as follows: "Referring to your letter of___(date), you will please note that your suggestion had already been fully anticipated in view of the fact that the publication in question is already being published in the form recommended". The first issue in the new form had not yet been received when the letter arrived, and it was clearly apparent that the letter had been purposely delayed until my suggestion could be adopted and the new issue gotten under way. The wording of the letter also indicated that I was not to receive any credit for the idea.

Quite suddenly in a certain year I began receiving requests by mail and telephone for the times of beginning and ending of each rainfall over certain periods of days; also the amount of rainfall during each of those hours. Upon inquiry I learned this type of information was used in settling demurrage accounts between shippers and common carriers of freight. Carloads of freight must be unloaded by the consignee within 48 hours after receipt, otherwise the carriers made a charge for the time in excess of that allowance. In computing demurrage charges Sundays and holidays were excluded; also all working hours in which there was sufficient rain to interfere with unloading operations. Many disputes arose over this last item and Weather Bureau data became the basis of settlement, hence the numerous and steadily increasing number of requests for that particular kind of information. It involved considerable time to extract the data from our records and transmit it to the inquirers.

As a solution, I conceived the idea of printing a table, of all beginnings and endings of precipitation and the amount recorded from each shower, for the 7-day week on a card 3 X 5 inches. By mailing these weekly franked cards to all who had need for the data, they could be filed chronologically in a standard card index drawer, and be instantly available for references to weather conditions on any particular day or days. I made up a sample card, explained its purpose and need, and sent it to Washington for approval. A characteristic cool reply was received, which neither approved nor forbid its use. This made me a trifle peeved and I determined I would not give up what I considered a very practical idea. I prepared and printed a circular which I mailed, together with a sample card, to 400 or more firms in the city. I explained how the cards could be used and filed, and that their adoption as a regular publication of our office depended upon the number of responses from my letter. The response was overwhelming--almost 100 percent requesting to be placed on the mailing list. Most of the letters compli-

mented the plan, emphasized their need for that information, and a considerable number said it was the best idea that ever came from the Weather Bureau. I selected 150 of the best letters and sent them in a package to Washington, then mailed a letter reporting what I had done and urging permission be granted to issue the published cards as a regular feature. The reply I received grudgingly gave the desired permission but contained the following stipulation: "Under no circumstances are you to send any cards to addresses outside the State of Indiana". Such a limitation was the height of absurdity, as Indianapolis rainfall data could have no useful value beyond the immediate vicinity of that city, as any user of it would be fully aware. The cards were still being issued by the Indianapolis office at the time of my resignation. A monthly Weather Bureau publication now carries a table showing the amount of rainfall at the issuing station for each hour during the month.

The foregoing illustrations indicate the hangover of militaristic influence in the minds of Washington Weather Officials of that day. The soldier could be punished for his mistakes but never complimented by the brass hats for his successes. However, it is only fair to state that an occasional crumb did fall in the direction of this writer. A clipping of a feature article I had written for one of the Indianapolis papers was forwarded (as universally required) to Washington. This brought the following reply from the Chief: "I have had pleasure in reading your letter of the 17th instant and its inclosures, in regard to the work of the Weather Bureau". About a year later Indianapolis was visited one evening by a severe thunderstorm in which the electrical display was exceptionally brilliant, such as was fairly common in the western mountain regions but of rare occurrence in eastern states. An enterprising photographer succeeded in getting some good photographs of the display which is ordinarily a difficult accomplishment. I happened to see these photographs in a store window which I passed a few days later. Being at once struck by their unusual excellence, I purchased two or three of the best ones and sent them to Washington. The Chief Clerk acknowledged their receipt in the following words: "The Chief and other officials at the Central Office are much interested in the photographs of lightning which you sent. The chief thinks they are the finest he has seen in that line. We will have slides made of them". A critical analysis of this wording really indicates the compliment to have been aimed at the artist for his good work, rather than to me for recognizing their quality and making them available (at my own expense) to officials who would use them to enhance the Bureau's prestige and, indirectly, their own.

INTERESTING EVENTS AND EXPERIENCES AT INDIANAPOLIS--Chapter XXVI

Not long after assuming my duties at this station a visitor came into the office one day. Mr. Blythe knew him well and introduced him to me as Captain Bumbaugh, a commercial balloonist. For a number of years he had made exhibition balloon flights at fairs and other public events, but first attracted important public notice through a stunt he had performed a few years before I came to the City. On that occasion, he substituted a new Overland car, then manufactured in Indianapolis, for the usual basket attached to his balloon. He and two officials of the Overland Company climbed into the car and the balloon was released. They soared over the city and finally landed at a point some 50 or 75 miles away. They loaded the balloon into the car and drove triumphantly back to the city. This advertising stunt attracted nationwide attention for its originality, and the Captain became very well known for his part in it. Whenever he was about to make a

commercial flight he always came to our office to consult us about prospective weather conditions and to study the weather maps. He was a splendid fellow and we became the best of friends.

The International Balloon Races

This annual event had been in vogue over a period of years. The contestants came from many different countries and a different starting point was chosen each year. Several had been from various points in Europe and a few had been from points in central and western United States Cities. I believe each contestant's expenses were sponsored by his home city for the advertising value received. Each contestant started his flight on the same day from the chosen starting point, and the one that came down at the farthest distance from that point was the winner and recipient of a very substantial amount of prize money. Because the upper air always moves in an easterly direction, it was impractical to have a starting point in an eastern city as all would be forced to land when the Atlantic coast was reached. When Indianapolis was chosen as the base in one of the years of my regime there, it was the farthest eastern city for the event in the United States.

Captain Bumbaugh had been an entrant in some previous years but had never been a winner. As the representative of Indianapolis he was naturally anxious to bring back the honors for his home city. On the morning of the day of the race he came to the office accompanied by all of the other contestants. As there were 13 entries and most of the contestants were taking a helper with him, my group of visitors numbered more than 20. I believe there were representatives from England, Sweden, France, Germany, Italy, Austria, and perhaps one or two others from Europe, while the United States was represented by several. I was introduced to every one, and together we went over the weather map and weather conditions in detail. When they left I received urgent and cordial invitations to come out to the park in the afternoon and see the start of the big race.

There was a rather large crowd on hand to see the thrilling event, although they were kept some distance away. I edged my way to the front for a better view and to get a glimpse of the men whom I had met in the morning. The balloons were fully inflated having been under the filling process during the preceding 24 hours. This was done with gas from several large mains installed by the Indianapolis Gas Company. Each balloon was anchored by ten or a dozen ropes from its top down to large stakes driven into the ground, and the balloons were released one at a time at intervals of about 15 minutes. The basket contained, in addition to the two men, a quantity of food, a cask of water, extra clothing, and many other necessary items. Around the rim of the baskets were hung rows of cloth sacks filled with sand for ballast, the total for each basket probably weighing a half ton or more. When all was ready for a flight, an attendant at each rope released it from the stake and held it in his hand. If there was any perceptible pull on the ropes more ballast was added until they slackened, because the more ballast carried the greater the distance it was possible to attain. When a perfect balance had been reached between the lifting power and the ballast, the command was given to let go of the ropes and to move away from them. If the balloon failed to rise, a trickle of sand was slowly poured from one of the sacks until it would start. Sometimes it would rise a few feet and then stop, and the balloonists would chat with the crowd until a different current of air would arrive and start it upward again. After it reached a height of 50 to 100 feet it usually then rose more rapidly and began to sail away, although some remained in sight for as much as an hour. The first one was launched about three o'clock and the 13th did not get under way until towards six o'clock.

I had told Captain Bumbaugh I would like to have him come to the office and give me a full account of his trip after his return. On the morning after the start of the race, I was disappointed to read in the paper that the Captain had already landed being among the first to do so. Reports of a day or two later revealed the landings of some of the others. Two or three had landed near the Atlantic coast in different states, it being impossible to proceed over the water. When the captain came to report to me on his trip, I learned that he had come within sight of Lake Erie as darkness overtook him. Not wishing to assume the risk of navigating across the lake in darkness he prudently decided to land. At the time of his visit one balloon had not yet been reported down, and we speculated on its fate. When a week had passed with no news, other than vague rumors that it had been seen over Canada, the newspapers began speculating at length on possibilities of every kind. The facts, which did not come to light until two weeks had passed, were that it had landed in the wilds of northern Labrador and the men had to walk for many days to reach an inhabited region. they were uninjured and were the winners of the race.

An enterprising news reporter came to the office on the day preceding the races and asked me to make a forecast of the direction the balloons would take. I did not care to do it but he was insistent. We compromised on a map of Indiana with an arrow over each county indicating the probable direction of the surface 2winds. Fortunately their direction was expected to coincide quite closely with that of the upper currents, the latter being the ultimate controlling factor. The statement I issued at the same time was that the balloons would fan out in an easterly direction ranging from slightly south of east to due northeast. The arrows on the map had practically the same range but with some variations in direction between the northern, central and southern sections of the State. After the event was over the reporter stated that my forecasts were practically 100 percent accurate. Perhaps some further explanation is needed as to why the balloons followed different courses. Each balloonist would try to find the swiftest upper current in order to travel the greatest possible distance from the starting point. However, he would not try for an extreme altitude because it involved too great a sacrifice of ballast and greater discomfort from the cold. As the balloons ascended into thinner air, the gas content expanded and escaped at a more rapid rate. This necessitated pouring out enough ballast to maintain the desired altitude. When all the ballast had been used up the balloon naturally settled to the ground and the race was over for its pilot. The varying air currents chosen by the pilots were responsible for the different directional courses followed.

There's Music in the Air

About mid-September, 1913 Captain Bumbaugh informed me that he had entered into a contract with a leading piano company to make a flight over the City, carrying a piano and pianist, and to bring the piano back without a scratch on it. For this stunt he needed a day with perfect weather conditions and which must be forecasted on the morning of the previous day, as it required 24 hours to fill the big balloon with gas. He delegated to me the task of selecting a suitable day, a responsibility that I disliked to assume. When he insisted, I stipulated that I would make no selection until I was absolutely sure of a proper day regardless of the delay that might result. He assured me a date within two or three weeks would be quite satisfactory. September is normally an uncertain month with frequent storms of wind and rain, and it was no exception in that year. Low barometric pressure areas followed each other in rapid succession during the following two weeks and the Captain was becoming somewhat restless over the delay, especially when an occasional day passed which might have been utilized in safety.

It was not until the opening days of October that an extensive high barometric pressure area appeared on the weather map over the upper Mississippi Valley region. This was the signal I had been waiting for and I resolved to notify the Captain as soon as I had completed the map. Before that time arrived he called me to inquire about it. I told him I felt sure the following day would be ideal and he might go ahead with his project. he immediately started filling the balloon and when, on the following morning, the day proved to be sunny and warm with scarcely a breath of air stirring, I was elated and telephoned my best wishes for the success of his trip. He invited me to come to the park and see the sendoff, but I was rather busy that day and only went to the roof of our building at the time set for the take-off.

He had constructed a solid platform of planks which he attached to the balloon by means of ropes at each corner. He had anchored the piano and piano bench solidly to the platform, and had obtained the consent of a girl pianist from a local movie theater to accompany him and play the piano while enroute. She was strapped securely to the bench, began playing before the balloon left the ground, and continued to do so until they were miles away and out of hearing. From my elevated position I saw the balloon rise above the intervening buildings and float leisurely over the City from west to east, but I was too far away to see the travellers or hear the music. When it was about two miles northeast of me and still over the residential portion of the city, I noticed the balloon settling towards the ground. When it had descended so low that I could no longer see it over the buildings, I feared an accident of some kind had resulted. However, the balloon suddenly reappeared and shot vertically upward at a rapid rate to about a mile in height. then it moved slowly eastward at that high level and descended a little later in an open area near Irvington, a small city five miles east of Indianapolis. While the evening paper mentioned a near-accident had occurred there were no details about it, and I was curious as to what had happened. Captain Bumbaugh came to the office the next day to give me his personal report of the trip.

When all was ready for the flight there was so little room for him on the platform he climbed up into the network of ropes just below the open mouth of the balloon. These formed a sort of basket where he felt he could ride safely and comfortably. However, the breeze was so light the escaping gas was not quickly blown away and he was partially overcome by it. With no attention being given to the job of piloting, the bag descended. Fortunately, either the denser air at the lower level or a sudden current of air revived him sufficiently to realize he was within 100 feet of the ground. Realizing, too, that quick action was necessary he slid down until he was astride the piano and began dumping bags of sand ballast. That caused the balloon to shoot vertically upward as I had seen it. He remained on the piano while the remainder of the trip and the landing were completed without mishap. He jokingly told me I had picked too good a day because there wasn't enough wind to carry the gas away.

On one occasion he brought to my office a large scrap book, the pages of which were about the size of a 5-column quarto newspaper and the book itself at least four inches in thickness. All the pages were completely filled with news accounts and pictures of his various exploits in cities throughout the United States and Europe. He was justly proud of the book and I was much interested in it. He was careful and always conservative in his judgement, had never been injured, and considered his profession as safe as any other. He frequently urged me to accompany him on a flight but I was a trifle too timid to accept his offers although, after observing the departure of each entrant in the International

race, my apprehensions were largely dispelled. I regret losing contact with him since leaving Indianapolis and cherish the memory of our warm friendship to this day.

Annual 500-Mile Automobile Races

Carl Fisher, President of the Presto-Lite Company, had built the Indianapolis Speedway and initiated the annual automobile races some two or three years before I went to Indianapolis. The speedway was an oval-shaped track, paved with brick, and two and a half miles in length. The track was level along the sides of the oval but the ends were steeply banked and had cement retaining walls at the outer edges. Even this arrangement failed to prevent an occasional car from going through or over the retaining wall when driven too fast at the sharp curves. I happened to go to the speedway about two weeks before the scheduled Decoration Day race. Drivers were there testing their individual cars and practicing for the big race. I saw these cars being driven at speeds up to 100 miles or more per hour, and decided I did not care much about seeing the thrills and spills of the big race itself. Moreover, we did not feel exactly able in a financial way to indulge in such a costly and dangerous sport. While busily working in the garden on that holiday, I heard a humming sound which soon rose to a roar. As the speedway was three miles directly west, and I was five miles directly north of the business center of the City, it was coming over the airline distance of nearly six miles. The race started at 10 a.m. and ended between 4 and 5 p.m. during which the roar of the motors could be distinctly heard even inside the house. This was repeated on all of the subsequent Memorial Days during our stay in Indianapolis, except in 1914 when we spent the holiday with the Palmer family at Fort Wayne.

Strikes and Riots

I had encountered only one serious strike of organized labor before coming to Indianapolis. That one was a teamsters' strike in Chicago which was under way when I reported for duty there in 1905. the trucking companies hired non-union drivers in an effort to make deliveries of food and other essentials for the benefit of the public. While walking along a main business thorooughfare I saw a group of strikers surround a team and truck, quickly cut the harnesses from the horses, and leave the truck and driver helplessly stranded in the middle of that busy street. The trucking companies appealed to the Mayor for protection and he took drastic action at once. He placed policemen armed with rifles on each truck that was being operated, and ordered them to shoot anyone who attempted to interfere with its operation. After two or three weeks of this continued protection the strike was effectually broken and the situation returned to normal.

At Indianapolis, a strike of milk wagon drivers suddenly broke out. The Mayor refused to interfere and it dragged along for weeks. It did not affect our suburban area but became serious in the main portion of the City. About the time it ended, a strike of streetcar workers was declared. One morning our messenger, Fred Ackelow, returned to the office from his errands about the City and reported the streetcars were being stopped by strikers. Motormen and conductors, who, either were not in sympathy with the strike or were non-union men, undertook to continue their runs. When a car stopped, a striker would run up behind it, pull the trolley rope down as far as possible and cut it. This left the car and its crew helpless to proceed. Policemen rode on some of the cars to protect the crews, but strikers knocked the policemen down with bricks and then beat them up. The next morning some 30 members of the force went to the station and turned in their badges, not wishing to be subjected to such treatment. The Mayor, a junk dealer and auctioneer who had been nominated as a joke and elected, announced he

did not blame the policemen for refusing to serve under existing conditions.

After our luncheon at the Chamber of Commerce that day the membership held a general meeting. Leading business and industrial men spoke on the serious situation and deplored the complete breakdown of law enforcement. They feared widespread destruction of their properties and debated what action might be taken to quell further rioting by the frenzied mobs. A member advanced the suggestion that, as municipal authorities seemed unwilling to assume control, an appeal should be made to the county sheriff who possessed legal authority to draft as many private citizens as needed to cope with any emergency. A resolution to that effect was immediately voted and the meeting adjourned. While sitting in a window with some other members watching a riot in progress in the street below, an officer of the Chamber requested that we move away from the window because of the danger from possible stray bullets. However, I was there long enough to see a loud-mouthed striker walk up to a mounted policeman and vent his feelings in no uncertain words. The policeman responded by promptly knocking him on the head with his club. this stopped his aggressiveness and, when I read the story in the paper that evening, I learned that he was the leader of the Union.

At the noon luncheon on the following day it was announced that the sheriff had made reply to the Chamber's appeal. He asked for 500 volunteers from the Chamber's membership and promised the situation could be handled with their help. That afternoon, 500 of the younger members went to the Sheriff's office and signed up for duty as deputies. These volunteers were business and professional men, and quite a few had served in the Spanish-American War or had other military training and experience. The group was organized into five companies of 100 men each and a captain was elected by each company. One company took up quarters in the center of the City, in Tomlinson Hall, above the city market which covered an entire block. The other companies were stationed in residence districts on the four sides of the City. Each man provided his own bed and bedding, gun, ammunition, personal needs, and car or truck if he possessed one. When these arrangements were completed, it was announced that all riot calls would be promptly answered. When such calls came in, the nearest company responded by racing to the scene in autos and trucks, each man armed and ready for battle, and the riots were quickly broken up. Frequently a truckload of these men would speed through one of the business streets with their rifles pointed towards the walks on each side, not in answer to a riot call but merely for the psychological effect upon possible would-be rioters among the crowds on the streets. While the rioting practically came to an end within two weeks, these five companies remained on duty for four weeks. They were disbanded only after all labor disputes had been settled and the men were back at work.

At the beginning of the strike the Union forbade the street railway company from removing the cars to the barns, with the warning that any attempt to move them would result in their being demolished. For three weeks each car remained where it had been stopped, many of them in street intersections where they were a hindrance to other traffic. During that three weeks the public had to get about as best it could, mostly on shank's horses with occasional lifts by generous automobile drivers. On numerous mornings I walked most of the five miles to work, but usually got a ride, at least a part of the way, with some friend at night.

The strikes I have mentioned here followed the usual pattern of those which have occurred during the past 50 years or more. Groups of union workers, bent upon winning their objectives, subject the public which outnumbers them many hundreds of times over to every type of inconvenience and suffering. The "Greatest good to the greatest number" is absolutely ignored. They shout loudly that

they are entitled to freedom of action and use of any means to gain their ends, yet, by so doing deny the vast public a similar measure of freedom. What right has any individual or group to prevent others from obtaining food, fuel, transportation, and other services for which they have need? Labor unions will do well to adopt entirely different devices in attaining their just benefits if they are to retain public tolerance and sympathy.

And the Rain Descended and the Floods Came

In March, 1913, Claude and Alma Harker were married, and came to our home for a week's visit as a honeymoon trip. On a certain Friday morning Claude went to the office with me and, after finishing the weather maps, I suggested we walk down to the river that being the day to change the weekly sheet on the recording river gauge. After attending to that duty we walked to the river bank and viewed the river itself. The river was low and perhaps shallow enough to permit wading across it. The bank was steep at that point and it probably was as much as 25 feet above the water level. I told Claude the water company engineer had said the river had, on one occasion in the past, overflowed the bank and flooded the water plant. Claude remarked: "It don't seem possible, and anyway, it will never happen again". I replied by saying: "It seems unlikely, but I suppose what has happened once could happen again". Little did either of us dream at the time that our gauging station of brick construction would be washed away three and a half days later.

It began raining on the following day and continued steadily through Sunday and Monday. The total rainfall at Indianapolis aggregated something over four inches, but at some points along the upper reaches of both the White and Wabash Rivers it exceeded seven inches. On Monday morning rainfall and river stage reports began pouring in to the office, and our messenger came in shortly before noon with a statement that the streetcars were stopped and the power off because the city light plant was flooded. Warehouse men with stocks of merchandise in their basements near the river began telephoning me for information on the probable extent of the river's rise. Not having any formula for forecasting the stage which might be expected, as already stated elsewhere, I was in an embarassing situation. However, I suggested the river level be watched closely and, if it continued to rise, to start moving goods from their basements in time to complete the task before damage could result. This proved to be good advice as many thousands of dollars worth of goods were saved by those heeding it.

I went down to the river to have a look at it and see if I could get to the river gauge. I found water was flowing over the street at the approaches to the West Washington Street bridge, and that the police had roped off the street more than a block away. Not being able to see the gauging station ftom the rope barrier, because of intervening buildings, I crossed the rope. A policeman stopped me and ordered me to go back. I explained to him who I was, that I needed to make a report on the gauging station, and had to go nearer in order to see it. He reluctantly allowed me to proceed. Had he refused I intended telephoning the United States Marshal and request he provide me with an escort for this official mission. By stretching the truth a little to the policeman and his relenting made such a move unnecessary. When I reached a point where the station could be seen, the water was up to the door knob of the building's door and I decided the instrument would not be read that day.

In the afternoon I began to ponder the problem of getting home in the pouring rain with no streetcars in operation. Finally I learned that a special train would be sent out at 6 p.m. to accomodate residents on the north side. As this road ran about a half mile east of our home, it gave promise of solving my prob-

lem. I telephoned home that I would be there sooner or later, and not to worry if it proved to be later. When I arrived at the depot it was jammed with people and the railroad officials were confused by the size of the crowd, the problem of handling it, and the incessant downpour of rain. When our train finally left the station it was 8 instead of 6 o'clock and after darkness had fallen. The train stopped every two or three blocks to discharge passengers until we reached Fall Creek, a small stream flowing from northeast to southwest across the northern residential section. The trainmen went ahead to inspect the bridge and decided it was unsafe, and informed us that the remainder of the trip was cancelled. There being no alternative we stepped forth into the darkness and rain. I was fortunate enough to have an umbrella, and a few others had either raincoats or umbrellas but the great majority had neither. The only light was that of the locomotive which obligingly remained until we had crossed the trestle. This trestle had no side rails, the ties were several inches apart, and occasional reflections from the rushing water showed it to be within a few inches of the ties. It was not easy under the circumstances for any of us to cross the trestle, and many office girls were too scared to attempt it. However, the male members of the large group gallantly offered to help them. Each took a girl on his arm and, moving slowly and cautiously in the darkness, succeeded in reaching the other side without mishaps. I walked the remaining two and a half miles reaching home at 10 p.m. and quite ready for supper.

I started out early the next morning and succeeded in catching a ride, but, when we reached Fall Creek, found only one of the numerous bridges remaining. After reading in the morning paper that the beautiful and costly stone bridge over the river on West Washington Street had collapsed and that the people in 3000 homes on the west side were trapped, I decided to make another trip to the river. The rope barrier had been removed as the bridge was down, and I was free to go down to the water's edge, Our brick gauging station had completely disappeared and the plant of the water company was flooded. Down the river one-half or three-quarters of a mile was the only highway bridge that remained. Learning that flood refugees were being brought out over it, I walked down there. The rain had stopped, the weather had turned much colder, and snow was falling. Trucks and autos were coming from the west across the bridge in quick succession. Each was filled with men, women and childrn who had been rescued from upper floors, attics, and roofs of their homes where they had been marooned for at least 24 hours. Nearly all were bareheaded and without wraps of any kind; the most were in ordinary work clothes and many of the men were in their shirt-sleeves. They were rushed to churches, school houses, hospitals, and other shelters where they were fed and warmed. The only vehicles allowed to move westward over the bridge were doctors or vehicles carrying insignia that they were engaged in rescue work as volunteers. Boats were recruited from surrounding towns and cities. The rescue work was so prompt and efficiant that, according to my recollection, not a life was lost.

After the flood had subsided, it was disclosed that mud to a depth of 12 inches had been deposited on the ground floors of these 3000 homes, and that the furniture had been lifted by the water up to the ceilings. Later, these furnishings had settled down into the mud and were completely ruined. The Catholic churches subscribed $100 for the aid of each Catholic family, and the Masonic lodges did likewise for each member suffering a similar loss. A leading piano company, which had sold 300 pianos on the installment plan in the flooded district, replaced them with new ones and credited each purchaser with the installments previously paid.

There were no electric lights or power, no streetcar transportation for more than two weeks. Drinking water in the business district was obtained from a single well, the water being carried in pails. Janitors in office buildings filled tubs with water and, when we visited the lavatory, we carried a pail of water from the tub. Telegraph and telephone services were disrupted and no incoming or outgoing messages got through for many days. Claude and Alma were forced to remain with us for a week beyond their intended stay, during which we could get no word to or from our folks in Michigan. Finally a telegram to Claude from his father came through, and we lost no time in sending a reply assuring him of our safety. During that strenuous period I rode in autos, the back ends of laundry and bakery wagons, delivery trucks, in addition to walking miles, in getting to and from the office.

My next special task was to reestablish a self-recording river gauge. The water company appeared indifferent to its being relocated on their property, and I began looking for another site. I conferred with the officials of the electric light company, and found they were agreeable to its installation at their plant on the bank of the river. They proposed that it be placed on a platform which they had built over the river and which was reached by a board walk which connected it with the shore. As this plan involved but little expense, I made a favorable recommendation to Washington and obtained immediate approval. While this action was in progress, I received a telephone call from a manufacturing plant some distance down the river inquiring if we had lost some instrumental equipment in the flood, as some of its workmen had found some sort of an instrument while cleaning debris from the river adjacent to its property. When it was described to me, I decided it must be the river gauge. I told the inquirer it was probably useless but that I would like to display it in the office as a memento of the flood. He kindly offered to have it delivered to me and it was brought in on the following day. The reason it had moved more than a mile down the river was the fact that I had securely fastened it to a board shelf with screws when it was installed. This board enabled it to float along with other debris and, strangely enough, prevented its being demolished. On inspection a small dent in the brass cylinder appeared to be the only damage. I suspected the clock was ruined from having been in the water for a month, but I took it to a jeweler. After cleaning and oiling it functioned perfectly. I cancelled the order for a new machine and installed the old one at the newly selected site.

INTRUSION OF POLITICS INTO THE WEATHER BUREAU--Chapter XXVII

It was probably early in 1911 that ill feeling developed between the Chief, Willis L. Moore and the Chief of the Climatological Division, Mr. James Berry. The Chief called upon Mr. Berry to resign and upon the latter's refusal to do so was summarily removed by him. I cannot recall the exact cause of the trouble between them and some of the details were never known except to the few comprising the inner circle. I believe the charge was insubordination, and there may have been some grounds for such an allegation, as Mr. Berry had become somewhat petulant and arbitrary during the later years of his service. While he had a clean record, as far as I knew, he was cordially disliked by many of the section directors. After his discharge he made numerous charges against the Chief through interviews with various newspaper representatives, sent circular letters to us in the field, and asked the Congress to make an investigation. The congressional investigation resulted in an exoneration of the Chief, who brought suit for libel against Mr. Berry. I cannot recall the outcome of the court action but believe

he was restrained from further persecuting activities. It was known to us that the Chief aspired to the Office of Secretary of Agriculture, and we were more or less of the opinion that Mr. Berry tried to block his attainment of that ambition because, perhaps, of similar aspirations on his own part.

In the presidential election of 1912, Woodrow Wilson was elected--the first Democratic victory since Grover Cleveland's second term in 1893-96. Uncle Jim Wilson had been the Secretary of Agriculture throughout the long Republican regime from 1897 to 1912. Not only was he morally obligated by precedent to resign his position when the opposite party took over the reins of government, but he was old in years and probably quite willing to lay down the burden. As Moore had been Chief of the Weather Bureau throughout Secretary Wilson's years in office, it was assumed that he was a Republican. However, he promptly announced his candidacy for the position of Secretary of Agriculture and asserted that he was and always had been a Democrat. His political activities and the ultimate results are discussed in succeeding paragraphs.

Establishing Weather Bureaus

Indianapolis is near the geographical center of the State and, when I was there, it was the only city in the State having a regular Weather Bureau station. The obvious reason for this fact was the excellent system of rail, interurban, telephone and telegraph lines radiating from it to all important towns and cities within its borders. Furthermore, just outside its boundaries were the stations at Chicago, Detroit, Toledo, Cincinnati, Louisville and Cairo. Our system of forecast distribution was such that the people in all Hoosier towns received the weather reports just as early as the residents of Indianapolis itself. Fort Wayne was the next largest and most important city and a weather bureau was established there, probably about 1910. I do not know that any ulterior motive was involved, but, in some cases, the establishing of a station in the home city of a powerful congressman and allowing him to claim the credit for its establishment, was considered helpful in securing adequate appropriations for the Bureau's needs.

When, a little later, a station was created at the smaller city of Terre Haute only about 60 miles west of the State Capitol, we discussed the probable reason within my office. The solution of the question proved very easy. The chairman of the committee that was to investigate the charges brought against the Chief by James Barry was a resident of Terre Haute. There is little doubt that the investigation, which came to naught, was purely a "white-washed" affair. Perhaps "there was a reason".

We had an excellent co-operative station at South Bend which had been in operation for many years. Its cumulative record had become a valuable one because of its length and uniformly high quality. The observer who had contributed this free service was a former college instructor and, when I visited him, was the operator of a fine commercial orchard just outside the city. Notwithstanding this satisfactory situation, a sub-station weather bureau with a paid observer was installed at Notre Dame University only six miles north of South Bend. Perhaps the support of one or more Catholic congressmen or the general Catholic vote was considered a sufficient motive at that particular stage of the Bureau's career. The only grounds for my suspicion were: the Terre Haute incident, newspaper speculative comments, and analogous circumstances recorded in the paragraphs that immediately follow.

Life Among the Four Hundred

In the fall of 1912 a letter from the Chief informed me that a sub-station was to be established at French Lick Springs, that the instrumental equipment already had been shipped to that point, and that, upon its receipt, I was to go

there for the purpose of installing it and training the observer who was to be paid for keeping the records. The manager of the French Lick Springs Hotel was to be the observer. The French Lick Springs resort was the most famous watering place in America and on a par with the most noted ones in Europe. Gambling on a scale equivalent to that of Monte Carlo in Europe prevailed in the town of French Lick. I had longed for an opportunity to see the place, and now that wish was to be fulfilled--and at Government expense. I dreaded the ordeal of training a man as important as the manager of such a swanky hotel in the art of taking, computing, and recording weather observations, and insisting on punctuality, accuracy, and in strict accordance with Bureau regulations. I was also deeply concerned on how I was to obtain a room and three meals a day on my Government allowance of $3.00, even if I added as much of my own money to it as I could afford.

The depot was opposite and directly across a park from the big hotel, while the town of French Lick was several blocks away. I went directly to the hotel, told the clerk I had an appointment with the manager, and asked to see him. The clerk notified him and he hurried forward and greeted me with extreme cordiality. Before I could ask him about suitable accomodations in French Lick he could recommend, he asked if I had registered yet. When I said I had not, he turned to the clerk and told him to give me one of the best rooms in the house. He asked me to come to his office as soon as I was settled comfortably in my room. The room was on the second floor and as large as a spacious living room. After a brief visit in his office he insisted on plunging into the intricacies of the observation work, and I gave him his first lesson. To my surprise he already had the barometer attached to the wall of his office, the instrument shelter erected in the park, and the parts for the wind instruments on the roof ready to be quickly erected if I approved the location. All of this had been done by his mechanics, and there was but little left to be done in completing the installation except to make an engineering survey for the purpose of ascertaining the height of the various instruments above sea level. He said there was an official benchmark on the grounds and he would have surveyors on the job in the morning. Thus all of the work of installation was completed quickly and without a cent of expense to the Bureau.

When the clock hands approached the six o'clock hour, he said he presumed I was hungry and that he would escort me to the dining room. Before doing so he advised me to come down and sit in the lobby from 8 to 9 that evening, when I could see the guests, hear the orchestra, and watch the dancing. He said he would be through with his day's work at the latter hour, then would join me in the lobby, and take me over to Brown's. He left me at the dining room door with the injunction not to pay for any meals or give any tips. The dining room was very large and there was one or more colored waiters dressed in tuxedos for each table. My waiter stood directly behind me throughout my meal. When I attacked each different dish he would pick up the appropriate piece of silverware and courteously hand it to me. No where else have I ever had such complete and individual service. The guests were dressed, in some cases, in formal clothes while others were informally dressed.

The grand ladies had already begun to stroll back and forth through the large lobby when I seated myself there about 8 o'clock. They were dressed in rich gowns several inches shorter and cut lower in the neck than I had ever seen elsewhere, and wore a profusion of diamonds and other precious gems. Some carried lorgnets and some led a pooch attached to a leash. I readily discerned this was a cross-section sample of New York's so called elite society, and that I was seeing more of it than if I had been in that City itself. The hotel manager later

gave me many items of information about some of the guests. He told me there were 13 private coaches belonging to that many different individuals parked on a side-track at the depot. He also told me that a certain wealthy widow and her daughter had occupied a suite of two or three rooms there for many weeks, and for which they paid $125. a day. I believe it was Mrs. Vanderbilt; if not, it was an equally wealthy and well-advertised personage. No one pointed her out to me so I did not receive an introduction.

A Visit to Brown's

The manager arrived around 9 o'clock and we walked over to the village of French Lick. He had given me no inkling of what I was to see which naturally aroused my utmost curiosity. When we entered the building I noted a sign which read: "Brown's Hotel". We walked through the lobby which was no larger nor more elaborately furnished than that of any ordinary small-town hotel. Entering the elevator we quickly arrived at an upper floor made up of several rooms. In each room a gambling game was in progress, and a different kind of game was being played in each. The stakes in the lesser games ranged from 25 cents to one dollar and the patrons were of a mediocre type. My companion explained each different game while we stood watching it. Finally we reached a much larger room where the famous roulette game was being played on two large oval tables. Here the patrons were of the aristocratic type, many of the men being dressed in "tails" and the women in evening gowns. I do not recall whether there was a fixed minimum stake in this game but, as I looked on, I soon discovered that $5., $10, and $20. bills were mere "chicken feed".2 Many $50. and $100. bills were in evidence, and an occasional player would lay a $500. or $1,000. bill on a single spot on the board where he only had one chance in 35 of winning. I believe the winning spot paid either 33 or 34 times the stake placed upon it, while the stakes on all the other spots went to the house. When stakes had been placed on all or most of the spots, the attendant spun the roulette wheel which was mounted in a horizontal position at the center of the table. The number on which its pointer stopped was the winning one. As the wheel was spun every minute or two, it took only that long for the losers to dispose of whatever cash they had ventured on each play. It was interesting to watch individual players and how they reacted to their winnings and losses. Women seemed to be more daring and less emotional than the average man. Some who were universally unlucky that evening continued to extract bills from their handbags until, finally, a last look revealed the bag to be empty. She would then hastily depart without saying a word. An occasional lucky one had a handbag stuffed so full of bills that it was difficult to close it. My friend explained that the most of these people played every evening and that their luck changed back and forth from one extreme to the other, as would be the case by the law of averages. Before we separated for the night, he asked me to keep in mind that this seemingly reckless pastime was merely a sport or hobby for those who were abundantly supplied with cash and fully able to indulge in it.

My Second Day at French Lick Springs

It was late on the following morning that I went to the manager's office, as I wished to allow him an opportunity to attend to his regular duties. When I did arrive I found the engineer had already completed his surveys, and workmen had set up the mast and installed the wind instruments on the roof. Everything now was in readiness for the regular observations to begin. I gave the manager another lesson in that work, and took the first official observation that evening while he observed the various steps in the procedure. Near the noon hour he took me through the spotless kitchen where 60 people were preparing the noon meal, and which would be served by 100 colored waiters.

In the afternoon he took me down into the hotel basement where 30 different kinds of baths were available to guests. A large percentage of the visitor's to this resort were there for the benefit of their health. For many, the hotel's staff of physicians prescribed a certain type of bath in keeping with individual needs. The resort's mineral water came from a spring in the park which flowed a constant stream of water and of which all guests were urged to drink as many glasses as possible each day. The water contained salts having pronounced purgative qualities. I drank only enough to determine its taste, prudently refraining from exposing myself to its further reactions. The wisdom of this was demonstrated many times, as I observed aristocratic guests hurrying to one or another of the numerous outdoor privies scattered at intervals of only 100 feet throughout the surroundings but, when I saw an occasional sportily dressed guest stride rapidly toward one and finding it already occupied adopt an undignified sprint to the next one, I revised my opinion. This spring water was piped into a bottling plant, concentrated by boiling, bottled, and shipped throughout the world as the well advertised Pluto water. The manager shipped a case of Pluto to me as a gift but a trial of it convinced us that its use was neither needed nor advisable for our family. I went through the bottling plant, a canning plant, an ice manufacturing plant an ice cream and dairy manufacturing plant, and a refrigeration plant where a large quantity of meat was stored for future use by the hotel. A large dairy herd and a large beef herd were pasturing in several fields on the farm. I saw the barns and riding stables. There were accomodations for horseback riding, polo, golf, and other games. The sedentary lives led by most of the guests in their home environments were productive of much ill health or outright invalidism. A few weeks at this resort, with its varied opportunities for outdoor exercise, special baths, good food, and an abundant supply of free natural physic, decidedly improved the health of many who went there.

The Reason for a Weather Station at French Lick Springs

My trip to set up the station at French Lick probably occurred within a few days after the November election which resulted in a National Democratic victory, but the plans for the station must have been laid as many as six or eight weeks earlier. The French Lick Springs resort was owned and operated by the nationally known Tom Taggert, and Tom Taggert was the National Chairman of the Democratic Party. It might be a reasonable assumption that an offer of a station at that point by the Chief would not only be pleasing to the Honorable Tom for its advertising value to his commercial enterprise, but also, it might enhance the Chief's political ambitions which I have already described. For many years it had been reputed that Tom Taggert was the owner and proprietor of the gambling outfit at French Lick. Each time the charge was reasserted it brought a vigorous and unqualified denial from Tom. The hotel manager informed me that Tom had no interest, financially or otherwise, in it, and I had no reason to doubt his sincerity.

On the second day of my mission, Tom returned from a business trip and the manager introduced me to him. He was a genial fellow and greeted me warmly. He inquired if I was being treated well there, and told me that he was very grateful for having the station located at his institution. He introduced me to a son who was standing near us, and perhaps it was he who inherited this large enterprise at his father's death some years after I returned to Michigan.

My Third Day at French Lick Springs

I had previously arranged with the manager that he was to take the observations under my supervision during the remainder of my stay. He took the evening one on the second day without an error. On the morning of the third day I purposely arrived a few minutes late in order to determine how well he would func-

tion without my assistance and unhampered by my presence. When I reached the instrument shelter at that moderately early hour, he had correctly read the instruments and properly recorded the data. But what was more surprising, Tom Taggert was there to watch the operation. He reiterated his appreciation of the station, and his presence at that early hour indicated his keen interest in the project. He asked if I was remaining for several days and, when I told him I was leaving that afternoon, he begged me to stay longer. However, I adhered to my original plan by taking the train several hours later. When I went to the desk to check out of the hotel, I asked the clerk for my bill and he replied: "Your bill is paid". My warm and friendly reception there and the many interesting things I had seen made this one of the more interesting trips of my life.

An Interview With John L. Lewis

It was not far, probably, from the time of the event just described I received a letter from the Chief in which he requested me to contact John L. Lewis and arrange for a day and hour when he could have an interview with him. He stated that Lewis was head of the International Typographical Union with headquarters in Indianapolis. I had never heard of John L. up to that time but easily obtained his office address from the Directory. It was only three or four blocks from my office and I went there, on a forenoon, in compliance with the Chief's order. The girl in the office informed me that Mr. Lewis was busy and that I would have to wait a little while. After waiting about a half hour, and having heard no sound from the inner office in the meantime, the girl announced I could see him and led me into his room. No one else was there and no one had entered or left during my wait; and I immediately concluded my forced wait was a feigned attempt to impress me that he was a person of great importance. His brusque manner and speech lent further strength to my conviction. While he probably was only about 30 years of age at that time, his bushy eyebrows and belligerant manner of speech were equally as evident then as newspaper correspondents are currently reporting them. I promptly introduced myself and delivered the chief's request. He replied that he could not set an advance date. I argued that the Chief had to come a considerable distance and at some cost, that he was willing to time his visit to suit his (Lewis') convenience, and wished to be assured that the interview could be had. He cut me short with a bellowing statement to the effect that he was a busy man, could not tell what he might be doing or where he might be on any future date, and that my man would have to take his own chance on seeing him. As a significant afterthought he said he knew what the Chief wanted to see him about, thereby conveying the inference he was not interested in lending any aid.

It was known that the Chief had been a printer in his younger days, and at this time he claimed that he was a member in good standing of the Typographical Union. I reported to him my failure in securing a designated date for his interview with John L. However, the Chief came to Indianapolis a week or two later and called at my office. After a brief visit, during which he assumed a more human and cordial attitude than heretofore, he left the office saying he was going to call on Lewis. He returned in about an hour and, when I inquired if he obtained an interview, replied that he had. He was non-commital as to the results but appeared to be in good spirits. He invited me to lunch with him at the Claypool Hotel, during which he outlined his hopes and ambitions. If he became Secretary of Agriculture he would transfer the crop reporting service to the Weather Bureau where, in his estimation, it rightfully belonged. In that event, we, the Section Directors, would have charge of that work. He would furnish us with Government-owned cars, and we would have permission for unlimited travel in our respective states to observe the condition of crops and collect information about them. This

was the rosy picture he painted to me. It was plain to me that his interview with John L. was for the purpose of securing Union backing for his candidacy.

About this same time I received a letter asking me to secure, if possible, indorsements for him from the Chamber of Commerce and from the Indiana Grain Dealers' Association. I did not like this assignment as it might be construed as an infringement of Government Regulations. However, it being an order from my Chief and the secretaries of both organizations being friends of mine, I mentioned the subject to them. The secretary of the former said the Chamber would be glad to do anything in its power as a personal favor to me but its by-laws prohibited indorsing any candidate for public office. I sent a marked copy of these by-laws to the Chief. The Secretary of the Grain Dealers' Association informed me that it had a candidate of its own therefore would not indorse the Chief. I was secretly glad of these refusals because it relieved me from possible involvement and from giving aid to a political candidate whom I was not willing to indorse or abet in any way.

The Downfall of Chief Willis L. Moore

Not only was the Chief unsuccessful in obtaining the coveted appointment but rumors were in circulation that his campaign had been illegally conducted. I do not recall whether or not these were instigated by his enemy, James Berry, but I have a faint recollection that he demanded an investigation be made. He was charged with spending Government time and travel funds in furthering his candidacy. The hearing was conducted by the Department of Justice and he was ordered to be discharged, but I cannot recall whether he was subjected to other penalties or not. My impression is that he was assessed a heavy fine. In addition, 28 other Washington and field officials were found guilty on the same charges. Two or three were discharged outright; the others were demoted. Among the latter, Inspector Conger of Detroit suffered a reduction in annual salary of $1,000.--which was more than one-third of his former pay.

For many years Moore had owned a farm at Rockville, Maryland, from which he commuted daily to Washington. At the time of his punishment, I assumed that the proceeds from the sale of the farm probably were required in settling his obligation to the Government. Truly, the way of the transgressor is hard. His unbounded egotism and craving for aggrandizement undoubtedly made his dishonorable downfall doubly hard to bear. He moved to Los angeles or its vicinity and later became partially insane. I read of his death in the newspapers a considerable number of years ago. He was succeeded by Charles Marvin as Chief of the Bureau who, as I have mentioned elsewhere, had been Chief of the Instrument division for many years.

A Second Trip to French Lick Springs

After Moore's removal from office, there were stories floating around that the investigators had unearthed evidence of weather stations having been established as political favors. In the summer of 1913 a letter from Chief Marvin came to our office. It contained a request for information concerning any stations established ostensibly for political reasons. I was absent on an extended sick leave when it arrived and Mr. Norquest, being temporarily in charge during my absence, wrote a reply. He reported the circumstances connected with the French Lick Springs station and the implied reason for its establishment. He made no reference to the other new ones I have mentioned because there was no positive evidence of illegitimate motives.

A little while after my return to duty a letter from the Chief directed me to go to French Lick Springs, dismantle the station, and ship the equipment to Washington. After my kind and cordial reception there, the hotel manager's

efficient record as observer, and the financial outlay assumed by Tom Taggert at the time of installation, it seemed ironical to have it in use less than a year. To soften my embarassment and lessen the shock to those whom I had met on my first visit, I informed the hotel manager by letter of the official orders I had received and of my impending visit. When I arrived I went directly from the depot to the village of French Lick and secured a room in a small hotel there, as I neither expected nor intended to accept any favors such as were accorded in the previous fall. From there I went directly to the manager's office and received the same cordial greeting as before. When I expressed regret for the action I was required to take, he told me to think no more about it as neither of us was responsible in any way. To my surprise he already had the equipment mostly dismantled and packed for shipment, and said the job would be finished the next day. On the following morning he took me to where his men were finishing the task and I found everything had been carefully packed and in proper condition for shipping. I suggested that he should submit a bill for the labor and materials but he positively refused to do so. I was able to leave in the afternoon of that same day, and had sufficient time for a considerable visit with him before my train was due. Here was a man possessing the qualities that I most admired; friendship, affability, reliability, culture, and unaffected courtesy--the true Hoosier type. He was a member of the various Masonic orders, up to and including the Shrine as in my own case. Our parting was equally as cordial as the previous one but, unfortunately, I never had the opportunity of meeting him again or any information concerning his movements in after years.

ACTIVITIES OUTSIDE THE BUREAU--Chapter XXVIII

In previous chapters I have mentioned minor incidents which hold but little interest to the reader. Those referring to financial ventures were included only to indicate the necessity for exercising care and caution if success is to be assured. I was constantly under the urge of adding to my small income which fact may have been indirectly responsible for such failures as resulted from hasty and faulty judgement. I will close the subject with just one more lesson, and hope my experience may be of benefit to someone.

Engaging in an Engineering Business

A young man called at my office one day for a brief social visit after having transacted business in another office in the same building. I had previously met him in the office of the architect who had the contract for installing our river gauge. At that time he, assisted by a couple of draftsmen, was engaged in preparing working drawings and specifications for a truck that was to be manufactured by a local firm. I questioned him about the nature of the work he was doing and he gave me a detailed account of it. He had obtained his training in mechanical engineering at a college in Minnesota, his home state. He expressed confidence in himself as an engineer but said he was lacking in ability to handle the correspondence involved in the business he was developing by mail. He was living at the home of his father-in-law with whom I was well acquainted and who was an official of the church we attended at Meridian Heights. From these facts he seemed to be a good moral risk and I thought I might be able to help him, at least temporarily, with his correspondence. He seemed grateful for my offer, and I went to his office to obtain further detailed information as to his planned operations. He showed me current copies of the Patent Office Gazette in which every patent issued was described and illustrated. His plan was to select a few promising patents, solicit by mail the business of preparing working drawings and

specifications, and, if desired by the patentee, build a model machine for him. These were the necessary preliminary steps to either marketing or manufacturing a patent concerning which very few patentees had any experience or knowledge. The plan had the earmarks of being a valuable service to its patrons and of becoming a profitable and growing business for us.

When I broached the subject of remuneration for my services in handling the correspondence (which I could do after my regular work hours), he proposed a partnership in which he would attend to the engineering work and I would handle the business correspondence and bookkeeping. The net proceeds were to be divided equally between us. There seemed little risk in giving it a trial and I assented. I suggested that we have some letterheads, envelopes, and a circular of solicitation printed. He agreed to this but said he had no funds on hand to pay for them. He asked me to advance the money to cover their cost, for which I would be reimbursed from the first returns. From letters I wrote we landed a contract for preparing drawings and specifications for a one-horse manure spreader. The owner of the patent lived in Kansas or, possibly, in another state. He stated there was urgent demand for such a spreader on farms where only one horse was kept. The fee was to be $150. and paid before the drawings were started.

The letter ordering the drawings arrived in the morning mail and was opened by the engineer. When I arrived after four o'clock the drawings were already under way but, to my consternation, he had employed a draftsman to do the work. I felt he should be doing the work himself until we had sufficient contracts and money to justify employing outside help. Furthermore, he was incurring this expense without consulting me. I went to the desk, took up the letter and read it. The writer mentioned that he was inclosing his check for the required amount, but it was not with the letter or about the desk. I immediately asked the engineer what he had done with it and was informed that he had cashed it. When I asked for my share he said he had paid some personal bills with it. It began to dawn on me that something was wrong and I went home in a disturbed frame of mind. It was two or three days later that I went to his office, having mentally analyzed the situation in the meantime. I told him I was through with the business and that the partnership was ended. I had revised my estimate of his integrity, and decided it was better to lose the small investment than remain subjected to the possibility of more serious involvement. The wisdom of this course was soon to become apparent.

Having delivered copies of the drawings he was successful in obtaining from the same man an order to build a model. He let the contract for manufacture to a local machine shop owned by one of my good neighbors for $500. It is probable that the cost charged the patent owner was double that amount. The machine was completed and ready for shipment within three or four weeks, but the manufacturer refused to release it until he had received his pay. When the patent owner, who had forwarded his check for the machine in advance, failed to receive the machine within the specified time, he filed complaint with the postal authorities. A postal inspector called on the engineer and, being told that the delay was the fault of the builder, went to the machine shop where he obtained the facts. He returned at once to the engineer's office and told him he would be taken into custody unless he paid for the machine within 24 hours. That same afternoon the engineer went to the machine shop and handed his personal check to the owner of the shop. The latter, being somewhat suspicious, slipped out to another telephone and contacted the bank on which the check was drawn. Finding the check was worthless, he returned to his own office and told the engineer that, unless he received full payment in cash by the next morning, he would turn him over to local

authorities. The engineer promised to do so and asked that his check be returned to him. The owner told him he would do so only after he had received the cash, otherwise he was holding it as evidence of guilt. The engineer, thus confronted with two prospective charges: using the mails to defraud and drawing a check on a bank in which he had no funds, hurried from the shop. Within an hour or two, and before the day ended, he returned to the shop with the money. We never learned where he obtained it, but suspected the father-in-law was forced to advance it in order to protect his family from unfavorable publicity.

Masonic Experiences in Indianapolis

I first attended Ancient Landmarks Lodge soon after we had taken up our residence in Indiana. this was at the invitation of the clerk in the furniture store, and, on arrival, found he was the Senior Deacon. He introduced me to the other officers and the Lodge opened immediately. I was able to pass a good examination because of my thorough knowledge of the work gained at Cheyenne, which naturally produced a good impression on the examining committee. There were several important visitors from western states present that evening and, at the conclusion of the business session, were called upon to speak. They responded with effective and interesting short talks. I expected no introduction as I doubted that the Senior Warden, who was a banker and Acting Master for the evening, could recall my name or occupation. However, he announced there was present a visitor who had recently come to Indianapolis to live and who was the City's new weather man. He said he thought all weather men should be hung and wanted to know what Verne Church had to say for himself. Always lacking for something pat to say extemporaneously, I was so dumbfounded by the suddenness and character of this introduc-tion, I could think of nothing appropriate to say. I said only a few words and sat down. This incident impressed me deeply with the fact that Ancient Landmarks Lodge, made up of mostly business and professional men, was endeavoring to demonstrate fully the true qualities of friendship and affection for which Masonry stands. I resolved to attend its meetings regularly, and transferred my membership from Cheyenne to it soon afterward. Of the 13 blue lodges in the City, only one other had the same high quality of membership and number of members.

Notwithstanding its approximate membership of 2,000 and comparatively large attendance at all meetings, every member had a standing invitation to take an active part in the work. My previous experience and knowledge of the work, gained at Cheyenne, enabled me to easily and acceptably perform any assignment. This Lodge followed the precedent of advancing its officers each year. This left only the lowest office in the line to be filled by appointment, that of Junior Steward. This appointment was the prerogative of the Master but, in this Lodge, he did not assume that authority. Instead, he selected the one who had done the most outstanding quality of work and otherwise fully qualified as a candidate, and submitted his name to the officers for their consideration. If any line officer voted against the one named he was not appointed, in which case another name was proposed until a unanimous vote resulted. This procedure was designed to promote the utmost harmony between all officers, and called for the exercise of good judgement and extreme care in making the selection.

When Obie J. Smith was advanced to the office of Master at the election in the late fall of 1911, I was surprised to receive a call from him at my office, and still more surprised when he told me I was being considered for appointment as Junior Steward for the coming year. He asked me if I expected to remain in Indianapolis during the seven years normally required to pass through the chairs, if I would become proficient in every phase of the work within that year, and if I would attend all meetings except for illness or absence from the city. I un-

hesitatingly answered all of these in the affirmative and was notified a few days later that the officers had ratified my appointment. At the end of 1912, when the line officers were due for advancement, the Senior Steward resigned. This enabled me to skip that chair and be advanced immediately to the office of Junior Deacon. At the end of the next year I advanced to the office of Senior Deacon, but served only a half year because of our removal to Lansing in July. It was a great disappointment to me in not having the opportunity of continuing my association with these good friends, and failure to attain the honor of being Master of that wonderful Lodge. It had been the custom in this Lodge for many years past to present each retiring Master with a fine gold watch, instead of the usual Past Master's badge which served no useful purpose other than the honor of wearing it on important occasions. The leading jeweler in Indianapolis, who had been a member of this lodge up to the time of his death, had generously offered to supply it with any merchandise from his store at actual cost. The Lodge took advantage of this offer in buying the watches presented to its Masters. At the death of the jeweler the offer was continued by his son, who also was a member of that Lodge and who had inherited his father's jewelry business. A provision was inserted in the by-laws stipulating that a watch costing $100. was to be purchased from treasury funds and presented to each retiring Master. A watch costing that amount when purchased at wholesale rate, naturally was among the finest obtainable in that era of low prices. The inside of the case was engraved with the donee's name, name of the Lodge, and the year he served as Master. In addition, the corps of officers purchased a suitable chain and charm to go with each watch as a token of their esteem and friendship.

Norquest Becomes a Mason

Not long after Norquest became my first assistant he, noting my deep interest in the Masonic Lodge, confided to me that he would like to become a member. I lost no time in supplying him with an application blank and, after he had filled it out and attached his signature, presenting it to the Lodge. He was duly elected to receive the degrees, each of which made a deep and lasting impression on him. My fellow officers considered him an excellent candidate and complimented his proficiency in absorbing it. He was ready for the third and final degree while I was yet in the Junior Steward's chair. Hence, I was greatly surprised when the Master came to me and asked if I would like to confer that degree upon him in view of my close association with and friendship for him. This meant I would be the Acting Master and conduct the principal rites of the ceremony. I had never served in such a capacity but, having it fully committed to memory, I gratefully accepted the offer without hesitation. The work progressed smoothly and the ceremonies were concluded without a single error. Immediately afterward and on numerous occasions in after years, Norquest told me how highly honored he felt in receiving that most important degree from me, and that it really meant more to him because of that fact. Before the Lodge closed that evening, the Master not only complimented my work but said that, as far as he knew, it was the first time that the degree had been conferred in that Lodge by a Junior Steward in his first year as an officer.

Norquest immediately took an active part in the work and soon was highly regarded by the other members for his earnestness and ability. In less than a year after his initiation he was started at the bottom of the official line. He advanced through the chairs and became Master of the Lodge. In the meantime, he had joined the Chapter of Royal Arch Masons, the Consistory, the Mystic Shrine and, I believe, the Commandery of Knights Templar. His only disappointment was the fact that he was unable to complete his year as Master. After serving only

a few weeks, he was promoted and sent to a western station. Before leaving he was surprised by a visit at the office one day from his fellow lodge officers. As they bid him adieu they handed him a Past Master's watch just as if he had served his full term. This was a fitting tribute and further expression of the high esteem he had deservingly acquired during his stay in Indianapolis. He became a Section Director and was in charge of the Idaho Section at Boise for a period of years. He was later transferred to Houston, Texas and, after several years' service there, he was given the important post at San Francisco, California where he is now. He will reach the maximum retirement age of 70 within the next year or two. His son Kenneth, who was a small boy in knee pants when they moved to Indianapolis, also entered the Weather Bureau service and, at present and for some years past, is and has been one of the National forecasters in the Washington office.

My Remaining Masonic History

Many of my fellow Masons in Ancient Landmarks Lodge were members of the higher orders of Masonry and active in them. This was a special incentive for transferring my Chapter and commandery memberships from Cheyenne to this City, which I did soon after affiliating with Landmarks. My membership was in Raper Commandery No. 1 which had a Nationwide reputation at the time for its excellent drill team. It had won a large share of the trophies over a long period of years in the competitive drills at the triennial conclaves (National), and these filled several display cases in a room of the Temple. I took no active part in its meetings, giving my time to the Blue Lodge instead. I transferred my membership to Lansing Commandery, probably in 1915, where I took part in several exhibition drills at State conclaves and at district field days. I was made a life member of that body on September 16, 1940.

I did very little work in the Chapter for similar reasons, and transferred my membership to Capitol Chapter in Lansing about 1915. On October 11, 1940, life membership was conferred on me by that body.

I joined the Mystic Shrine in Murat Temple, Indianapolis, either in 1910 or 1911. Its temple was a beautiful building and contained the finest theater in Indianapolis. The initiatory ceremonies were held in this theater and I enjoyed them greatly. At the last one I attended there were 500 candidates in the class, 400 attendants with them on the stage, the 3,500 seats in the body of the theater completely filled with members of the order, and every inch of standing room by others. Since that time the membership has more than doubled and the Temple greatly enlarged. In February of this year the number of members was reported as 9,622. At several of the ceremonials I witnessed, a particular part was taken by Charles W. Fairbanks, former Vice President of the United States and a member. One of the candidates was Charles J. Orbison, then a circuit judge, now a Federal District Judge. I am still a member of Murat Shrine.

Returning for a few further notes relating to the Blue Lodge, I should mention that Obie J. Smith, who started me in the officer's line at Landmarks, later became a 33d degree Mason and Grand Master of the State of Indiana. Some years ago he received crippling injuries in an auto accident while returning from an out-state masonic meeting. He never fully recovered from them and died in 1944 at the age of 65 years.

A member whom I helped initiate in Landmarks was one of the Stutz Brothers. They were building the Stutz car which was quite popular at that time. The officer in the chair just ahead of me was Theo. Meyers, treasurer of the Indianapolis Speedway and generally called "Pop Meyers" by news writers and racing fans. When I returned to Indianapolis several years later, I attended a meeting at Land-

marks. They were celebrating the 75th anniversary of the Lodge that night with a large banquet. Theo. Meyers took me in tow and seated me at the Past Masters' table. I protested that I was not eligible for the honor but he waved it aside by saying it was through no fault of mine, and that I really belonged there anyway. Such a display of warm, fraternal friendship I have never found elsewhere. After being in Lansing for a time, I affiliated with Lansing Lodge No. 33 but never forgot the splendid treatment I received in Landmarks. Fred Ackelow of the Weather Bureau became a member there and served as its Secretary for a considerable number of years. After moving to East Lansing I transferred my membership to that Lodge. On May 5, 1943 I was honored with a life membership by it. Earlier I was invited to become an officer and proceed through its chairs but, being absent from the City nearly half of each month, could not conscientiously accept the offer. Evidently the Fates had decreed that I was never to become a Past Master in Masonry.

Two-thirds of the Doctors Were Wrong

Late in the fall of 1912 I was suddenly made aware that all was not right with my internal machinery. I had left the house one morning carrying a package of books weighing several pounds. At the streetcar line I had to wait a little while for the car that would carry me to the office. I had no more than comfortably seated myself in the car when I was seized with a strange feeling--one of extreme exhaustion and heart palpitation. I felt I should leave the car and return home by another one, but could not summon sufficient energy to do so. The attack continued during most of the trip but ceased before I reached the office. After that, whenever I walked rapidly or performed any work requiring exertion, I had a recurrence of the same symptoms. Many different times I was compelled to sit down on the curb or other convenient place in the business district, and wait for the attack to subside. I consulted Dr. Dow and he pronounced it as some form of heart trouble. He gave me medicines but I could see no change for the better. He also prescribed some smelling salts which he advised me to carry and use whenever an attack developed. They seemed to lessen the length and severity, but not the frequency, of the seizures. I went on through the winter, moving slowly, and avoiding excitement or exertion as much as possible. In April, at the earnest solicitation of numerous friends who believed that the primary cause was in the stomach or digestive tract and that the palpitation was a result of such trouble, I went to a noted stomach specialist. For his $10. fee he told me it undoubtedly was heart trouble and not a stomach ailment. He gave me a couple of prescriptions which, having a working knowledge of, I was able to read and interpret. One was a heart stimulant; the other, a simple tonic. I presented neither one at the drug store, instead I bought the items called for and took them in accordance with the directions, at a probable saving of at least a couple of dollars.

For a number of weeks past I had carried a noon lunch from home which I ate at my desk, to avoid the necessary exertion and hurried dodging of traffic in going to the Chamber of commerce for lunch. Two or three days after I began taking the specialist's prescribed medicines, I was seized with an attack in the office. I had finished my lunch and leaned back in my chair to take a brief nap until my office help returned. As I was under no strain or exertion at the time, I was considerably disturbed. Moreover, I had put on a different suit that day and had forgotten to transfer the bottle of smelling salts to it. When Norquest returned I told him what had happened and asked him to go to a store for another bottle of them. Although we were nine floors above the ground and the nearest drug store was a block from our building, it seemed to me he had no more than

disappeared out the door when I saw him returning with the bottle. They afforded me relief and I was still under its effects at the closing hour of four o'clock but was determined to reach home if possible. Norquest aided me to the streetcar and insisted on going home with me. He assisted me from the car to my home and into the house. Within five minutes after relaxing in my rocker the attack subsided, after which I felt as comfortable as normally.

That evening, Cora went to choir practice and I remained to look after the children. While reading the evening paper I was seized with another attack. I phoned to Dr. Dow, who lived only about a block away, and asked him to come over and examine me while I was still in the midst of it. He found nothing unusual but seemed puzzled. After I had reported in full my experiences that day, he asked me if I had been taking any kind of medicine in recent days. It was then I told him about the stomach specialist and the medicine he had prescribed. Dr. Dow thought the more severe and prolonged attacks were due to the heart stimulant and advised that I discontinue taking any more of it. Being a good friend and neighbor he spent some time discussing my condition with me. Finally he said he would like to take me to a specialist on diagnosis with whom he worked a part of each day at one of the hospitals. When he asked if I would consent to seeing him, I quickly replied that I was willing to go to any doctor that could give me any help. He agreed to pick me up with his car the next morning and take me to this specialist.

When we reached the elevator in the building where the office was located, I felt extremely weak and nervous but no attack developed as I feared. The specialist, remaining seated at his desk some distance from me, asked questions for at least five minutes. Suddenly he turned and asked Dr. Dow if he had ever examined my blood. When he replied in the negative, he said he would make such a test as the first step. When it had been done and the hemoglobin count found to be only 45 against a normal of 95, the specialist said to me: "Man, you have no business to be away from home, you might keel over any minute". He ordered me to go home and to bed and not to get up or even sit up for at least a week and not then unless he said so. In the meantime, he would have a microscopic examination of the blood made to determine more definitely my exact condition. He told Dr. Dow to give me heavy doses of an iron preparation, the treatment in common use for anemia, and to closely watch my progress. At the end of the first week he ordered me to continue in bed for another week. This was repeated each week until I had lain there for five weeks and my blood showed a test of around 80. Then I was allowed to sit up and, a few days later, allowed to get onto my feet. To my surprise, at first I could neither stand nor walk. But I soon had sufficient strength to take a few steps with a chair for support, then to walk a little way at a time without support. When I was able to walk a few blocks and seemingly making little or no further gains, Dr. Dow suggested that I ought to go to some quiet place and remain there until I was restored to normal.

Sojourning at Morrison Lake

In keeping with the Doctor's advice, I decided to visit my parents at Clarksville. Norquest procured my railroad ticket and sleeping-car reservation and, accompanied by Cora, assisted me to the depot and into my berth. I arrived at Grand Rapids in the morning where I had to walk only a few steps to board the train that would take me to Clarksville. This slight effort, together with the tiring effect of the trip itself, caused me to feel exhausted and ill. When I stepped from the train at Clarksville, I handed my grip to Jake Lenhard and told him to get to Father's house as quickly as possible. A few minutes later I walked into the house and slumped into a chair. Mother was surprised to see me and learn

of my condition, as I had not informed her in advance of the visit and had minimized the degree of my illness in my letters. She went to the back porch and called Father who was working in his shop. Her call must have been more urgent than usual, as he rushed to the house fearing she had met with an accident. He was relieved to find her all right but surprised to find me there and in such a weak condition. The following week was marked by extreme heat every day. I laid in the shade of the maples on the lawn and suffered with the heat each day. I tossed restlessly in my bed on the second floor each night. In order to get a little sleep I went down to the front porch, unknown to the folks. I made no improvement and felt I was losing ground. I asked Father to take me to the Lake where I hoped to find a vacant cottage and a cooler atmosphere. I was able to secure a furnished cottage, and immediately sent for my family. An old friend of my father kindly offered to let me use his steel boat and came to the lake, removed it from storage, and placed it in the water for me. He said he had never loaned or rented it to anyone, but I was welcome to use it personally as it was easier propelled than any wooden boat. He asked me to keep it locked and allow no one else to use it and, when I later left the lake, refused to accept any pay for it.

When we began living in this cottage at Morrison Lake, I was too weak to row the boat, dig fishing bait, or carry water from the well. Our little girls performed all of these tasks for me. Fishermen from Clarksville came to the lake at daylight nearly every morning and caught good strings of bass. My fishing was done during2 the day and I caught practically nothing despite persistent daily attempts. Other cottagers, some of whom were good fishermen, had no better success. Among these was the Reverend Will Minty, who came each summer from his pastorate in a western state and of whom I have previously spoken. I had no previous knowledge or experience in casting for bass. He offered to take me out one day for the purpose of demonstrating that particular method, and optimistically predicted he could get some bass. He knew all of the favorable spots and we tried all of them that forenoon. No one in the party got even a single strike.

I spent much time relaxing in a hammock on the porch but went fishing whenever the urge impelled me. One warm and sunny afternoon around four o'clock such a desire suddenly and forcibly struck me. Our stay at the lake was nearing its end and I had improved sufficiently to row the boat myself. In recent weeks I had often gone out alone but, hoping the children might experience the thrill of catching some fish before we left, I resolved to take some of them on each future trip. Realizing this particular day and hour was unfavorable for success, I decided to only invite Jessie, in the belief that she was old enough to accept philosophically the defeat which was probably in store for her. Because of the prevailing heat, I reasoned the larger fish might have sought the coolness of a deep channel which I had been told existed somewhere between an island in midlake and the opposite shore from our cottage. We rowed to that area and tested the varying depths with our anchor. The deepest spot proved to be about 30 feet and we anchored there to try our luck. I baited the hooks and we began fishing. Before I had gotten my line into the water Jessie had a bite. The tug on the line was a strong one and she faithfully followed my instructions in handling him. The action of the fish convinced me it was not a bass but some other kind of a large fish. I threw out my own line and then proceeded to watch and instruct her in landing it. We got it into the boat and found it unlike any fish I had ever seen. It was nearly 30 inches in length and had horns like a bullhead but of a light red color, whereas the bullhead is normally black.

There was a live well built into the boat which allowed the water to run into it until the tank was about two-thirds full, after which it remained at that

level. The constant change of water kept it fresh and the fish alive. This was the first occasion for using it and I put the fish into it. While doing so Jessie announced that my bobber had disappeared, and I quickly grabbed my pole to handle my fish. It proved to be of the same kind and size as the first one. Our good luck continued and we remained until darkness put an end to our fun. As we neared the cottage on our return, one of the porch occupants, a minister from Grand Rapids with whom I had gone on several fruitless fishing expeditions, jokingly inquired if we needed any help to carry in our fish. I replied that we did and asked him to bring a lantern. When we reached the shore he had made no move, so I urgently repeated my request, as we could make no move without a light. When he finally arrived I opened the live well which was nearly as full of fish as it would hold. When he saw them he gave a loud shout that brought all of the other cottagers. When the fish had been removed we found that, believe it or not, there were 12 of them. They were distributed among all the fish-hungry cottagers who pronounced them very good. A Clarksville fisherman told me they were known as sand bullheads. I evaded all questions as to the spot where they were caught as I wanted another unhampered try at them before leaving the lake. The day before we were to start for home, we again went to the spot and brought back 6 more of the same kind. That evening I described the spot to the other cottagers so that they could easily locate it. When I arose at daylight the next morning for an early start on our homeward journey, I saw through the haze of half-light a half-dozen or more boats camped on the favored spot. During our stay at the Lake, Marks of the Grand Rapids office came out, at my invitation, and spent a weekend with me. We had a pleasant visit and enjoyable time together. Also, we were visited there by numerous friends who were still living in that vicinity. My health was greatly improved and, although not back to normal, I felt the necessity of returning to duty as soon as possible. My sick leave had expired on May 28th, and I had been on leave without pay from that date until I should return to duty, which proved to be on August 28.

Seeking a New Field and Better Health

After the 7-week-stay at the lake, I was able to perform my official and social duties quite normally for two or three months. Then I began to have recurring symptoms of the former trouble. Winter had arrived, and but little outdoor exercise and fresh air could be obtained during the cold months when all daylight hours had to be spent in the office. This discouraging reversal of hopes and aspirations led me to consider the possibilities of an occupation affording a partial outdoor existence. While such a resolution was still in the formative stage, I happened to read in a local paper an announcement by the Civil Service Commission of an examination on March 4 for Field Agent in the Bureau of Statistics. I knew such a position was identical to that which Chief Moore had envisioned to me while waging his unsuccessful campaign for the office of Secretary of Agriculture. Also, it appeared to fit my needs and be within the scope of my knowledge and past experience.

In view of my experience in the Weather Bureau, my good record as an administrative official, and the fact that the Bureau of Statistics was in the same Department of Agriculture, I thought it probable that a transfer without examination could be obtained without difficulty. Following the proper procedure, I wrote to the Chief of the Bureau of Statistics about the middle of February, stated my qualifications and experience, asked for information about the duties, salary, and prospective chances for appointment, and inquired if he would approve the transfer. I received a very cordial letter in reply, in which he stated he wanted each appointee to come in only through a competitive Civil Service examin-

ation. He also outlined the nature of the duties, the entrance salary (about $200 less than I was then receiving), and that he expected to appoint 20 men on July 1 if the necessary funds were forthcoming from the Congress. He deemed my qualifications were adequate and hoped that I would take the examination as scheduled. I applied to the Civil Service Commission for the examination and the admission card arrived2 only two or three days before the scheduled date. One of the printed statements on the card was to the effect that applicants for the Departmental Service must be examined in the state claimed as legal residence. I had contin-uously retained my legal residence in Michigan, which prevented me from voting elsewhere, but was permitted by the Regulations and advised by numerous friends in the Service. I did not understand the term "Departmental" or whether it ap-plied to this examination. If it did, I would have to take the examination in Grand Rapids. I consulted the local examiner but he was uncertain about it. How-ever, he advised that I take the examination in Indianapolis. I wrote to the Civil Service Commission for an interpretation, but took the examination while waiting for the reply. When it arrived I was informed it applied to positions in Washington, but applicants could take the examination in any state for positions in the field. As I had no desire or intention to accept a Washington appoint-ment, I rested easy in the knowledge that no appointing officer could locate me elsewhere than in the field.

Educational requirements for the position were: Training equivalent to that required for a bachelor's degree from a college or university of recognized standing; or experience as a State Statistical Agent in the Department of Agriculture; or not less than three years' practical experience in statistical research or investigation. I could make only a weak claim under the first category, nothing under the second, while my Weather Bureau training and experience, which could be a subject for variable interpretations, was the single basis for a claim under the third classification. However, additional credit was to be given for education or experience in agriculture, but I could qualify only under the latter alternative in this provision.

There was too little time for any material preparation, and I went to the examination room feeling poorly equipped mentally for the test. Also I was seriously handicapped by my weak physical condition. There were 100 questions on each of the first two subjects, and I had to write rapidly from 9 in the morning until the closing time of 4 o'clock in the afternoon without stopping for lunch. When the examination was ended I was nearly physically finished, too. The results of the examination were, as always, slow in coming through. I finished a week's trip inspecting co-operative weather stations in northern Indiana in time to reach Fort Wayne for a weekend and Decoration Day visit with the Palmer family. I had arranged for Cora to meet me there, and when she arrived she brought the letter from the Civil Service Commission containing the results of my examination.

My standings were as follows:

Subject	Weight	Rating
Agriculture	7	84.5
Arithmetic (including statistical)	4	64.0
Crop-Reporting Methods	2	70.2
General Education and Experience	7	75.0
Average Percentage.....		75.85

Under the first subject some of the questions were: Name five diseases of farm animals and give the treatment for each; name five diseases of fruit trees

and the remedy for each; name five insect pests on fruit trees and how to combat each; name the five most important crops grown in each of the grand divisions of the United States; name the five crops in the order of their rank that led in production in various named states; name the five leading states according to rank in production of each of a dozen named crops; and many others of a similar nature. The answers I gave to the first ones were based on my former farm experience. I had never studied the statistics relating to the others, and my answers were mainly guesses. These proved to be quite good because of the general knowledge I had gained while residing in various sections of the country. These accounted for the higher rating received on that subject.

The over-all rating seemed low to me, but when I found a statement in the report that only seven in the entire United States had received a higher rating, I felt quite jubilant. If 20 were to be appointed, as stated in the Chief's letter, my appointment was definitely assured. I discussed my prospects and plans with Mr. Palmer. He gracefully tendered his congratulations but I suspected he inwardly felt I was making an error in leaving the Weather Bureau. After this enjoyable visit we returned to Indianapolis. I never saw him again.

Preparatory Steps for Leaving Indianapolis

For two2 years or more our home had been listed with a real estate company. The house was not insulated and we had difficulty in heating it, hence our decision to sell and to purchase something more satisfactory. The real estate company had produced no buyers and apparently had ceased making any effort to dispose of it. We did not want to leave the city without selling it, and I gave the company some high pressure talk calculated to force some action on their part. They promised to resume their efforts and soon came up with a proposition to trade the equity, we had accumulated through regular payments on our contract, for a large corner lot in a newly-platted and restricted addition. This addition was destined to become a fine residence section, and the lot was one of the choicest in the addition. After brief deliberation we decided to accept this even trade as the lesser evil. We reasoned that the lot could not be stolen or materially damaged in our absence, although we needed our equity in cash to purchase a home wherever we might become located. Following the disposal of our home we set about packing our household furniture and other belongings for shipment, although we neither knew at that time when nor where they would go.

A letter, dated June 3, 1914, from Chief Estabrook informed me that my name had been certified for appointment by the Civil Service Commission. He asked me to name three states, in order of preference, which I would accept for assignment. In my reply to this request I listed Michigan as my first choice, but doubted it would be favorably considered as the Weather Bureau policy was against placing its men in their native states. Later I learned that Mr. Estabrook's policy was exactly the reverse, he maintaining the sensible view that the appointee could render better service in a state where he was acquainted with the character of its people, its crops, and its agricultural practices. Another letter from him followed on June 13, stating I had been selected for appointment and would be assigned to Michigan with headquarters in Lansing. Although the agricultural appropriation had not yet been passed by the Congress, it was evident that the necessary funds for the contemplated additional appointments had definitely been decided upon by that body. However, no appointments could become effective until the bill had been passed by the Congress and signed by the President.

During the progress of these events I had notified the Weather Bureau of my tentative plans, and had earnestly recommended that Norquest be appointed to succeed me. This was rejected on the grounds that, while it was recognized he was

fully qualified and had an excellent record, there were others with prior claims for advancement. When I made the trip from Salt Lake City to Indianapolis, nearly five years earlier, I called at the Chicago office enroute. My friend Armington, the first assistant, congratulated me on my promotion as Section Director in charge of Indiana. It was his home state and he frankly said he envied me this desirable assignment and he added that, if I ever left Indianapolis, he wished I would notify him in time to make his plea for the place. When I learned that Norquest was definitely out of the picture, I wrote to Armington and suggested he get busy if he still wanted it. I felt sure he could get the strong indorsement of Professor Cox which, with his long service and delayed advancement, would have great weight at Washington. Hence, it was no surprise when I later learned he was to be my successor.

Mr. Estebrook had made the desirable arrangement with the Weather Bureau for my release from it whenever my new appointment should become effective. The bill was still in the Congress on July 1, the date planned for the transfer, but a telegram on July 2 announced my appointment and requested a reply by wire as to the date I could report for duty. I immediately wired my resignation to the Weather Bureau and received, on the following day at 3 p.m., acceptance effective at the end of that day. In advance preparation for such a probable sudden change, Norquest and I had taken an inventory of the station property on triplicate forms of 17 pages each. All that remained was the attaching of my signature and that of my successor. As he had not arrived yet, Norquest signed the three copies with me as I had authority to turn the property over to him. This was done during the closing hour of my service in the Weather Bureau.

Perhaps a further statement concerning Miss Day will not be out of place at this point. I have already given a brief description of her, but later developments possess some degree of interest. She frequently asserted she was entitled to promotion, but her unsavory demeanor and the mediocre quality of her work did not seem to justify my recommending it. One morning a letter arrived announcing a promotion for me. She came into the room as I finished reading it and I handed it to her. When she finished reading it she threw it down on my desk and, instead of offering congratulations as was generally customary in such cases, she said: "Humph, those who least deserve them get all the promotions", and flounced out of the room. Soon afterward I received an announcement of a Civil Service examination for stenographers to serve in Washington. As she had often said she would like a transfer to Washington, I showed her the announcement and suggested she might be able to gain the desired transfer and possibly an increase in salary by taking it. I could see no chance of losing by the deal. If she passed the examination, which I doubted she could do, and received an appointment we would be well rid of her and her disturbing effect on the office. If she failed, it would undermine her self esteem and claims of extraordinary ability. She made no reply to my suggestion, but roundly abused me to the others by saying that I was trying to get rid of her and, for that reason, would not take the examination. Norquest, who felt the same as I about her, told her she was absolutely wrong, that my suggestion had been sincere and designed for her benefit. Evidently he was able to convince her because she relented and applied for the examination. To my utter surprise she passed it with a fair rating mark. Very soon afterward she was informed that she would be transferred to Washington within a short time. She was so elated and excited that she insisted on taking the remainder of the day to go to her room and pack up. As she was renting a furnished room and presumably had little more than a trunk and bag to pack such haste seemed ridiculous and unwarranted. One of her idiosyncrasies was to ask Mr. Blythe each fall and spring if

it was time to don or shed her heavy underwear. If he was unavailable, she referred the question to me. I hesitated to venture a prediction as I did not consider myself sufficiently acquainted with this particular article. It always afforded much amusement to the office force and, whenever long range weather forecasts were the subject of conversation among them, the status of her underwear uniformly became the clinching argument.

After her belongings were packed she promptly announced she was ready to take the first train to Washington. She waited for the orders with impatience but they were slow. After a year, or perhaps two, had elapsed I lost all hope of ever being rid of her. Finally, on July 2, the orders came by wire. The delay, of course, had necessitated her unpacking her effects many moons before. But she again repacked and was ready to depart on the following day's train. It was ironical to me that she left the office at 3 p.m. on the same day my services were ending at 4 p.m. I told Norquest I was glad that my appointment had been delayed so that I could enjoy one hour in the office unfettered by her presence.

Vacationing in Iowa

My vacation allowance for the fiscal year ending in June had not been used, and I was not certain that it would be credited to or accepted by the new bureau. Also, it seemed improbable that I could get a vacation at Lansing within a reasonable time because I would be alone and very busy learning and developing the new work. For these reasons I decided to ask for one while still in the Weather Bureau. It was granted, and we took the train to Iowa to visit the Harker families at Cedar Falls. I went fishing along the river above the City with Father Harker and we had enjoyable times together. One day Fred went to Charles City and Greene on business, and I rode with him. It was quite a long trip and we had ample time for lengthy conversation. I discussed my new job and what the duties would be as far as I understood them. I told him I regretted the fact I had no experience or training in salesmanship which I thought would be helpful in meeting people and extracting information from them. He confided to me the fact that he had recently taken a salesmanship course by mail, and had several small books on the subject. He had read them and, having no further use for them, I was welcome to keep them. I found no time to read them then or later. However, under peculiar circumstances, I read the opening chapter in one of them twice and was benefitted by the exact information I sorely needed at the moment. Perhaps I may find an opportunity for further explanation in a later chapter. After a very pleasant visit with all of our relatives in Iowa we returned to Indianapolis and awaited final orders for transfer to the new field of labor.

Looking Backward at Hoosierdom

Our stay of nearly five years in Indiana's Capitol holds many pleasant memories. The people possessed a high level of culture, friendliness and sincerity. These desirable attributes were prevalent throughout the business, professional, fraternal, and neighborhood groups. Among its residents were the well known writers, James Whitcomb Riley, Booth Tarkington and Meredith Nicholson. Farther north in the State lived George Ade and Gene Stratton Porter. General Lew Wallace, who had died long before, wrote Ben Hur and his other books at an Indiana home. A well known book publishing house, Bobbs-Merrill, is located in Indianapolis and operates the City's leading book store.

Kin Hubbard, the author of Abe Martin's Almanac, supplied a daily comic feature for the Indianapolis News. It was entitled "Abe Martin", a fictional character supposed to live in Brown County who portrayed the homely people of that hilly and primitive county. The feature consisted of a drawing of Abe either sitting on or leaning over a barbed wire fence and uttering just two sentences

each day. His dry humor was forceful and highly entertaining. I did not meet him but some of my friends told me they had sat on restaurant stools and eaten with him, and he would keep up a steady flow of spontaneous wit and humor. Many people quoted his sayings when conversing with one another, as an indication of their appreciation and his popularity.

The Indianapolis Star initiated a similar feature under the Title of "The Black Crow". The author, whose name I believe was Brooks, acquired sufficient popularity from it to become an advertising writer for some large manufacturing companies. I helped initiate him into our Lodge and became acquainted with him through that means. The feature was continued in The Star by another for a time, but lost its popularity and I believe it was later discontinued.

Both papers sent reporters to my office every day, and these were men of high calibre. They reported accurately the information I gave them and practically no criticism ever appeared in either paper. On one occasion the reporter for the News asked me to write a paragraph on "Is there a Santa Claus?" for their Christmas edition. He was asking a number of people to write on the same question, and intended to fill a page with the best ones. I demurred because of my lack of literary ability to compete with the abundant talent to be found in the City. He insisted, however, and my contribution was published. Governor Tom Marshall won first place. That page is in my scrapbook.

When the Weather Bureau decided to publish the weather map in daily papers wherever possible, I sought an interview with the business manager of the News. We proposed to furnish copy in the form of a pen drawing to the paper each morning, which could be photographed and a stereotype plate made from the photograph. For this service the Bureau was to pay nothing, deeming it a valuable feature to the papers using it. the manager received me cordially and we discussed the matter. I believe he estimated the cost to his paper at $100 a day, but consented to give it a month's trial. This enabled us to discontinue the printing of the map in our office, a considerable saving in time to us, but involved delivering the drawing not later than 9:30. As the map contained the observations taken at more than 100 stations in the United States, Canada, Alaska, and Mexico at 7 a.m., we occasionally had difficulty in meeting the deadline. The News continued the feature during the remainder of my stay and for many years afterward.

A young reporter for the Star, whose name was Fred Schortemier, came regularly to our office for a considerable time. He was a very likeable fellow and we called him "Shorty" for short. He finally left the Star, I believe to take a law course and assist in some work of a political nature. Not long after I left Indianapolis he entered the race for Governor but failed to get the nomination. Later he was elected Secretary of State and served one or two terms. When I was in the City 10 or 12 years ago I called at his office. We had a good visit, recalling the events of twenty years earlier and exchanging facts concerning our subsequent histories.

I met many prominent men at the Chamber of Commerce, Board of Trade, State Capitol Building, and in the various Masonic orders. These men were universally friendly and sociable regardless of their social, educational, or financial status.

The varied and somewhat unrelated notes I have included under this general heading are not individually important. They merely give a glimpse of the type and character of the people, and have been grouped herewith in an effort to illustrate and support my opening sentences.

INTRODUCTION TO THE BUREAU OF CROP ESTIMATES--Chapter XXIX

The name of the Bureau was officially changed on July 1 from "Statistics" to "Crop Estimates"; so that my appointment was under the latter instead of the former as earlier expected. Not being familiar with the crop reporting routine, I was somewhat skeptical about reporting for duty on a National holiday. I was almost certain the office would be closed; nevertheless, following my telegraphic instructions, I made my way to the Federal Building on the morning of July 4, 1914. The door was open and behind the only desk was seated a rather dignified gentleman, considerably older than myself and possessing a neatly trimmed beard. He introduced himself as Mr. Fessenden, greeted me cordially, and said he was very glad that I had come to help him with the reports. I learned that he was District Field Agent for the states of Ohio, Indiana, Illinois, Kentucky and Michigan, and that he made a report monthly for each of those states. I spied a covered typewriter on a stand in the corner of the room, and, as my first duty was "to report for duty in writing to the Chief of Bureau". I asked if I might use his typewriter. He replied, "Certainly, but I am not sure about it's condition as I have not used it during the several years it has been here". Then I asked for official letterheads and carbon paper; the latter he located after some little search as he said he never had occasion to use any. After the letter was written I picked up the carbon copy and asked where I should file it. He replied to the effect that he made no file copies hence had no place to file them. Then I asked permission to place it in his correspondence file, but I learned that he had none as answered letters went into the waste basket. Later, when I learned that his time, except when making the monthly reports, was spent in the field, his lack of a filing system seemed less significant.

He then initiated me into the routine procedure with the monthly crop report. Due to my lack of experience in and knowledge of the work, my presence probably was as much a hindrance as help on this first report. In order to complete the reports for the five states within the prescribed time we worked both days and evenings on them. The number of field aids in each of the five states reporting to the Indianapolis office was around 300, and the number of schedules returned monthly from each state ranged from less than 100 up to about 150. The lists were maintained in Washington and the envelopes were addressed there and mailed in bulk to the field offices where the schedules were inserted and the envelopes mailed to reporters. As Michigan was to be my permanent assignment, Mr. Fessenden handed the Michigan schedules to me and gave me the necessary instructions for editing and computing. As there were no adding or computing machines available, all computations were made with pencil in the good old-fashioned way developed by our ancestors. For that July, 1914 report for Michigan exactly 100 schedules were available. The type of computations being comparatively familiar and easy, I felt that I had made excellent progress in completing the task. But when I found that, in the meantime, Mr. Fessenden had practically finished the computations for the other four states, I revised my opinion. I wrote my report on the typewriter and, comparatively, did little better than Mr. Fessenden who wrote his with a pencil. I had not learned how to substitute speed for the meticulous methods required by the Weather Bureau. After our reports were completed and mailed to Washington, Mr. Fessenden told me to go to Lansing and open an office. A letter from the Chief requested that I stop at a small Indiana City, and pack up the Government furniture and supplies in the Office of the State Statistical Agent, which was being abolished, and ship them to Lansing. Upon my arrival there I learned the Agent, who received a salary of $25. a month for supposedly

performing about ten days' service each month in collecting crop reports and sending a summary to Washington, was the county sheriff and operator of a real estate and insurance business. Neither he nor the clerk in the latter office knew what property belonged to the Government. This lady clerk had handled the reports and the sheriff told me he had never seen them. I was told to take whatever property of the Government I could find, but was able to identify one sectional filing case only. There were no records of value and the stationery and blank forms were easily contained in my brief case.

On To Michigan, My Michigan

When I arrived in Lansing, I went directly to the home of Will Britten whom I had known for many years and he insisted that I stay with him until I could become located. He referred me to a certain real estate man who drove about the city with me in search of a suitable house to rent. We looked at several but only one seemed desirable in all respects. It was an 8-room modern house in good repair and nicely located at 225 North Logan St. It was owned by "Dad" Huntington who operated a very good restaurant and a cigar store, and the rent was only $25. a month. It was Saturday and during the supper hour I told Will about it. He said we should go to the store after supper and see Huntington as such a house would be quickly rented. After a brief talk about the house he seemed willing to let me have it, but his wife reminded him that another party was to accept or reject it on Monday. During the moment of hesitation I laid $25. on the counter before him and he laughingly said he guessed the first one offering money should have it. I immediately sent for the family and they and the household goods arrived about the same time, and we soon were settled in our first Lansing home.

I already had called on the postmaster and inquired about available office space. The ground floor of the building was fully utilized by the postoffice. The second floor, consisting of 6 or 8 rooms, was vacant with the exception of one small room occupied by the postal inspector Ed Mackey, and I was permitted to choose any of the vacant rooms. I selected the southwest corner room facing the Capitol on the west and Michigan Avenue on the south. After having selected the room, which continued to be my office until 1922, the postmaster resurrected an old discarded desk from the basement, and had it dusted and polished up a bit for my use. This, together with three or four old chairs also supplied by the postmaster, the filing case shipped from Indiana, and a dilapidated old typewriter sent from Washington, constituted my entire office equipment.

My First Official Field Travel

In accordance with my instructions, I then locked the office and made a week's excursion by train into the field. My initiation into this type of work was both painful and disillusioning. From city directories and personal inquiries I located the grain and produce dealers. I found that some were cooperative while others were not. Nearly all expressed criticism of crop reports and crop reporting methods. My lack of experience and knowledge of the subject made it difficult for me to answer their criticisms. I had no statistical data in mind and very little in my brief case. I found much of the criticism was levelled at the State crop reporting service with which I was not familiar at that time. Those who were satisfied with the State reports were inclined to look upon the Federal invasion of the field as a needless duplication of effort and expense. There were county agricultural agents in about one-third or one-half the counties; some of these were friendly and helpful; others were skeptical, critical, or antagonistic. Farmers in general knew very little about the service and were inclined to be suspicious of its purposes. These first few weeks of field travel was the only period during which I had any regrets for having transferred from the Weather

Bureau. Before the end of the month Mr. Fessenden arrived on the scene and traveled with me for a few days. He already had established a few desirable contacts in each area and was able to secure more and better information with far less expense of time and shoe leather than I had been able to do. After this trip with him I made more satisfactory progress on my own initiative and had comparatively little difficulty either in securing the desired information or in combatting criticism. Within a few years the experiences acquired in interviewing, knowledge gained concerning the crops in each local area, and a wide acquaintance established, made the work increasingly interesting and productive of results.

It was during the first hectic weeks that my thoughts reverted to the books on salesmanship which Fred had given me. I had found no time for reading the books, but carried one in my traveling bag in case I was able to find some available time. At the end of a certain troublesome day, when my spirits were at their nadir, I picked up the book to see if it contained anything that would be of help. I read only the first chapter that evening, but found it so full of practical hints and ideas which I ought to digest, memorize, and follow, I went no further. The next evening I reviewed the same chapter again to see how well I had utilized its principles during a relatively successful day. I found I had followed the most important ones and that they gave me the key to greater success and better results. I never opened the book again as I found no further need for it. Self-confidence had gained the upper hand and I could pursue my work aggessively thereafter.

During the first three or four months in Michigan I was still too weak to carry my grip any distance. Any material exertion produced some of the former difficulties. I had to take a bus or taxi in order to get my grip from the depot to the hotel even if the distance was only a block or two. After that my health and strength returned slowly, and, when a year had passed, I felt fully restored.

Returning to Indianapolis for Monthly Reports

Under the Bureau's plan for expansion a field agent was to be placed in each of the five states which Mr. Fessenden had administered for several years. They were to report to him for their preliminary instructions as I already had done, take up the work in their respective states, and return to Indianapolis at the first of each month to prepare their reports under his supervision. When I arrived there for the August report, one or two of the others had received their appointments and were on hand for their induction into the new work. All were on hand for the September and October reports. Through these monthly contacts we became quite well acquainted with each other. Mr. Fessenden had been assigned to the State of Illinois, Colonel Moore to Kentucky, Captain J.L. Cochrun to Ohio, and George C. Bryant to Indiana. After the October report, the mailing lists were transferred and the schedules were sent out from and returned to the respective state offices, and each field agent was on his own thereafter.

War broke out in Europe in August, and Captain Cochrun became extremely interested in the news concerning it. He would buy every edition of the daily papers and, while we were together for the September report he said: "Boys, if the United States gets into this I am going to go over there". This seemed a little surprising as he, while serving in the Phillipine Constabulary, had been severely wounded and returned to the United States because of partial disability. Immediately after our country declared war in 1917, he was on his way to France before I learned of his movements. He was assigned to General Pershing's Personnel Office as Captain; in a few months he was promoted to Major; and at the end of the war returned with the rank of Lieutenant Colonel. He resumed his position as field agent in Ohio, but resigned a few years later to accept a position with

the Goodyear Rubber Company at Akron, Ohio. When the Seiberling Rubber Company was organized shortly afterward, he transferred to it as a district sales manager. My latest information is that he is now a vice-president of that company.

Colonel Moore of Kentucky was among the first lost by the Service after our entry into it. While traveling on a field trip he was instantly killed in a train collision. Mr. Fessenden remained in Illinois for several years. When the work in that State had greatly increased, he was relieved of the heavy burden and transferred to Washington. He died just prior to the date of compulsory retirement after a two-year extension beyond the age of 70. George Bryant resigned his position in Indiana about 1924 to take a similar position with a Chicago grain firm. He died in Chicago some years later.

Origin of Group Conferences

Our annual letter of authorization permitted travel anywhere within our respective states and to contiguous markets in adjacent states. Bryant, Cochrun and I agreed that it would be advantageous to meet together occasionally in some city with markets common to our three states. We planned our itineraries so as to reach the selected city in the late afternoon of the same day. After having the evening meal together, we would discuss the progress of our work and the methods used in the office and in field interviews. On the following morning we interviewed the dealers who operated in the three states, and then separated to pursue our individual work. At the first such meeting, when each felt he was a mere novice at his job, we naturally had a keen interest in each other's methods. We found that each had about the same problems, but no one available to give the proper answers. I suggested that if half a dozen or more field agents could be brought together at the office of one and a representative from the Washington office meet with them, we would have an opportunity to obtain the answers we wanted. The others approved the idea but were very skeptical that it would meet with favor in Washington. I was delegated to make the suggestion to the Chief which I did within the next few days. Mr. Estabrook stated in his reply that he thought the idea was an excellent one and that he would try to have such a conference in May at Indianapolis. The conference was held in accordance therewith, six or seven field agents being invited and the Washington office being represented by Mr. Estabrook and Mr. Murray, Chief and Assistant Chief, respectively. all agreed that this type of conference was extremely beneficial and Mr. Estabrook expressed the opinion that similar conferences should be held in other sections of the country as soon as possible. He also announced that we would have another one in this area within a few months, and, on my invitation, it was agreed that it should be held in Lansing.

After concluding our discussions it was suggested that we go out into the country and see some of the fields of grain during the final afternoon. Piloted by Bryant, we boarded an interurban car and rode out to a good farming section. Leaving the car at a highway crossing we traveled down a road on foot, observing the growing crops on both sides and commenting on their condition. A somewhat amusing incident occurred which caused some hearty laughs and a little gentle razzing. After having passed a few fields of wheat and while opposite another, Mr. Estabrook observed aloud that it had a slightly different shade of color and stood a little taller. I immediately noted his mistake but hesitated to speak up fearing it might be resented. While mentally debating the matter, Mr. Murray said it looked more like a field of rye than wheat to him. The Chief laughed heartily at his error and remarked it had been quite a few years since he left his Texas farm or had seen a field of wheat. Of course we added various comments about a group of Government officials, all claiming farming experience, making the

official crop estimates, yet unable to correctly identify a field of grain when we saw it.

I believe the Lansing conference was held in the fall of the same year, and that there were about 15 field agents and three or four Washington officials present. The first general conference, including all field agents, was held at Washington in 1917. My framed copy of a group photograph taken on that occasion hangs on the wall of my former office where, upon retirement, I chose to let it remain for the benefit of present and future employees. Another general conference was held at Washington in 1921 in which I had three separate small parts on the program. Numerous group, regional, and general conferences were held during the after years; the last one I attended having been held at St. Louis, Missouri in March, 1938. One of the outstanding advantages of these conferences was the opportunity of becoming acquainted with all members of the official staffs, and the occasional renewal of those acquaintances and further cementing the friendships formed. This was in marked contrast to the Weather Bureau, where I met very few of the field men other than those with whom I was associated at the stations where I served.

First Service as Member of the Crop Reporting Board

The National Crop Reporting Board was organized in 1905, and met at the first of each month to analyze the state reports, combine them into a national report, and release the information at a given hour on a set date. The composition of the board was changed each month as a safeguard against undue bias in the reports or illegitimate use of them. One or two field agents were called to serve on the board each month as a means of effecting this alternation of personnel and supplying informative ideas from the field.

My first call came in connection with the April 1, 1915 report, and it was to be my first meeting and acquaintance with the officials of this Bureau. In a previous chapter I described my only trip to Washington while serving in the Weather Bureau, and the type of reception I encountered. Naturally, I assumed that all bureaus were similar and equally formal towards their field personnel. I arrived in the evening and went directly to my hotel. The Board was to meet on the following day and, not having been informed of the hour of meeting or the exact location of the office, I set out early and reached the old Agricultural Administration building before eight o'clock. The only person on the first floor was the watchman who informed me the office I was seeking was on the second floor. that floor seemed deserted but there was an open door far down the corridor. It proved to be the office I was looking for, and, when I entered, its only occupant was a gray haired man sitting at a desk at the far side. He immediately arose, came to meet me, and asked if I was Mr. Church. He said his name was Murray whom I knew was the Assistant Chief. After a brief visit, a half dozen lady clerks arrived and went to their desks. He introduced me to each of them and to each board member as they arrived. shortly before nine o'clock Mr. Estabrook came in and I was introduced to him by Mr. Murray. He greeted me warmly and invited me into his office which proved to be where the Board was to meet. The meeting started at nine o'clock, the necessary blank forms were distributed, and I was instructed on the method of Board procedure. Mr. Estabrook then brought forth a box of cigars from his desk and invited all to smoke with him. The Board functioned smoothly and, as wheat and rye were the only crops to be reported on in April, our work was finished by 11 o'clock and some of the other members went to their own rooms to write the text for the report. Assuming that Mr. Estabrook would be very busy for a time, I left the room and observed the work of computing the reports by the clerks. Before leaving for lunch I decided to ask Mr. Esta-

brook for an interview later in the day as I wished to consult with him on some administrative matters. To my surprise he asked me to come in and said that was just as good a time as any for a conference. Because of the hour I hurried through the discussion, promptly arose to leave, saying I did not wish to intrude on his lunch hour. He informed me that he and some of the others usually ate at a little restaurant just around the corner, and invited me to join them. The invitation seemed quite sincere and I accepted it. I believe there were five in the party: Messrs. Estabrook, Murray, Dr. Jones, Frank Andrews and myself. The restaurant was a small one, with a short steam table, and not more than a half-dozen small round tables. It was operated by two lady graduates in home economics, and the food was excellent. I noted that those ahead of me chose only enough items for a modest and tasty lunch and I followed their example. At the cash register I noted each lunch had cost just 25 cents. The five of us filled one of the small tables and we exchanged personal histories while eating. It developed there was a range of less than two years in our ages and that all had been in the Government Service about the same length of time.

The friendly and democratic attitude exhibited by these men that day, and an equally cordial reception accorded to me by all other members of the Washington staff, made a deep and lasting impression. I returned home greatly elated with the prospect of working with this group of men. Their seeming freedom from self-esteem and jealousy, and their respect for and appreciation of each other and the men in the field, were attributes I had not perceived in the Weather Bureau. I found the same spirit of comradship and mutual esteem among the field men as I later became fully acquainted with them. Although many changes in personnel took place down through the years, the same cordial relations continued up to the time of my retirement.

THE EFFECT OF WORLD WAR I ON OUR WORK--Chapter XXX

When the United States declared war on Germany in 1917, crop production became primarily important. Governmental interest had increasingly developed during the early years of the war before our entry into the conflict, but demands for additional information relative to our present and future food supply were multiplied when our own soldiers were being trained and sent over seas. The food Administration made many requests of our Bureau, and many surveys by mail and travel were necessary. Many of these were for types of information which had never been collected before, such as inventories of raw and processed foods in farm homes, average annual consumption of such foods, potential production of all edibles not regularly included in our estimates, farm requirements for binder twine and other items for which the raw materials were usually imported in whole or in part. These requests often reached the field offices by telegraph asking for a survey report within three to five days. Thus the ability and ingenuity of each field agent was put to many severe tests. There were no precedents to follow and no time available to consult with older and more experienced members of the staff. Each had to solve them in his own way and trust the information would be helpful and sufficiently accurate for the immediate need.

Information concerning stocks of food in farm cellars, in percentage of normal for that date, was requested by telegraph on a Saturday and asked that a report be wired on the following Wednesday night. On Sunday, I contacted a few local people and outlined a travel itinerary. During the next three days, I visited a number of the more important counties and interviewed key officials, several county agricultural agents, a few leading farmers and any others whose

opinions might be helpful. On Wednesday afternoon I was in the City of Adrian, Lenawee County, and before leaving there I filed my telegraphic report of estimated percentage for Michigan. I had previously arranged with Messrs. Bryant and Cochrun to meet them in Toledo on that particular night, and when the request for this special information was received, I saw no need to cancel our arrangement. Neither did the others, hence all arrived in Toledo anxious to compare methods used and the percentages submitted.

Bryant had hired an automobile and driver and left Indianapolis on Sunday morning for a circuit of his state. He called at every tenth farm regardless of its size or character, hastily explained his mission, and secured the owner's opinion of his own food supply. From the average of these opinions he made up his report. Captain Cochrun sent a circular letter to all county agricultural agents in Ohio. In it he outlined the information needed, asked them to contact as many farmers as possible, and to submit their average percentages to him by telegraph on Tuesday morning if possible and in no event later than Wednesday morning. Thus, it will be noted that each of us had used a method quite different from either of the others. Before beginning the survey it was generally known that strong demand and swiftly mounting prices had depleted stocks of food throughout the Country, and some newspapers had proclaimed that they were at a precariously low level. Hence, we were not surprised at finding less than a normal supply of food on hand. The interesting sequel to this story was that, from three different methods in the three adjoining states, the lowest percentage was 72 and the highest, 75 percent of normal. Of course, no one knew how accurate the estimates actually were but the close agreement in these states, where conditions were similar, inspired some confidence in them.

Another effect of the War was the induction of a considerable number of our men into the army; some through voluntary enlistment, others through the draft. Later, when the draft registration included those up to 45 years of age, nearly all of the Bureau's personnel were involved as there were comparatively few in the Bureau beyond that age. While it was hoped and more or less believed that the older registrants would not be called, the prospect of maintaining an adequate personnel was rather gloomy. Mr. Estabrook, at this juncture, issued a letter in his unusually capable wording urging us not to volunteer for enlistment, but to consider that our most patriotic and useful service was to continue in our present positions, and await draft developments. He also made a strong plea against resigning our positions to accept more lucrative employment elsewhere. His requests were heeded almost universally, and the tension was completely removed by the sudden ending of the war in November, 1918. The draft registration for those up to 45 was set for a certain day in September, 1917. It so happened that the date fell within a week that I needed to be in northern Michigan. To remain in Lansing until the date would necessitate postponing the trip until the following week. The delay would cause the loss of an effective week's work, hold back the much-needed survey, and cause possible complications, if, instead, I registered at a point distant from my legal residence. Notwithstanding it had been announced that, under no circumstances, would one be allowed to register on a different date, my hired driver and I went before the Board two days earlier and explained the circumstances. To our relief we were allowed to register and received our card certificates. On the official registration date we were near the northern end of the Lower Peninsula more than 200 miles from home.

Special Duties During World War I

Aside from the extra duties already described, which were incidental to the War and which were closely related to our regular function, we were directed to

act more or less in the capacity of secret agents of the Government. We were supplied with a confidential list of secret service officials to whom we were to report any subversive acts, disloyalty, or suspected individuals. Abnormally large stocks of food of any kind, grain or hay, were to be reported to the Washington office in order that they might be requisitioned or purchased from the holder in case they were needed elsewhere. While interviewing the sole elevator operator in a small town in the Upper Peninsula, he mentioned that there were 800 carloads of hay in that locality which could not be moved because of car shortage. Being suprised that such a large quantity had not been sold at so late a date in the spring, I asked him how he knew that number of cars was available. He replied that at a recent meeting of farmers nearly that many cars were reported by those present, and that of many more cars held by other farmers not at the meeting. He told me he was anticipating an order from a commission firm in Chicago which had a contract with the Army Quartermaster. If he obtained the order, cars would be made available as the Government had taken over control of the railroads, but the order was long past due and he was skeptical about receiving it. I asked him why he did not try to sell direct to the Government and save the commission for himself and his farmers. He admitted somewhat sheepishly that he did not know how to go about it. When, after questioning him further, I learned he was willing to submit a bid on 300 cars of No. 1 timothy for immediate delivery, I told him I would wire the facts to Washington and he probably would hear from it soon. I did not see him again but, in relating the circumstance to a mutual acquaintance a year later, I was told that the elevator man had employed this acquaintance to buy hay for him throughout the Upper Peninsula to fill Government orders.

We were ordered to remove from our field aid list the names of any whom we suspected of having pro-German leanings. Also, to personally investigate the entire list of county reporters, whose reports went directly to Washington instead of to our offices, for possible disloyal feelings toward America. This was quite a task as it involved travelling through the different counties, locating the one county reporter, and ascertaining the facts about him. Although a number of the counties had a large proportion of German population, I found it necessary to make only one unfavorable report. He was a prosperous farmer of whom I was unable to get any definite statement in the nearest village. The banker refused to make any comment and suggested that I go out to his farm and talk to him. When I reached the farm he was away from home for the day, but his wife was located at a neighbor's house and, after introducing myself, I interviewed her. The conversation naturally led up to the war effort and she immediately proceeded to tell me what they thought of Government restrictions and food regulations. She asserted that as long as they continued to raise wheat they would use pure wheat flour for their bread, feed wheat to their poultry and livestock, and were doing so despite the Government's orders to the contrary. I immediately reported the case to Washington, and this reporter's name was removed from the list within a week.

Partial Relief Provided Because of Our Increased Responsibilities

The increased demand for agricultural statistics during the progress of the War resulted in larger appropriations for the work. After having operated my office for nearly three years without any help, I was authorized to hire a part-time clerk in the summer of 1917. Civil Service lists of eligibles had become exhausted and I was empowered to employ anyone I pleased. This was not easy because wages in other occupations had risen far above the established Government rates. After a few unsatisfactory appointments I succeeded in obtaining the part-time services of Mrs. Blanche Bailey in the fall of that year. Her work was very

satisfactory and she was given a full-time appointment within a few months. She continued until after the war ended but resigned in the spring of 1919.

The more important fruit and truck crops were carried on the general monthly schedule, but field agents had little available time for field investigations concerning them. Their relative importance in the Nation's food supply, emphasized by the prevailing war needs, made it desirable that much more information about them be collected. A special appropriation for these crops was requested and obtained. Accordingly, five regional fruit specialists and two or three truck crop specialists were appointed. Their Civil Service ratings were largely based on actual experience in the growing and handling of these crops. They made field surveys in the main producing areas in the states embraced in the region to which each was assigned, and their reports removed most of the responsibility for those crops from the field agents.

How Marks Became a Truck Crop Specialist

I have mentioned elsewhere my friendly acquaintance with Marks and his final assignment to the Grand Rapids office of the Weather Bureau. In the course of my travels about the State I frequently spent a night at Grand Rapids, which was the central key point for information on western Michigan crops. On some of those occasions Marks and I spent the evening together. About August, 1916, he confided to me that he was discouraged and dissatisfied with his future prospects in the Weather Bureau. He had been in the Service for about ten years and had not been advanced beyond an assistant's position.

Just a few weeks before this, it had been announced that several fruit and truck crop specialists were to be appointed on the following January 1. I asked Marks if he possessed any knowledge or experience in either of these fields. He said he had worked on truck farms for a time and was somewhat familiar with the growing, packing and marketing of several truck crops. When I told him about the prospective appointments and urged him to try for a position, he displayed an eager interest and asked how he might proceed to prepare for the forthcoming examination. I suggested he study all of the Farmer's Bulletins on the subject, and told him I would loan him a complete file. I sent them to him and he went to work, with the result that he passed the examination and received an appointment. He sent me a telegram of his good luck but was so excited he addressed it to Washington instead of Lansing. After several years in that field working from Florida as far north as New York, and sometimes as far west as Michigan and Wisconsin, he became agricultural statistician for Florida where he continued until his retirement in 1942.

INTRODUCTION AND DEVELOPMENT OF NEW METHODS--Chapter XXXI

Inspection of Field Offices

After the Lansing office had been established about a year, I began anticipating a visit from some Washington official for the purpose of making a thorough inspection, but no one arrived. After two or three years had passed, I received a letter stating that Dr. Jones would visit my office on a certain date. This, I thought, was to be my first inspection, but could not understand why I had been notified in advance as all Weather Bureau inspections were unannounced. His stay proved to be in the nature of a two-man conference. Methods were discussed and experiences exchanged, his visit being comparable to those since made down through the years by various members of the Washington staff.

A year or two later I was favored with a visit from Charles E. Gage who was Chief Clerk of the Bureau at the time. I told him I had been looking for someone

from Washington for a long time to inspect my office and was glad he had finally arrived. He promptly informed me his visit was not one of inspection but merely to learn how we conducted our offices in the field, and to pick up some useful ideas that he could take back to Washington and pass on to other field offices. He examined our files, records, and methods, and asked for suggestions on how he could be of greater assistance to the field offices. His visit was the nearest approach to an "inspection" I ever experienced in this Bureau, but far different in character from those I had encountered in the Weather Bureau. His criticisms were all favorable ones and he found three things that particularly interested him. They were: an improvised calculating table, my filing system for correspondence, and my method for counting fields of different crops while traveling over the State.

A Multiplying and Dividing Table

In making the necessary computations for the monthly crop reports during the first few months it was noted that practically all condition percentages were between 40 and 100, and that the number of reports per district was also mostly within that range. It was evident that an expanded multiplication table would save much time and increase the accuracy of the computations. With a typewriter I prepared such a table which filled about a dozen sheets of letter paper. The margins were trimmed off and the sheets pasted on a heavy piece of cardboard in such a way that the figures were lined in straight columns. Perpendicular and horizontal lines were drawn at intervals to aid in locating the proper numbers. The product of any number across the top times any number on the margin would be at the intersection of the two lines. In dividing, the process was simply reversed. At the next general conference Mr. Gage placed me on the program to discuss and demonstrate the use of this table. On that occasion I pointed out that, if the table was printed, it could be much smaller and less cumbersome. At a later date, I received a request from Frank Parker of North Carolina for a copy of it. Fortunately, I had made carbon copies and sent him a set. He expanded the table so that it covered all numbers from 11 to 99, dubbed it "The Statistician", had it printed and copyrighted, and then asked my permission to sell copies of it with the understanding that the profits be divided equally with me. This was in 1921 by which time some of the field offices had been supplied with an adding machine, and calculating machines soon followed. I never received any remittance from Parker, hence assume that the "profits" failed to materialize. He sent me a few copies of the printed chart, and I made a suitable frame of cedar wood for one, put the chart under glass, and placed it in the office where it has seen much service. Notwithstanding the fact that comptometers and calculating machines have largely superceded its use, some of the clerks still prefer it for certain types of calculations.

Adoption of a Filing System

During my dozen years of service in the Weather Bureau, at least three different filing systems had been in use. A system would be promulgated by the Washington office and all field offices required to use it. When a new and better system was devised all stations were ordered to discard the old and adopt the new. These changes produced much confusion in all offices and field officials prayerfully hoped for the final adoption of a system that could be modified to meet changing conditions yet be permanent in form. After opening the Lansing office I waited in vain for an announcement of the filing system to be adopted. After six months or more had passed, the accumulation of letters made it necessary to establish a system of some kind. The last one used in the Weather Bureau was a numerical-subject system and had proved very satisfactory. I proceeded to

set up a similar one for my office, using the accumulated letters as a par-tial clue to the scope of subjects that would be needed in the future. On this basis a numerical index was outlined with ample allowance for additional subjects and for subdivisions of all; a system possessing almost unlimited possibilities of expansion. Mr. Gage was very much interested in it and I furnished him with a carbon copy of the index. I mentioned to him that this covered only correspondence and typed reports, but I had since found it should be expanded to include all printed reports, data tabulations, publications, periodic routine reports, etc. Within a few weeks he sent me an index which included the missing items and requested my opinion of it. He had retained all of my original subjects and their corresponding numbers, and had added other sections and numbers to include the missing items. After making a a few minor changes I returned it to him with my full approval. A circular letter and a copy of the index was then sent out by him to each field office, stating it was being adopted for use in the Washington office and requesting it be used in all field offices. He pointed out that by so doing each subject would have the same number in all offices and employees transferred from one station to another would have no difficulty in using it. It is still being used in its original form, except for additions and slight modifications to meet increased needs and changes in character of work.

A vew years before my retirement we had need for all information on field beans, including correspondence, field notes, tabulated data, etc. which I had collected during the period 1914-19. Taking the current file index with me to the basement and pulling out the old dusty transfer file cases, I located the proper folders and was back in the office within five minutes.

Several years ago Frank Parker of North Carolina asked the Washington office for a copy of the original instructions concerning the filing system, as he was unable to find it in his files and wanted to refer to it. He received a reply giving the date and number of the circular but stating that no copy was available. They suggested that, in case he could not locate his copy, possibly the Lansing office could help him. He wrote to me and said he would greatly appreciate the loan of my copy if I could find it without too much effort. Although it had been in our files for 20 years it was easily located. In my letter to him I stated that, owing to the excellent filing system maintained in the Lansing office, there was no trouble in complying with his request.

"Church's Bean Box"

This gadget, developed to meet a particular need, attracted more attention throughout the Service than either of those described in the preceding two paragraphs. It was the source of almost as many jokes as the early Ford cars, all of which gave it more publicity than it probably deserved, and almost, but not quite, placed its designer's name among the Nation's great inventors. Its development came about in this way. About 1915, I began counting the fields of different crops from train windows to fill in the idle hours while traveling in that manner. With a notebook in hand I tallied the crops as observed while passing them, and made notes as to the date, distance covered by the counts, starting and ending points, and which side of the track was used for the observations. These were repeated each succeeding year for the same routes, and ratios to the previous year afforded fair indications of the acreage changes which were difficult to accurately determine from our mail reports. As far as I ever was able to determine it was the first use of this method. Later, when I began traveling by automobile with a hired driver, I continued making field counts where practicable. Tallying fields in a notebook, while riding in the earlier models of cars over unimproved roads, was not as easily done as on smooth-riding trains. When

the shift was made in 1921 to the use of our own cars, it was no longer possible to make notebook tallies while traveling alone and driving the car.

This problem was solved by cutting down a wooden cigar box to a size of about 2 x 2 x 6 inches, inserting tin partitions to make 6 or 8 compartments, boring a round hole over each compartment, and attaching the box to the instrument panel with clamps. Each compartment was labeled with the name of a crop to be tallied, and a handful of beans was carried in the right-hand coat pocket. Each field was tallied by dropping a bean in the proper compartment. Definite routes were recorded in a notebook together with the points where counting began and ended. It was necessary to stop occasionally, empty the box, count the beans, and record the counts in the notebook. This was usually done at each county line so that comparisons between counties and for each county between successive years could be made. The ideas originated in the Lansing office and described in the last three paragraphs comprised the subjects explained in my three appearances on the program of the 1921 general conference.

This method of counting fields was supplanted within two or three years by the crop meter, an ingenious device that measured the frontage of fields in each crop, and which was invented and developed by our Mississippi statistician. It consisted of a series of dials, one for each crop, and connected to the speedometer. At the beginning of a field the proper crop button was pushed which put the geared mechanism into operation. At the end of the field the button for the next field was pushed which automatically released the previous one. There was a blank button for use while passing woods, cropless fields, through towns, etc. Each dial had sufficient capacity to record each crop during several days of travel, which reduced the frequency of making notebook records. This machine produced much curiosity on the part of persons seeing it for the first time. Often, while the car was parked in a town, I would find one or two dozen people standing around it and trying to figure out its use. Usually there were as many different guesses as there were people. Before starting the car in such cases I had to make sure the buttons were in proper position, because the curious ones often manipulated them in my absence and would leave them in the wrong positions. One day I picked up an old man on the highway and carried him to the next town. He watched me operate the machine in silence for a time then ventured a remark. I do not recall what it was but it indicated he believed, either I was an escapee from an insane asylum, or the instrument was an infernal machine. I tried to explain its operation and purpose but he responded only with a grunt and a remark to the effect it was the craziest fool idea he had ever heard about. Deep silence prevailed until we reached his destination where he stepped out of the car and hurried away as if he expected the Devil was about to get him.

Adopting New Methods of Travel

Travel by rail and interurban lines was the only method used in the first few years by field agents. Nearly all would have preferred to buy a car and use it in their field work if reimbursed for operating expenses, but the Comptroller ruled that it would be illegal for a Government employee to receive payment for the use of his private property in official work. This left no alternative and we traveled by common carriers although it was relatively slower and more expensive. Many towns in Michigan had only one rail line and only one or two trains a day. To get out into the country for the purpose of seeing the crops and interviewing farmers, it was necessary to hire a liveryman with his team or car. He would drive a few miles from the town and wait while I did my observing and interviewing, then return over the same road. As I was a stranger to him, he was unsparing in his charge; then I would often have to wait several hours and some-

times over night before I could get a train to the next stopping point. These livery bills and rail fares seemed out of proportion to the amount of work accomplished. Regardless of this fact, I received no complaints from Washington concerning the heavy livery bills in my expense accounts. This gave me an idea which I laid before Mr. Estabrook during one of my trips to Washington. I suggested that a car and driver be hired in Lansing to travel about the State thereby avoiding the doubling back over the same roads, permitting more interviewing and observing of crops, doubling the amount of work that could be accomplished within a given time, eliminating rail fares, all at no probable increase in cost. He promptly said it seemed logical and told me to give it a trial.

Not being acquainted with any professional drivers I resorted to employing friends for these trips. Their driving abilities and car conditions not being up to the standard I desired, I discontinued this practice. It so happened that Frank Braendle, who had lived in Clarksville at the time I was in business there and with whom I was well acquainted, was operating a jitney bus service in Lansing. He employed about six drivers to operate his cars and had developed a prosperous business. Believing he would know many good drivers, I told him of my needs and asked if he could recommend a good man who might be available. To my surprise he said he would like nothing better than the opportunity to drive me about the State himself. I asked him to make me a proposition and his offer was that he would furnish his own car, pay his own hotel and operating expenses including car repairs, and drive as many hours and as many miles as I wished each day, for $10. per day. This was much cheaper than I had expected and I lost no time in accepting his proposal.

This arrangement proved very satisfactory. He was a jolly companion, an excellent driver, kept his car in good working condition, went anywhere I asked, and always had his car in front of the hotel before breakfast ready to start the day's trip immediately afterward. If we reached a town at night with only a poor hotel he would propose driving to our next stop during the evening if it was known to have better accommodations. Most of the roads were unimproved and poorly marked which made night travel slow. Occasionally we traveled until 11 or 12 o'clock at night, but he never complained. He used only the best grade tires on his car and during the three seasons we traveled together, he never had to change a tire. This was remarkable as most drivers in those days had tire trouble very often. He was able to make any needed adjustments on his car and always attended to them while I was interviewing dealers and farmers, so that no time was ever lost while traveling. When the fruit and truck specialists were in the State, we planned itineraries to fit their needs, thereby saving their transportation expenses and facilitating their work with little or no interference to my own.

Incidents While Traveling With Frank Braendle

Much of our travel together was during the War, hence Frank was my driver while interviewing the county reporters to determine their loyalty to America. Frank was of German parentage but he was more loyal than the average American citizen, and held extreme hatred for anyone who was otherwise. While sitting together in the lobby of an Alpena hotel one evening, he waxed more vehement then usual and told what he would like to do with, and what he thought of, all pro-Germans. The only other occupant of the lobby was a middle-aged man with a full beard, evidently a resident of Alpena and a permanent roomer at the hotel. He occupied himself with the local daily paper which he held in front of him as if to screen his face. After Frank had talked loudly for a considerable time, the man suddenly dropped his paper and mounted the stairs. Frank called my attention to the circumstances and said: "He couldn't take it, could he?" I was a little

uncertain as to his meaning until he explained. He recognized the man as being a full-blooded German and suspected him of to be pro-German, his strong talk was for the purpose of testing his theory.

While driving along a level country road one day there was a sudden loud report that seemed to come from the rear end of our car, and I felt certain a rear tire had blown out. Frank was sure the car was all right and we did not stop, but continued to speculate on the cause of the explosion. We joked about it and said it must have been the work of a German saboteur. We made a call at a farm after which we returned over that same road. When we neared the spot this second time we kept a sharp lookout but could see no one about. Nothing happened until we were fully 80 rods past the point, when we heard an explosion. Looking back we saw a car had stopped and the driver was examining his tires. Finding nothing wrong he moved on. It was then I recalled seeing another driver stop and make a similar examination when we approached the spot the first time but still a half-mile away where the explosion could not be heard. These similar circumstances led us to the conclusion that some boys hidden in the shrubbery were having fun with firecrackers at the expense of passing drivers. The date was not far from July 4.

While calling on farmers in a northern county one day, we stopped in a small town and went into a store to make a small purchase. When I went to pay for it I discovered my billfold was missing and I had but a few pennies in loose change. Frank said it probably slipped out of my hip pocket in the car or when I got out of it. We hurried back to the car but could find no trace of it. We intended to be out for another full week, but here I was more than 200 miles from home and without money. I asked Frank if he had enough to cover my expenses in addition to his own, but he said he could stake me for only a day or two. The loss of the money meant something to me but my predicament was even more embarassing. We registered at a hotel for the night, had our supper, and later went to our room. I told Frank I was going to wire home for funds in the morning, whereupon he reached into his pocket, produced the billfold and tossed it to me saying: "There is your old pocket-book, now see if you can take care of it". He had found it on the car seat after I had left the car to make a call in the afternoon, and decided to have a little fun with me.

After we had left Lansing for a certain two-week's northern trip, Frank asked about my itinerary. I outlined it to him and asked if it was satisfactory. He replied by saying he did not care where we went if it only was where he could get some good fish to eat. As the route was to take us through towns near Lake Huron, where fresh whitefish were usually featured at most eating places, I assured him he would get plenty of fish on the trip. Although we ate meals at numerous places along Lake Huron not one had fish of any kind. We reached Rogers City at the northernmost point of Presque Isle County on Saturday night but still no fish could be found. Frank pretended to be highly disgusted and I continued to promise a good dinner of fish at our next stopping place. We planned to make a long drive on Sunday as the route was through wild country where very few farms existed. We left Rogers City in the morning and soon reached a point where the road was under contstruction. There were few detours available and they were mere trails of deep sand through the woods. Much of the way we had to use the freshly graded road which had been deeply rutted by trucks and made very soft. Progress was slow and mostly in low gear. At noon there was no place to eat because there were no towns in the woods, so we plodded along. Much time was lost, we fell far short of our scheduled objective, and only reached Onaway at 8 o'clock that evening. I had been there a few times before and knew a hotel where fine meals were

served. It was an old lumber boarding house which had been remodeled into a hotel after the lumbering days had ended, and was being operated by a woman. After registering I inquired about supper and she said supper was over and the dining room closed. I told her about missing our dinner, how hungry we were, and asked if she would help us. She explained that they had served a large number of people that day and there was nothing left, but she would go to the kitchen and see if there was anything in the way of a lunch. She returned and said they would try to get us something. The waitress who came to get our order said there was no meat, only eggs. Frank ordered the eggs but, as I was allergic to them, I asked only for anything else she could find to eat. The landlady appeared very sorry for me and soon came and told me they could cook some whitefish if I wanted. I said that would be fine, and Frank said they could duplicate it for him and cancel his order for eggs. When the order arrived, there was a large slab of whitefish covering a medium-sized platter for each of us. It was fine and each ate all he could, but when Frank failed to finish his portion I seized the opportunity to razz him severely, not only at the time but for months afterward.

While on a trip with the fruit specialist through western Michigan, we stopped one night at Scottville. There was only one hotel and I was acquainted with the proprietor and his wife as I had been there several times before. They were very friendly people and, the house being practically filled that night, could give us only one of their poorest rooms with two beds in it. Frank always pretended to be dissatisfied with whatever accommodations we found each day and we retaliated by branding him "The Old Crab". Also, he claimed he could not sleep with any other person. When we reached the room the specialist said to me "We will sleep together and let The Old Crab have his bed to himself", which was entirely agreeable to me. Frank walked over to his bed, which had a very thin and cheap mattress, and tried the springs with his hands. He shook his head and began muttering in his customary way. This pleased us because, in this case, there was ample ground for complaint. When Frank had undressed and was ready for his bed, he jumped from the floor into the middle of it with both feet. His more than 200 pounds was more than the old iron bedstead could withstand under such treatment and it partially collapsed. The center sagged to the floor and Frank had to sleep, much to our enjoyment and his discomfort, in a jackknifed position throughout the night. In the morning I told him I would inform the hotel people and see that they collected damages from him unless he did so voluntarily. Of course, neither of us actually said anything about it, although I felt sorry for these good people. Some years afterward they moved to East Lansing and we became well acquainted with them when they joined the Eastern Star Chapter. We are still very good friends but I have never confessed the bed episode to them.

While in Barry County to investigate its county reporter, we learned at Hastings he lived about ten miles south on the main graveled road at a corner. On our arrival at the described location and seeing nothing resembling a home we went on and made inquiry at the next house. Here we were told we had passed his place at the corner. We returned to the corner and turned onto the side road past a shack that showed no signs of being occupied. Going to the next house I inquired where Mr. Smith lived. (I cannot recall his right name so am calling him Mr. Smith). The lady said inquiringly you mean that crazy Smith, if so, he lives in the shack at the corner we had passed. I asked her if he was crazy and she said "Not exactly crazy but very queer". There were no steps up to the front door of the shack and no appearance of being able to enter from that side. I had an eerie feeling about the place and insisted Frank go with me to the back door. We passed through an open shed which had a floor of a few loose scattered boards resting

on logs. Picking our way carefully we reached the kitchen door on which I knocked. An old man shuffled to the door and after I introduced myself he invited us inside and led us through the kitchen into the living room. In each corner of the room were high piles of old bedding, newspapers, magazines, and other things, in a dust-covered confused mass. There was a large old-fashioned combined secretary and desk. The case was filled with books, some scientific, others standard high class literature. On the center table were a number of the leading best magazines. The old man had a long white beard and spoke to us in refined English; everything, except the careless disaarray of the room, indicated he was highly cultured and a well-read man. He informed us he had been the county surveyor for many years during which he traveled much which enabled him to observe the crops in every locality and render good reports for the entire county. He had retired from that work a few years back and admitted he was unable to keep up the standard of his reports as he remained at home most of the time. He had lost his wife a number of years before and, apparently, he spent his time reading, fishing in a little lake just back of his house, and preparing his own meals. He seemed a very kindly old man and a delightful conversationalist. Why he had lapsed into his careless housekeeping habits was a mystery we were unable to solve. Perhaps it was due to some secret sorrow, frustrated ambition, or the attitude of less educated neighbors toward him.

Initiating Reports on Additional Crops

One of the original instructions issued to field agents was that we should investigate and report any available information concerning crops not being covered in the regular reports. When calling upon grain dealers during my first month's travel I noted that in all sections where grown, field beans was the principal crop in the minds of dealers. The conversation usually began with remarks about that crop. When I began asking about corn, wheat, oats, and other major crops, the person being interviewed would pass over them quickly and lightly and switch the conversation back to beans. Some asked why the Government made no reports on this important crop when the State had been doing so for more than 20 years. They were greatly pleased when I promised to see what could be done about it. In August, 1914 I asked the Washington office for permission to include field beans in my inquiries and that steps be taken to have similar inquiries made in all bean-producing states. I was authorized to start the inquiries at once but, in other states the project did not get under way until the following year. Much interest developed from these reports and, from this beginning in 1915, they have since become an important feature of the Bureau's work. As a result of further demands by dealers, each variety of beans is reported separately.

During my early travels I also noted the large number of towns and villages, particularly in the central and northern parts of the State, that had a pickle-salting station. I began making inquiries of managers of plants which maintained one or more offices in the State. Some of these supplied me with acreage and production data on cucumbers for pickles; others referred me to their head offices in other states. I wrote to a few of the larger ones and obtained the data I asked for, but there were many lesser ones and I needed a circular letter and questionnaire, for which I had no printing facilities. I prepared a circular letter and a list of questions for the information needed, sent them to Washington, and asked that a quantity of each be mimeographed for my use in soliciting the data. The reply received was to the effect that the crop was considered too minor to bother with. This was very embarassing as I had promised those already contacted a report of my findings. I immediately wrote to Washington

New Methods of Estimating Crop Acreages

Prior to 1925 crop acreages were based mainly upon the averages of crop reporters' opinions for their respective localities. Individual reporters had little knowledge of the changes made by their neighbors as a group and many would report the acreage to be the same as the previous year. This tended to make the average change less than warranted by the facts and, as these errors were more or less cumulative during the 10 years between available Census data, a considerable correction had to be made at the end of each 10-year period and prorated back through the intervening years. In an effort to avoid the necessity for these drastic revisions we began seeking other methods of obtaining acreage data.

About 1918, we began asking the acreage of each crop on the reporters' own farm and enlisting the cooperation of other farmers throughout the states to supply that information. The accumulating of these additional names entailed much work and progress in the effort was relatively slow. The data from this source showed some interesting situations but the number of reports continued to be too small and too selective in character for any material improvement in accuracy of the final acreage estimates. The cooperation of the Postmaster General of the United States was sought and obtained in 1925. He ordered his rural mail carriers to distribute acreage cards to the farmers on their routes and to pick up and return the cards that had been filled out. This greatly increased the number of reports without much effort on our part, and gave us an ample list of farmers' names which we could solicit to make reports on special crops which the cards showed they were growing on an extensive scale. While it greatly increased our tabulating and computing work, the improved results justified the extra expense for clerical labor. This method is still being used and, during more recent years, the rural mail carriers distribute three sets of acreage and two sets of livestock cards during each year.

THE STATE CROP REPORTING SERVICE--Chapter XXXII

The State of Michigan began collecting and publishing crop information about 1868, which was only two years after the first National reports were issued on a regular monthly basis. This function, along with all others pertaining to agriculture, was administered by the Secretary of State. The State law provided that each township supervisor should render the reports for his township and, as there were about 1200 townships in 1914, that office had that number of potential crop reporters. The majority of these were farmers and leading citizens who, being capable and more or less obligated, were reasonably faithful in performing this service. The man directly in charge of the State crop-reporting office in 1914 was Mr. Hiram Chambers, an elderly man who had served in that capacity for about 20 years. His office was in the basement of the Capitol, and I visited him frequently to get such crop information as he could and would give me. Neither he nor anyone in his office did any traveling about the State, which gave me some competitive advantage in that respect. He acquainted me with his established methods which he rarely sought to improve or change in any way, whereas I was constantly on the alert for new and better methods. Through these interviews with him, I soon was able to appraise the strong and weak points of his system.

The Successful Development of State Co-operation

It was obvious from the beginning that the State crop reports, with a historical background of nearly 50 years and sponsored by an elective state official, constituted formidable competition to our recently-developed system. The public naturally compared the two reports and, because they were seldom in close

agreement, was skeptical of both. The Federal and State services had been merged in a few states and others were being joined from time to time. I began early to discuss the matter with agricultural leaders in the course of my travels about the State. They admitted the advantages I pointed out to them, but frankly expressed doubts about securing a cooperative set-up. I had talked the situation over several times during a period of two years with a certain county agricultural agent who, in a political sense, was unusually keen and thoroughly experienced. Finally, on one occasion, he told me that if I would follow his instructions explicitly he would guarantee successful results. I accepted the offer because I had full confidence in his judgement and ability. He told me to first ask the Secretary of State to set a date for a conference with him; then to see personally each of a list of about a dozen men whom he named and ask them to attend the conference. I could not understand why he had selected these particular individuals although I knew each was interested in agriculture in some capacity. I carried out his instructions and, in addition, asked the Washington office to send a representative to this conference. Mr. Callander came out and, because of his legal training and knowledge of the setup in other states, he drew up a suitable contract prior to the meeting.

As soon as the purpose of the meeting was announced, the Secretary of State leaned back in his chair, tucked his thumbs in the armholes of his vest, and said: "He would have to be shown". I asked Mr. Callander to explain the details of the subject. He arose and, because of the Secretary's evident hostile attitude, stuttered, stammered, and seemed so flustrated that I was sorry I had not assumed the responsibility myself. However, he soon recovered his mental equilibrium and presented the subject adequately. many points and questions were raised, but the various members took them up and argued in behalf of the project, so that Mr. Callander and I had little further talking to do. Finally, the Secretary of State remarked: "You gentlemen all seem to be in perfect agreement about this thing". When they nodded assent, he picked up a copy of the contract, read it through, then announced he would take no action until after it had been submitted to the Attorney General for approval, and asked me to come to his office in about two weeks for his answer. After leaving, Mr. Callander told me he was certain the Secretary's answer would be "No", but I was more optimistic. When I returned later to get his verdict he greeted me cordially, took the copies of the contract from a drawer, remarked that the Attorney General found nothing to criticize, and took up his pen and signed them. Thus the deal was completed. I had secured several months earlier an enabling act from the Legislature, and the two offices were merged on July 1, 1919. It had been generally understood that I was to move my office into the basement of the Capitol. I deplored this because my present office was much better lighted and more pleasant in every way. Then, too, I felt I would have a much greater degree of independence away from state influences. A few days before the merger date, I received a personal visit from Frank D. Fitzgerald, who was then Deputy Secretary of State and who many years afterward became Governor. After discussing the details of the merger, he broached the subject of the joint office quarters. He said the Secretary needed more space and would like to locate the automobile license division in the basement where the crop reporting office was located, and asked if it would be possible to use my present quarters for the joint office. I had already reserved a large adjoining room when it was vacated by the State Draft Board, not knowing what use I could make of it until I was given more clerks, but wanted to have it available in case of future need. This room would accommodate the State's eight clerks nicely, and I told the Deputy his proposal was quite satisfactory to me. My only fear was

that the Government might object to having its space used by non-Government employees, but the Postmaster said he did not care who I installed in the room. Thus, everything was settled in accordance with my wishes and to my advantage.

While discussing the outcome of the means for obtaining State cooperation with the county agent who had helped me, I told him I was curious to know why he had selected the particular men he had named to attend the conference. He informed me then that he, the members of that group, and the Secretary of State had served together many years earlier as members of the State Senate; and that he knew the Secretary of State would not hold out against his former buddies regardless of his personal feelings toward the proposition. This was my first lesson and participation in practical politics.

Enactment of an Annual State Census Law

Using the failure of the thresher law as a lever, I made an extraordinary effort to enlist support for a State census to be taken by the township supervisor at the time of making their annual assessments of farm property. In the early years of the State service, the Legislature enacted a law requiring each supervisor to enumerate the acreages of all crops and the numbers of each species of livestock on farms in May of each year when making his rounds for assessment purposes. Such a census was taken each year from about 1879 until the law was repealed in the late nineties. Oddly enough, this was a period when statistics in general were but little used or appreciated, whereas a rapidly growing appreciation of crop statistics developed during the succeeding years when the State refrained from providing such a useful aid as an annual state census. I secured the backing of several strong groups, and one of our very good crop reporters agreed to introduce such a bill as I wanted. He was a powerful committee chairman and engineered the bill to a successful vote despite very great opposition. The census was taken in the spring of 1922, tabulated in our office, and the results were quite satisfactory as nearly complete coverage was obtained. However, many of the supervisors found the added duties onerous and complaints by farmers numerous and difficult to combat. At the annual state meeting of the Supervisors in the fall they voiced their disapproval of the law. Hearing of it I rushed over to the meeting and asked permission to speak. I pleaded for its continuance, pointed out its advantages, and its small cost in proportion to its value. The powerful leader of this strong political group always had bitterly opposed crop reports and he had sufficient support to force the repeal of the law. While considerable support was mustered to save it, the opposition won by a substantial margin. After this defeat no further effort was made for a State census. Shortly afterward Federal census, to be taken every five years, was proposed and adopted; and the taking of such a census in 1925, together with the improved results obtained from the rural carrier surveys, lessened the need for an annual State census.

Creation of the Michigan State Department of Agriculture

When State cooperation began in 1919 our Federal staff consisted of only one clerk-stenographer and myself. The State personnel transferred to my office comprised eight people, five of whom were between 65 and 75 years of age. All were political appointees and, with two or three exceptions, without qualifications justifying their employment. However, I was powerless to make any changes and soon realized we had merged with an office used as a dumping ground for superannuates. My lot was no bed of roses and I immediately began to suggest to agricultural leaders that the State should have a Department of Agriculture, in which all agricultural activities could be coordinated. Many seemed interested but no one made any move in the matter. My principal interest was, of course, to

secure a more logical co-operative agency with which to work and the possibility of having an improved office personnel under a new setup. The circumstances which led up to the creation of a Department of Agriculture, being so peculiar and my little part being tinged with humor, I feel disposed to relate them.

The State Farm Bureau had been organized with offices in Lansing and had been functioning for two or three years. Its progress had been unsatisfactory and a reorganization took place, one of the results being the removal of the secretary. This secretary had appointed an assistant who, before coming to Lansing, was reputed to have been engaged in various unethical and unsavory practices. His past history probably was not known by the Farm Bureau, but there was some doubt about his services being retained under the new secretary. His chief ability was said to have been that of a legislative lobbyist, and I believe it was finally decided to keep him temporarily and give him a chance to prove his usefulness to the organization. About that time a young newspaper man came to Lansing and secured a position as reporter with the Farm Bureau. He came to my office frequently and we became very good friends.

About December 1, 1920, he dropped into my office one afternoon and asked if I could suggest any legislation that the Farm Bureau might sponsor to its credit. He explained that this assistant secretary claimed acquaintance with the Governor, chosen at the recent November election, who would take office on January 1. The assistant secretary thought he might make his position secure if he had a chance to demonstrate his influence with the Governor-elect by putting over some brilliant coup, and he had asked this reporter to dig up an idea that he could use. In reply to this question, I casually remarked that I could not understand why the great State of Michigan had no department of agriculture such as existed in nearly all other states. Before he left I showed him the list of such departments published in the Year Book. He gave the assistant secretary my suggestion who, banging his fist on his desk, said: "That's it". He immediately put on his coat and announced he was going out to see the new Governor. The Governor's message to the legislature in January included a recommendation for the creation of a State Department of Agriculture; the legislature acted accordingly within a few weeks; and the Michigan State Department of Agriculture began its functions on July 1, 1921. The law provided that all state functions relating to agriculture, including the collection of agricultural statistics, were to be transferred to the new Department.

i was exceedingly anxious to learn at the earliest possible moment who was to be appointed as Commissioner to head the new Department, as I wanted to acquaint him with the personnel situation in my office and secure his assent for its improvement before he had made any commitments. There was much gossip and speculation as to the identity of the new appointee, but I had no intimate acquaintance with any of those whose names had been mentioned. I felt the need of some influential backing to gain my point, and wrote to my good friend. Mr. Ira Waterbury, editor of the Michigan Farmer. His office was in Detroit but, knowing he made frequent trips to Lansing, I asked him to call on me at the time of his next visit to Lansing. When he came I found, as I suspected, he had some hints as to who the commissioner might be. I acquainted him with the situation I hoped to have corrected and asked him to use his influence towards that end. He promptly agreed to give me every possible assistance and suggested that we call on Mr. Fred Woodworth, who was the President of the State Livestock Sanitary Commission, and the one whom he thought might be the first commissioner. When we arrived at the office, Mr. Waterbury, evidently as a feeler, proceeded to congratulate him on his appointment to the new post. Mr. Woodworth replied that the con-

gratulations were misplaced and that we had come to the wrong office. After some questioning, we learned the commissionership had been offered to him but he had declined it. He thought it might be well for us to call on Mr. Herman Halladay, the Secretary of the Livestock Sanitary Commission, who was located in an adjoining office. When we questioned Mr. Halladay, he told us confidentially that the appointment had been offered to him, that he had it under consideration, and that he probably would decide to accept it. Mr. Waterbury outlined to him the situation in my office and said he thought I should be considered the State as well as the Federal statistician, and that I should have full authority as well as responsibility in the administration of my office. Mr. Halladay replied that, if he became Commissioner, he would see that I had such authority. He then told me that, when the State Office Building was completed and ready for occupancy, he wanted all divisions of the Department located together on one floor of that building. Moving our office from its present favorably located quarters was not going to be to my liking, and I made a protest which could be only a feeble one in view of the fact that I had just won my most important point.

Shortly after his appointment had been publicly announced, he called me to his office and asked me to designate which of the present State clerks, if any, I wished to retain. I told him about Mr. Chambers being past 70 years of age, still fairly efficient in mathematical computations, still a good penman, dependent upon his monthly salary for living expenses, his 25 year record of State service; and, although he might be difficult to get along with after having his administrative authority taken away, I would recommend his retention because I did not wish to be consciously guilty of destroying his peace of mind for the remaining years of his life. I also recommended the retention of the stenographer who, though only moderately efficient and somewhat lacking in general ability, was struggling to make the payments on a home bought on contract and to support an aged invalid mother. When I told him these two were the only ones I wished to keep, the next question naturally was how many new clerks were needed. He was greatly surprised when I said "none", and immediately asked how I could get along with six less clerks. I explained that we could do more and better work with all poor clerks out of our way, and would ask for additional clerks only when actually needed. He then asked what about keeping a certain male clerk who had been connected with the office for a considerable period of years. He happened to be the worst of the lot and I quickly said: "For God's sake, forget him unless you are under political compulsion to do otherwise". I explained that this man had absolutely refused to even carry the mail down to the postoffice on the floor below when requested by Mr. Chambers to do so, and that Mr. Chambers had been compelled to make such trips himself. The man's only excuse was that "He was not being paid to do that kind of work". He was lazy, did almost no work, and the little that he did was full of errors and had to be completely rechecked by someone else. His wife was equally lazy and developed the habit of sitting in the office throughout entire afternoons with her hands folded. Mr. Halladay admitted he was under terrific political pressure in this man's behalf, but said he would not appoint him because of my unfavorable report.

Quarters in the State Office Building

For nearly eight months the separate functions of the new Department were conducted from the same offices they had occupied in the past. Around the first of the year of 1922 I received a request from Mr. Halladay to come to his office. He took me to the 7th floor of the State Office Building, pointed out the rooms at the south end of the corridor he had selected for the Administration offices, and the corresponding rooms at the north end of the long corridor which he was

reserving for the Livestock Division. He then told me I could have my choice of any other rooms on the floor. I had previously asked for the use of a steel vault, as all crop reports were required to be kept under lock and key until after their official release for publication. Only one vault had been constructed and that was large enough not only for our records and files but for our stationery, envelopes, publications and all stored equipment as well. He told me I could have the use of it, so I selected the large room in which the vault was located and an adjoining one. We moved into those rooms in February although workmen were still in the building putting on the final touches and cleaning up the rooms. Our office remained in these rooms for 12 years following our 8-year occupancy of the rooms in, what is now termed, the Old Postoffice building.

Mr. Halladay was an excellent organizer and administrator. He selected capable men as chiefs of the several divisions and ignored outside political influence as much as possible. On one occasion he called me into his office and asked whom I considered the best man in the State for appointment as his deputy. Without hesitation I named Mr. W.P. Hartman who, at that time, was agricultural agent for the Grand Rapids and Indiana Railroad Company. He then confided to me that he had already offered the post to Mr. John Doelle, but if Doelle did not accept it, he thought he would offer it to Hartman. Doelle proved willing to serve, so the Commissioner appointed Hartman as Director of the Bureau of Foods and Standards, where he made an outstanding record for efficiency and where, I believe, he remained until the Democrats took over and indulged in a thorough house cleaning.

Mr. A.G. Carton was appointed Director of the Bureau of Agricultural Industry in which the division of Agricultural Statistics was placed. He had served the State over a period of many years in various capacities. He had served in the State Senate, and was Secretary of the Public Domain Commission when I came to Lansing. We had been good friends and I was pleased to have him as the Director of the Bureau with which I was connected. He was an astute but honorable politician, always good natured, and willing to help anyone who sought his aid. He gave me absolute freedom in administering my own office, eased my toughest problems with sound advice and political aid whenever needed, and interceded in my behalf with any who tried to cause trouble. He managed to hold his position through all administrations, Democratic and Republican, up to the time of his death three or four years ago. I believe his funeral was the largest I ever attended. Mr. Halladay, much to my regret, remained with us only until April, 1922. He resigned the Commissionership to become Secretary of Michigan State College, where he remained for at least a dozen years and from which position he retired from public life.

There had been eight or nine different commissioners up to the time of my retirement in 1942. In the main, my official association with these men was generally agreeable. Perhaps the one who gave me the most substantial and friendly support throughout his administration was Herbert E. Powell. He was a farmer and owner of a fine farm in Ionia county, an ex-member of the State Senate, an ex-official of the State Grange, an official of a bank in Ionia, and one who attended the conference that established our cooperative relations in crop reporting work. He served as Commissioner for six years during which he gave ma a free hand and no criticism of my work. On one occasion I went to his office to ask a favor that involved some expense to the State. When I arrived at the door I noted he had a visitor and hesitated to enter. He invited me in saying his caller was a friend with whom he was merely visiting. After being introduced to his friend I was cordially invited to take a chair and explain my errand. He readily approved my request and, turning to his friend, laughingly said in effect: "You know,

I have to give Church anything he asks for because he never asks for anything that is unjustifiable nor before he actually needs it". I considered those simple words as a fine tribute to the cordial relationship that existed between us. At this date he is still living, quietly, at his home in Ionia.

Sam Metzger, Self-Styled Potato King of Michigan

Potatoes and beans were the two most important cash farm crops in Michigan, and the State ranked high among all states in each. There were marked shifts in the acreage of both from year to year which made estimating of this factor difficult. Yields per acre were also a severe problem because they varied widely on different soils and between areas. The task of estimating these crops was further complicated by the fact that most farmers felt the estimates influenced the market prices, which made them reluctant to give unbiased information. The dealers were given to speculating in these commodities which tended to bias their judgement and made them wary of giving full information. For these reasons I had to concentrate a disproportionate amount of my time on these two crops through extensive travel and much interviewing. Montcalm County was one of the leading counties in the production of potatoes, and Greenville, the county seat, had become the leading potato shipping center in the State. Naturally, I visited that City whenever information was being gathered on the potato crop. On my early visits I found the potato business being handled by a farmers' co-operative organization and three independent dealers. One of the latter was Sam Metzger, who, probably was the largest operator of the four.

Sam was to the potato industry what John L. Lewis was to the labor unions. He bore some resemblance to John in personal appearance and actions, possessed the same pronounced degree of egotism, and had a similar bellowing voice. While he pretended to be cooperative in supplying information to me, his talk was mostly generalities about the potato situation and the big things he was doing in a business way. The real information I was seeking he carefully concealed, or it was suspiciously unreliable. I always called on him merely to satisfy his egotism and minimize his criticism of our estimates, although I obtained my best information from the other Greenville dealers. On one occasion I wanted to send a questionnaire to all potato buyers at local stations in the State, and made a circuit of the jobbers who maintained a large number of such buying stations. Each jobber willingly gave me a complete list of his local buyers, numbering from 60 to 100 each. My last call while enroute for home was at Greenville. Sam absolutely refused to give me his list. I did not press the matter but, in answer to his question, told him all the others had freely given me their lists. I left his office without further ado but, as I was about to drive away, he came out to the car and suggested I send him my questionnaires in bulk and he would forward them to the buyers and ask them to fill them out. I asked him how many he needed for his buying stations and he said 90. I could not understand why he took this course, but agreed to the plan. I sent the blanks to him together with an equivalent number of franked return envelopes, and I later received practically a complete response from his buyers. As each had signed his name and given his address, I had the list of Sam's buyers for future use.

Some years later, while making my usual round of the commercial potato areas in October, I stopped at Greenville. The crop was not large that year and the dealers thought the average for Montcalm county would not be much more than 100 bushels per acre, but Sam asserted it would not exceed 75 bushels. Of course I did not tell him what the others had said but, when he noted I was incredulous of his estimate, he said I would find no dealer in the County who would estimate more than that figure. Just to have a little fun, I told him a local buyer in a

small town had told me that morning he estimated the crop in his locality at 125 bushels on the basis of statements of local farmers. Sam immediately wanted to know who he was, and, as I knew him to be one of Sam's own buyers, I told him. Sam said that fellow didn't get around any and so did not know what he was talking about. When Sam said further that he doubted any farmer in the County would get 100 bushels per acre that year, I asked him what about Mr. Lincoln. He was a certified seed potato grower and his yield had been announced in the papers as 250 bushels per acre. Certified seed growing is supervised by Michigan State College and the yields are carefully authenticated. Nevertheless Sam said: "That man Lincoln is the biggest liar in the County". Such was his tribute to one whom I knew to be a foremost and progressive citizen, and a specialist in potato growing.

Later in the same year, about November 15, Sam called me by long distance telephone and talked for a half-hour in an effort to have me lower subsequent estimates on that season's potato crop. When I told him the estimate would be reduced only if the reports from growers justified, he tried to exact a promise to make another trip through the potato belt, saying the crop had deteriorated greatly since my previous trip. A week or ten days later, he called again and talked for about the same length of time. He accused me of being arbitrary because I refused to abide by his judgement. Just before the date of the final report, he called me a third time. When he realized I was not being swayed by his pleas, he threatened to "get my job". I told him he was free to do so if he saw fit, and gave him to understand I was not being scared by such a statement. Not more than three or four days later I happened to see him pass the open door of my office in the direction of the Commissioner's office, and suspected the nature of his errand. Commissioner Powell's farm in Ionia county was not more than 15 or 20 miles from Greenville, and Sam had frequently boasted to me that Herb Powell was one of his intimate friends. After Sam's visit, the Commissioner informed me that Sam had asked him to "fire" me. I jokingly asked him if he assured Sam he would do it, but he told me he had informed Sam that I was a Government official, that he could not fire me if he wanted to, and that he would not if he could.

A few weeks later, Mr. Callander received a letter signed "A Farmer" criticizing the potato estimates and saying any Government official making such a blunder should be removed from the Government payroll at once. The letter also contained a clipping of an editorial from the Greenville paper in which was embodied the arguments I had heard from Sam. Mr. Callander, knowing my trouble with Sam and suspecting the origin and inspired editorial, merely sent the letter to me without comment. A year or two later I received a letter from Sam typed by his stenographer on his official letterhead. I immediately extracted the letter from my files signed "A Farmer" and written in longhand. The paper was of the same size, bore the same watermark, and the handwriting compared closely with his signature on the later letter.

In October of the year following my dispute with Sam over the potato estimate, I made my usual annual trip through the commercial potato districts of northern Michigan. Oscar Day had become my office assistant and I wanted to acquaint him with the dealers and with the various sections of Michigan, so I arranged to have him accompany me. While on this trip I made it a point to ask every dealer we met how he felt about our potato estimate of the previous year. Not one among them disagreed with it and many complimented its accuracy. Our final stop of the week was at Greenville and I purposely delayed my call on Sam until the last. The other dealers there expressed themselves in full accord with our estimate, but

when I appeared at the door of Sam's private office he asked me to come in as he wanted to talk to me. He launched into a virulent tirade about the estimate and charged that the dealers were up in arms about it. It was then I told him I had not found a single dealer during the entire week who criticized it and that the majority had praised it. Then he blurted that a competitor across the street never told me any such thing, but I countered with a statement that he had done so not more than 30 minutes ago. At this he jumped to his phone, called him, and asked if he had told me he was satisfied with the estimates. From the conversation it was evident he had verified my statement, and Sam began an argument with him which lasted for some minutes. When he tried to tell me the estimate was not borne out by the shipments, I told him my forecast of shipments, based on the size of the crop, proved to be within one percent of correct hence the production estimate could not have been greatly in error. Finally, when he accused me of being absolutely crooked, I sprang to my feet, marched over to him and said: "Sam, no person in Michigan ever said or believes such a thing about me, and I know you do not believe it yourself". Turning to Day, I told him we would be on our way as we were only wasting time there. This last statement evidently effected Sam, as he called us back and said we had not asked him anything about the current potato crop. I remarked that, during the previous interview he had told me he would give me no information in the future, so I considered it useless to interrogate him. He apparently wanted to smooth things a bit, and volunteered more complete and, probably, more accurate information than ever before. Incidentally, while on this trip, one of Sam's buyers told me Sam had lost $100,000. through speculating on the previous year's crop, which explained his insistence on having the estimates changed in his favor. Day was much upset over this interview because of its marked contrast to all others we had experienced on this trip. Such an encounter would have been very disturbing to me in earlier years, but not so at this later date, especially with such characters as Sam.

A Democratic Commissioner of Agriculture

When William A. Comstock was elected Governor on the Democratic ticket, we expected a change in the commissionership and rumors were afloat as to the identity of the appointee. One morning I went to the office and said they, the office force, could not guess who would be the next commissioner. They were immediately interested and when I told them it would be Sam Metzger, they heaved a sigh of despair in unison. I really doubted my own statement but knew he was seeking the post in return for his efforts in the political campaign in his congressional district. The Farm Bureau, leading farmers, and other agricultural interests were vigorously opposing his candidacy, and, later, demanded an audience with Comstock before the appointment was made. They went to Detroit on the day set but found Comstock out of the city. He left word he would see them on the following day and they remained overnight for the purpose; however, Comstock had announced through the press in the meantime his appointment of Metzger. His only excuse when he met the delegation was that he was under compulsion to do so. The press ridiculed the appointment and all agricultural interests were very wrathy about it. When Metzger took the office he boasted he would have his name in the headlines every day during his term. He practically succeeded in doing that but not in the way he anticipated. The papers flayed him constantly, the legislature headed off an increase in salary for him, and farmers remained antagonistic. It was customary each year for the College to invite the Commissioner to address the assembled crowd at Farmers' Week. The same invitation was extended to Sam and he read a speech written by one of his assistants. It was a history of agriculture from the early days of the Roman Empire down to the present, but made no reference to

current farm problems in which his audience was primarily interested. As soon as he began to read the address there was a chorus of boos and a shuffling of feet that prevented his being heard. President Shaw, the chairman of the meeting, had to interrupt several times with a plea for order. By the time he had finished his address more than half the audience had left the room. This incident was fully reported in all the newspapers as illustrative of public feeling towards him.

As soon as his appointment was announced I wrote the fact to Mr. Callander. I reminded him of my previous trouble with Sam, and suggested he come to Lansing soon after the first of the year. I was apprehensive that Sam would undertake to dominate my office and dictate the official estimates, and I wanted a definite understanding that this would not be tolerated. Callander arrived January 3, the day that Sam first appeared at his new office. I told him Mr. Callander was there and wanted to see him. He seemed upset and tried to delay the interview but I insisted it was imperative. Shortly after noon he came to my office and brought an attorney whom he had just appointed with him. I sent my clerks out of the room and shut the door. Mr. Callander first asked him how he felt towards the crop reporting services and, to my surprise, he replied to the effect that any dealer who ignored the Government estimates would certainly go broke. Mr. Callander then showed him a copy of our contract with the State, explained that no one could have access to my figures until they were officially released, and submitted a statement of the amount of money contributed by the State and by the Government for the project. This statement also listed the State and Federal employees and their salaries. I had a feeling that when he noted my salary was higher than that he was to receive as Commissioner his opinion of me changed for the better. Mr. Callander then asked him if he was willing to continue the contract and fully abide with its provisions. He answered by saying he had just arrived on the job, knew very little about the inner workings of his department, and begged for time to give it full consideration. Mr. Callander said he was anxious for his answer because, if it was to be in the negative, he would start moving the office on the following day. We finally allowed him, at his request, to give me his answer in two weeks. He never gave me any answer nor made any reference to the subject, and our work went on as before under previous commissioners. He made no attempt to interfere with our reports and rarely offered any criticism of them.

Several weeks after he took office his administrative assistant told me he was planning to discharge our only State Clerk, Miss Ruby McNeill. I immediately went to him with a strong protest, explained that I had appointed her because of her mathematical ability, and asserted she had been with us six years or more and was entirely familiar with the work of the office. I pointed out a new clerk would be of doubtful value for several months, and that I could see no justification for her discharge because no political consideration had been involved at the time of her appointment. He seemed unimpressed by my arguments but agreed to defer the matter for a short time. I heard nothing more about it and she has continued with the office down to the present time. When State Civil Service was inaugurated some years ago, while visiting with an old friend who had been with the Department for about 25 years, he told me of a joke on Sam which I had never heard. He had boasted that he had gotten rid of Frank Leffler, who had been a nursery inspector and who was the husband of Jeanne Leffler at the time, and that he was going to have Mrs. Leffler fired also. She had been appointed by me more than ten years before under the Federal Civil Service and was an unusually efficient employee. What steps Sam may have taken in her case is unknown but, undoubtedly, he learned from some source that she was entirely beyond his reach. Aside from these minor incidents, Sam caused me no particular trouble during his two-

year term. The next Governor was a Republican and Sam was promptly ousted. He returned to his business in Greenville and I called on him whenever I was in that City. He was really cordial on those occasions, raised no arguments with me, and appeared to have been considerably chastened through his experience as Commissioner. He died several years ago. Before coming to Lansing he boasted of being a millionaire but, regardless of his actual financial worth, I understand he had lost a sizeable portion through rash speculations.

EDUCATIONAL WORK IN STATISTICAL METHODS--Chapter XXXIII

Very soon after coming to Lansing I sought the acquaintance of those in charge of various phases of agriculture at Michigan State College, or Michigan Agricultural College as it was known at that time. Among these was Joseph F. Cox, who was head of the Farm Crops Department, and later became Dean of Agriculture. He was greatly interested in crop statistics, gave me every possible help, and became one of my very good friends. At his invitation, I gave a talk to the agricultural students on crop reporting methods. He was sufficiently appreciative of my effort to announce that he would have me give a similar lecture to each annual class in agriculture during their senior year. I also lectured occasionally to classes in farm economics, farm management, and others.

About 1918, Professor Cox invited me to join the agricultural section of the Michigan Academy of Sciences. These meetings were held in March of each year at the State University in Ann Arbor, and I enjoyed the privilege of being a member and attending them. Cox was elected chairman of the agricultural section for the following year, and put me on the program for a lecture. I put considerable effort into its preparation and it was well received. At its conclusion, the chairman paid high tribute to it and said such a lecture was worthy of being delivered before a joint session of the entire Academy instead of merely the agricultural section. In it I outlined the present state of Michigan Agriculture, its future possibilities, and a forecast of possible developments. I have read that manuscript a few times in more recent years and was somewhat surprised how accurate the forecasts proved to be in comparison with actual developments. During a discussion, later in the day, of agricultural problems, a young Jew in the audience spoke rather disparagingly of the average mentality of farmers. Chairman Cox immediately jumped to his feet, pointed his finger at the Jew, and said in effect: "I want you to know that my old father and mother have been farmers all their lives, my reverence for them and their ability is of the highest order, and I would not think of leaving this room without expressing my strongest resentment of such a statement from you or anyone else". The young man offered a very weak apology and the meeting proceeded. At its close I was elected chairman for the following year.

I went to Ann Arbor via interurban train on the afternoon preceding the day of the meeting at which I was to preside. It was well that I did so, because a heavy rain set in and turned into sleet during the night. In the morning, telephone and telegraph wires were down, train service was at a standstill, and the ice-coated roads made automobile travel extremely hazardous. When I opened the meeting not more than 12 or 15 people were present. These were partly local residents and a few from Michigan State College who had come to Ann Arbor on the previous day. The opening and leading feature of my program was to have been an address by my friend, Mr. Waterbury, Editor of the Michigan Farmer, but he was among the absent ones and, although it greatly upset my planned program, inwardly I sincerely hoped he would not risk the drive under the circumstances. I announ-

ced that we would proceed with the discussion while we awaited Mr. Waterbury's arrival. Just before 12 o'clock he arrived, having been on the road from Detroit since early in the morning. He gave an interesting talk and spent the remainder of the day with me. I spent the evening at the general Academy meeting and remained in Ann Arbor over night, hopeful that trains would be resumed by the following morning. I kept in touch with the depot and it was finally announced that an interurban car would probably leave at one p.m. I went to the station at that time and waited throughout the afternoon and into the evening. The wires were still down and the car waited for orders from the dispatcher. When they had not arrived by 8 p.m., the crew decided to risk moving without orders. As this was a very dangerous procedure the car traveled very slowly and we did not reach Jackson until near midnight. There was some delay there in getting another car for the Lansing part of the trip, and it was three a.m. when we arrived at the Lansing station. Two or three others and myself obtained a taxi that conveyed us to our East Lansing homes. At the next year's meeting it was decided that, inasmuch as our attending membership in the agricultural section of the Academy was mostly made up of Michigan State College people, there was little point in meeting at Ann Arbor for a discussion merely among ourselves. The subject was put to a vote and resulted in disbandment of the section.

Instruction in Agricultural High Schools

About 1920, I suggested to the State Director of Vocational High Schools of Agriculture the possible use of a course in crop reporting methods. He gave immediate approval to the idea and assured me of his fullest cooperation. At the beginning of the school year, I sent a circular letter to each Smith-Hughes instructor in agriculture. In it I informed him of the plan, inclosed sample schedules, copies of crop reports, and asked whether he was willing to use such a course in one of his classes. Seventeen schools took up the course the first year with a little less than 100 students enrolled. During the ten or more years that the project was continued, the number of schools and enrollment increased in each and every year over the preceding one. The plan involved the sending to each school sufficient schedules and monthly crop reports to supply each student and instructor with a copy. The student was directed to fill out his schedule on the basis of a certain farm, either his father's or one with which he was acquainted. With the help of the instructor these schedules were to be edited in class, summed, and averaged. The results were to be entered on a single schedule and sent to our office. The combined report for the class, if satisfactory, was included with the other reports received from our farm correspondents in that county. After a few years we prepared monthly lessons consisting of a graph and three or four mimeographed pages explaining it and how the farmer could use it to his advantage. These proved very popular and requests were still being received for copies of them at the time of my retirement 12 years after the project was discontinued which was about 1930. In the final year the number of schools cooperating was 125, and the class enrollment over 2,500. Notwithstanding the great success and unlimited possibilities of the project, pressure of our regular work had increased to the point where it was physically impossible to continue the preparation and distribution of the monthly lessons in such large quantities.

At the annual meeting of the Smith-Hughes instructors at Michigan State College, during each year of the project, I was on the program to discuss crop reporting methods and the use and value of crop statistics to farmers. An occasional instructor encountered some opposition from parents who objected to crop reports on general principles. Some of these refused to help their sons with the schedules, and occasional ones forbid their boys to bring the schedules to the

home. One instructor came to Lansing and tendered his resignation to the State Director. It was not accepted and he was told to go back to his job and fight it out, which he did to his credit and personal well-being. In another instance, one of our crop reporters asked me to attend a farmers' meeting and give a talk on the value of crop reports. I knew nothing about the circumstances but, as he hinted there was a difference of opinion in his locality about crop reports, I went to unusual lengths in preparing a talk and fortifying my arguments with several of the best charts I was able to produce. At the meeting the crowd was orderly and in my talk I tried to anticipate and answer every argument usually raised. At the conclusion of my effort, I invited the asking of questions, but only one question was asked. That was for information on a point which had not been fully covered. Afterward, I learned that the course in the local high school had split the farmers into two factions, one for and the other against it. They had decided to settle it on the basis of my talk, and I assume that they did because the course remained in the school until the entire project was abandoned. Quite a number of the students grew up and became regular crop reporters before I left the Service. That was one of the objects I had in view and the decisive factor in giving it a trial. When other statisticians heard of it, a few adopted a similar course in their states but, as far as I know, they were short-lived. Too much opposition, too much time and effort required, and lack of support on the part of state directors, were the principal reasons assigned for its abandonment.

A Special Course in Agricultural Statistics

At the time I took the Civil Service examination for a position with the Bureau of Crop Estimates, a College course in agriculture or an equivalent number of years of farm experience was required. A course in statistics was not necessary for eligibility, and most of the earlier appointees had little or no training in that science. some years later, when the Washington office became staffed mainly with college graduates, the requirement were changed. These college-minded men succeeded in making a college degree one of the requirements, and farm experience was dropped from the list. In my opinion this shift was detrimental, and that opinion was shared by most of the older men who had been instrumental in bringing the Bureau's work up to a practical and high state of perfection. Nevertheless, many of us recognized the need for a better knowledge of technical statistics. I was one of those who craved such knowledge and sought to obtain it from textbooks on statistics, but was unable to find the definite connecting link between theoretical statistics and their practical application to our work.

While in Washington as a member of the crop-reporting Board in April, 1927, Mr. Callander told me that 15 junior statisticians had been called in from some of the field offices and given an intensive course in the application of statistical methods to crop-reporting. He said these young men, through lack of experience in crop estimating and knowledge of farm practices, were unable to fully understand the application of the methods, and that he felt it had been a mistake in calling this young group. He stated he was planning to repeat the course during the following winter, but that it would be limited to older and more experienced men. I asked him who he intended to have in that next class, and he replied that the first 15 making application following the announcement would be detailed to take the course. I asked him to put my name down as applicant No. 1, and he noted it on his memorandum pad. During the summer I reviewed two or three text books on statistics, and prepared a large number of frequency distributions of Michigan crop data. Also, I computed the various statistical measures for each and made a tabulated summary of each series of results. By doing this work in ad-

vance, I obtained a better comprehension of statistical methods, made my class work comparatively easy, and enabled me to do some experimental research work while the other members of the class were doing the work I had completed in advance.

We had the benefit of lectures by numerous men in the Department outside of our own Bureau. These included economists, statisticians and mathematicians, price analysts, etc. Among these was Dr. Mordecai Ezekiel, who gave us a detailed explanation of the approximation method for multiple curvilinear correlation, and which made it possible for me to take up research problems involving such values. Dr. Ezekiel published a book on "Methods of Correlation Analysis" soon afterward; hence it was known to only a few at the time we acquired it through his lectures. Later he became Nationally prominent as one of President Roosevelt's New Deal economists. It so happened that Dr. Louis Bean, another New Deal economist, brought out a chart method for accomplishing similar results during my stay in Washington. He explained and demonstrated the method to me and I made use of it even before returning home. Both of these new methods were highly practical in our type of research, and I made sure that I understood them thoroughly before leaving Washington.

A friend from Michigan State College called at the office soon after my return. He became interested in the new methods I was using, and suggested that I give a lecture on the subject at the College. I agreed to do so and he made the necessary arrangements by inviting all who might be interested in the subject. He estimated there would be about 15 in attendance but, when I arrived at the designated room, there were about 60 present. Various departments were represented including the entire staff of professors and instructors from the Mathematics Department. Some in that department had been critical of our crop estimates, contending that statistical relationships between weather conditions and crop yields would produce better ones. Thus, it was deeply gratifying to me to appear before them, and demonstrate how we were utilizing such relationships by newer and more advanced methods than any with which they were acquainted. It was certain to be a highly critical audience but I launched into the subject with full confidence. During the hour allotted to me, from 11 to 12, I demonstrated and fully explained each step on the blackboard. I stopped promptly at 12 but offered to answer any questions they might wish to raise. Many were asked and I was happy in being able to answer all of them. It was after one o'clock when the questions ended, and I went away feeling that I had succeeded in making a favorable impression upon all. A few came to me later seeking further help in applying the methods, and I heard no further criticism of our work.

An Instructor at Michigan State College

Early in 1929 Dean Cox approached me with a proposition to teach a one-term course each year on the application of crop statistics to farm management. He said I had given free lectures whenever called upon over a period of a dozen years or more, and he thought it was time I should receive compensation. He offered a salary of $500. per annum for four hours teaching per week during one 12-week term. The offer was accepted, after securing permission from the Chief of the Bureau and the State Commissioner of Agriculture. It seemed ironical that I was to become a college instructor without benefit of teacher training or having attended a college at any time in my life.

I set up a weekly schedule of two class lecture periods of one hour each and a two-hour laboratory period. The course originally was designated as an elective one for any agricultural student. This proved to be an unsatisfactory arrangement as it attracted some students from each college-year group, many of

whom had never had a course in statistics. This was corrected later by limiting it to juniors and seniors, changing it to a required subject for students in agricultural economics, and shifting the schedule so as to follow a regular course in statistics. Because of the severe depression prevailing in 1932, all College salaries, including my own, were cut seven percent. In the following year, a further cut to 60 percent of the original base was made. The position thus became far less attractive. Having been appointed a member of the State Agricultural Adjustment Committee in 1934 whereby I became responsible for organizing and administering the State Corn-Hog program, the teaching became extremely burdensome. At the end of the term for that year, I resigned as instructor and recommended my assistant, Irvin Holmes, to be my successor. He was a college graduate and, prior to coming into the Bureau, had taught in and been principal of a high school for several years. He filled the position capably in 1935, 1936 and 1937, then was transferred to Washington. My six and his three years as instructor made up the nine years that the course was conducted. Since that time some of the features of the course have been given in a class in statistics within the Mathematics Department. Some of my former students have since told me that they believed it was the most practical and useful course they obtained at Michigan State College. At least two or three are now on the College staff, and several others are known to have responsible and lucrative positions in other fields. It was an enjoyable experience and I had no regrets for having undertaken it.

PLAYING IN THE FIELD OF RESEARCH--Chapter XXXIV

The words of this title have been chosen somewhat advisedly. "Playing" because after reaching middle life, I came to realize that research really had been my favorite hobby from early childhood. It was not until then, when the word "research" came into general use by real and would-be scientists, that I even thought of it as being applicable to my favorite sport. As a boy on the farm I studied the cellular structure of plants and flowers under a small microscope, made a collection of all the different tree woods I could find in the locality, and tried numerous experiments with plants, seeds and fruits. These crude attempts accomplished little more than to disprove some of my pet theories and others of which I had read. However, my desire to study causes and effects in Nature was never dulled and grew with the passing of successive years.

My entrance into the Weather Bureau opened up a broad and endless field for research in many directions. The sounding balloon experiments at Indianapolis was an example. One of my first accomplishments, if it can be called such, took place at Cheyenne. I was the only observer on that station and it was my responsibility to record the beginnings and endings of all precipitation, both day and night, throughout each and every 24 hours. This was not too difficult in the daylight hours, but not so easy of accurate accomplishment during the period of normal sleep. Our automatic machines recorded the time of each measured one-hundredth inch of rainfall but not of snowfall, nor did it show the exact time of beginning and ending of rain showers. By experiment, I found that even a drop or two of rain would register on blueprint paper. I envisioned a clock-driven machine which would slowly move a strip of such paper beneath a narrow opening, and record the exact time of beginnings and endings of the lightest showers and of snow flurries. When discussing with the official in charge the advisability of constructing such a machine at my own expense, he discouraged doing so for the reason that the Washington office was prone to appropriating all practical devices to

its own credit and depriving their inventors of any benefits. As a result of his advice, I did not build the machine but, instead, dismissed the idea from my mind.

While at Salt Lake City, and before applying for permission to make official practice weather forecasts, I made a statistical analysis of past weather records and official forecasts. I discovered that, for at least six months of each year, a continuous forecast of fair weather would have produced a higher rating of accuracy than that actually attained by the official forecasters. I began making private practice forecasts, using my knowledge of forecasting principles tempered to some extent by the unorthodox relationship just described. The resulting forecasts were highly satisfactory and, a few months later, I applied for and was granted authority to make practice forecasts. These were required to be for an adjacent state rather than for Utah but this did not entirely void my 2methods. I was assigned the State of Colorado which happened to be the home of the district forecaster and for which he had made the official forecasts for at least 25 years. Even with this additional handicap, I made an accuracy record of 92 percent for the first month in comparison with 72 percent by him. This unusual margin was more or less accidental as results in succeeding months, although generally better than the district's forecaster's, gave me only modest percentage-wise advantages. My record may have attracted some attention at Washington for I soon was assigned another State in the same forecast district, and my salary increases became more frequent.

A Special Report on Farm Abandonment

A pronounced increase in industrial production immediately after the end of World War I, attended by relatively high rates of pay to its workers, attracted an unusual number of people from the State's farms to the cities. The wholesale abandonment of farms caused deep concern to administrative officials, newspaper editors, and leading citizens. Many requests came to me for definite figures on the extent of the abandonment. None being available the pressure put upon me steadily mounted until, finally, I determined to make an investigation and report the findings. Such an attempt had never been made and I had no precedent to assist me. After carefully considering the problem, I decided upon a course of action hitherto untried. As the replies to my inquiry must be obtained voluntarily, I reasoned it was necessary to divide the State into the smallest possible units--so small that an individual reporter would have information for a complete report for a whole unit. I hit upon the idea of designating rural school districts as the basic units and the school board directors as reporters. I found the Superintendent of Public Instruction had the names and addresses of the State's 7,300 school directors on addressograph plates, and he readily agreed to have them stamped on my franked envelopes. The information asked for was: number of farms in the district, number of houses on these farms, number of farms worked last year and number being worked this year, number of houses occupied each of the two years, and other related questions.

The original mailing brought such a satisfactory response that no followups were considered necessary. Reports were received from 60 percent of the districts, the largest ever obtained by me before or since from a new list of reporters, which fact can be attributed only to the intense interest in the subject at the time. Every county was well represented and the information was tabulated separately for each county. Many of the school directors sent letters and comments explaining the peculiar situations existing in their respective districts, and these supplied interesting stories to the daily papers for several weeks. These served to create public interest in the forthcoming report. I put forth my

best effort in writing the report, and Deputy Secretary of State, Fitzgerald, told me that the dean of newspaper men at the Capitol had said my news release of that report was the best written article ever sent out in Lansing. Afterwards, I received clippings, comments, and inquiries from practically every state in the Union and from at least a dozen foreign countries, including one from China. The report showed that more than 18,000 farms were completely idle and more than 30,000 farm houses were empty in 1920. The minor economic depression in 1921 caused a reoccupation of many of these in that year, and farm abandonment returned to normal proportions within the next two or three years. At no time since has it approached the percentage found in 1920.

When my report was practically finished and ready for release to the press, I was greatly astonished to read in the local paper the results of a purported survey on the same subject by the Michigan State Farm Bureau. I was at a loss to understand the motive behind such action and loth to believe the Farm Bureau which always had been friendly and cooperative, would deliberately undertake to double-cross me. The figures as quoted were at wild variance from mine, and I was very skeptical of their authenticity. Determined to have a showdown, I gathered up my large roll of county tabulation and State summary sheets representing the actual data for approximately 120,000 farms and proportional estimates for the remainder, and went to the Farm Bureau office. The manager was very friendly and, when I asked for an explanation, seemed to know almost nothing about the matter. He stated the report had been compiled and issued by the assistant secretary, the same man I already have mentioned as presumably having had a part in the creation of the State Department of Agriculture. He readily admitted having issued the report but was evasive in answering my further pointed questions concerning the source of the information on which it was based. At my further insistence, he finally said it was predicated on personal opinions obtained from the county agricultural agents, and intimated that a large majority of them had responded to his request. I asked him to bring them forth and compare their statements with my findings for the same counties. He reluctantly obeyed and brought forth one from each of several different drawers in his desk. This seemed very strange to me as any tabulations he may have made from them would have automatically brought them together in a single file. He managed to produce no more than a half dozen for as many counties, and each of these reports differed widely from my own figures. When I asked him how he arrived at figures for the missing counties, he replied they were prorated on the same basis as those received. I showed him the absurdity of such a method from my own tabulations, which indicated the percentages of abandonment varied from less than five percent in some southern counties to as much as 60 or 70 percent in some of the poor agricultural sections elsewhere. He was forced to admit that I really had the facts. After explaining my findings to the manager, I returned to my office, completed my report in which I stressed its factual basis and extraordinary number of farms enumerated, and issued it to the press. The Farm Bureau remained silent and I noted it had appointed a new assistant secretary very soon afterward.

Experiences in Forecasting Potato Prices

My first attempted speculation in an effort to enhance my nonexistant bank account occurred at the age of 13. I was living at home on the farm and knew absolutely nothing about potato markets and prices, as Father made no effort to raise more than enough potatoes for his family's needs. One of our hired men owned and lived on a 10-acre tract of land near us. His potato crop was fairly good that year and he found he had a surplus available for sale. He was deploring the fact that the current market was only 40 cents a bushel, whereas in the

spring it would be around $1. a bushel. Like many a much older farmer, I accepted his opinion as a gospel fact. My ambitious greed and lack of judgement led me to believe I had found the road to riches, and I lost no time in conveying my speculative desire to my father. He advised against it but allowed me to proceed. I spent a half day building an extra storage bin in the cellar, and another half day in grading and moving the potatoes into our cellar. In the spring Father suggested that the 40 bushels be sold before they reached the sprouting stage, and I sacked them and, with his help, carried them out of the cellar and placed them on the wagon. I was in school at the time, so Father hauled them to market for me. He was forced to accept 50 cents a bushel, a gain of 10 cents over the purchase price, but that did not represent my actual profit. I did not know that potatoes had the habit of shrinking two percent in weight during each month they are in storage, but when the total receipts counted up to only a few cents more than my original outlay, I had quite a sum to be charged against my ignorance. Also, my evaluation of the opinions of others suffered severely in consequence.

It was not until many years later, after our removal to Lansing, that I cmae into direct contact with potato prices. I called on a certain county agricultural agent who was also a large-scale commercial grower of potatoes. Before I had the opportunity to inquire about crop conditions in his county, he asked me what the latest Government estimate was for the National potato crop. I gave it to him and he promptly said that meant his crop would go into storage for sale in the spring. That aroused my curiosity and I inquired the basis for his announced decision. He kindly explained that the short National crop for that year, as shown by the figures I had supplied, would cause the potato market to rise during the winter and reach its highest point about March. Had the crop been considerably above normal, it would have resulted in a lower spring price and he would have marketed his crop soon after digging. This led me to follow the market closely and when the spring price fully verified his prediction, i stored the principle in my memory for future use. Each succeeding year consistently verified this simple formula. However, I noted that the majority of farmers were using a different and erroneous psychology with the result that the prices which they received were generally near the minimum.

A concrete example of this occurred within our own family, and strengthened my desire to help as many people as possible in the years that followed. Both the State and National potato crops were unusually large in the fall of 1924. We spent Thanksgiving Day that year at the home of Rob and Claude Harker, and I learned that they had stored their potato crop from a field of 10 acres in their cellar. Robert explained that the market started at 50 cents per bushel and had since declined to 40 cents. He wanted to know what I thought he should do. I disliked to assume any risk in a matter so important to him, so withheld a direct answer. Later in the day he again brought up the subject and said at least I could tell him what I would do if the crop were mine. I told him, if such was the case, I would go to town the next day and contract the entire lot for the best price offered. He said he thought the price might eventually go up to 50 cents, but I pointed out if it did so in the spring the gain would be offset by the shrinkage, and told him I expected a decline instead of an advance. He sold them for 38 cents a bushel. In the spring, one dealer, who had several hundred carloads on hand which he had bought at prices ranging from 25 cents down 8 cents a bushel, told me he offered to give them to the Salvation Army in Indiana and Ohio if it would simply pay the freight. Of course Rob was pleased for having taken my advice.

As nearly as I can recall, the next year's potato crop in Michigan was

about average in size. But the United States' production was the smallest in several decades, and from 60 to 70 million bushels less than the normal consumption needs. I made my usual northern trip in October and encountered a heavy snowstorm. I was not dressed warmly and the open Ford car caused considerable discomfort from the unseasonable cold. I intended to stop in Clarksville and see my mother and this took me over the road from Saranac. When I reached Rob's farm, I was so cold I decided to stop, get thawed out, and incidentally inquire about his potato crop. Rob and Claude were sitting by the fire as they considered it too stormy to do any outdoor work. Only half their potatoes had been dug, about 1,000 bushels; the other half being in the ground and under the snow was causing Rob some worry. But I assured him they would be all right because the snow fell before the ground had a chance to freeze. Rob told me that they could have finished the harvesting before that day, but had been marketing each load as soon as it was dug. I showed some surprise at his statement and asked what price he was receiving. He replied by saying it was 90 cents a bushel and asking if I did not think that a good price. I told him I not only did not think so but positively knew it was not. Then I told him I had been in Traverse City, where the price had been going up 10 cents a day and where it was $1.30 on the day I left there, and expressed the opinion that this was only the beginning. When he asked what it was all about and why, I told him about the National shortage and that a number of Chicago buyers were in Traverse City and other northern commercial centers, bidding against each other in an effort to get as much of the Michigan crop as possible before a further advance in the market took place. He turned to Claude and said he guessed they would put the remainder of their crop in the cellar. I was warm by that time and went on my way, wondering why they had not contacted me before beginning their potato harvest. In early February the price had reached $2.00 and he wrote asking my opinion about selling. I answered that, there being no prospect of a decline in the market, they might wait for any rise that might occur. However, I warned not to wait beyond the end of March to sell. I did not see him until the following August. He told me they held the 1,000 bushels until late in March and sold them for $3.00 a bushel, and I could not refrain from asking if he still thought the 90 cents in the previous fall was a good one. I just had to have my little joke. Thousands of potato growers were using the same false psychology and I wanted to help them. Each year afterward I inserted a sentence or two in my report, about digging time, in which I gave a strong hint of the direction the market was likely to move during the winter months. A few years later, a bad break in the cotton market occurred immediately after the Bureau issued a price forecast to the effect that cotton prices would go down. Although the forecast was fully verified, cotton growers charged the decline was caused by the forecast and demanded such forecasts be prohibited. This resulted in the Congress passing a law prohibiting price forecasts for all farm commodities. When I went back and checked the statements I had made annually for eight or ten years, I found I had achieved practically a perfect score in each and every year.

In the fall of 1929 I contributed a series of articles to the Michgan Farmer, in which I explained the formula and illustrated it with graphs. It may have benefitted a considerable number of farmers but I received no response from growers. I believe it was in the winter of 1935 that I received an invitation to address the Potato Growers' Association at Michigan State Coillege during Farmers' Week. I prepared a table covering a long period of years, showing the annual production of potatoes and the average monthly prices received in Michigan for each crop; described the use of the formula; and included one or two graphs illustrating the relationship. This material in mimeographed form was distributed to the

audience as I began my talk. Without advance notice to myself or the manager of the meeting, my talk was broadcasted. My discourse was well received, many requests came to me for copies of the mimeographed sheets, and were still being received in 1948 when I retired from the Service.

Research Assignment to Washington in 1931

After having acquired the new methods of statistical analysis in the 1928 class at Washington, I made studies of the relationships between weather factors and Michigan crop yields. Interesting and useful relationships were found for several different crops, one of which was wheat. While in Washington for the August, 1930 crop report, I discussed my various findings with leading members of the staff. The extreme drought of that summer had overspread 28 states, caused the so-called "dust bowl" in the Plains states, and resulted in an extensive survey by the Bureau. The questionnaires were pouring into the Washington office by the thousands, and I was drafted to help with the editing of them, a task which kept me there until the middle of September.

About February 1, 1931 I was called to Washington and given the task of determining, if possible, the probable size of the Nation's wheat crop that actually would be harvested that year. The Federal Farm Board had bought and stored millions of bushels of wheat in an effort to support a satisfactory farm price, and now were faced with the problem of unloading it without upsetting the price. The members were inclined to believe the 1930 drought would reduce the 1931 yield, in which case it would provide an outlet for the huge stored holdings, without serious effect on the market. Upon my arrival a conference was called by the Chief of the Bureau of Agricultural Economics. Representatives from the Federal Farm Board, Weather Bureau, Division of Historical Research, Plant Industry, and our Division were present to discuss the problem. The prevailing opinion was one of skepticism. The Weather Bureau had been active in research of this type for many years and its director of research was outstandingly pessimistic of any tangible results being obtained. No constructive suggestions were offered by anyone. With this discouraging outlook, I was given some clerical assistance and went to work. Progress was necessarily slow as charts had to be made for all the important wheat states, and much data had to be assembled or rearranged for this particular purpose. I placed myself on a 7-day week and 16-hour day schedule. The principal important discovery made was that optimum wheat yields were obtained with an annual rainfall of only slightly more than 20 inches. Any material excess or deficiency from this amount produced proportionately lower yields. A further finding was that drought during the three months prior to seeding was conducive to high yields in most of the soft winter wheat states. When I had been working about 30 days, the Chief of the Bureau suddenly called for a summary of my results. He was leaving the next day to attend an International wheat conference in London and wanted my idea on the prospective production of winter wheat in the United States to take with him. In my report I ventured the prediction that the yield per acre would be considerably above the 10-year average of 13 bushels. This statement must have been extremely disappointing to the Federal Farm Board, but the National average for that year of 19 bushels was the highest on record up to that time, and was not exceeded until 1942.

Around the middle of April the Chief again asked for a report, but this time it was to be concerning spring wheat. Only a little had been done with that crop, as the most of my time had been spent on winter wheat studies. However, I stated that the outlook was very unfavorable, that the drought over the spring wheat area was still unbroken, and that even a break in it would not result in a yield equal to the 10-year average. The yield as finally determined for that

year stands today as the lowest on record. While I made no attempt to express either forecast in actual bushels per acre, I believed my statements accurately reflected the true situation insofar as it could be determined at that early date. No comments of appreciation or disapproval ever reached me, so am unable to state how they were judged by the other interested individuals.

During the few years immediately preceding these events, a man at the Kansas State Agricultural College claimed to have forecasted the wheat crop from weather data more accurately than officially done by the Bureau. He was called to Washington at the same time as myself and, being outside the Government Service, he was paid a salary and expenses to demonstrate his ability. He was placed in the same room with me and I watched him work. He was very secretive concerning the data he was using and the results he was getting. He remained six weeks or more, and when he left for home he would not give us any information as to his conclusions. After he reached home he wrote a confidential letter to the Chief of the Division that had employed him, in which he estimated the National winter wheat for that year at 13.5 bushels per acre. This was practically the same as the 10-year average, much below my statement of indications, and far below the 19 bushels actually recorded. We never heard from him afterward.

A Farm Bureau Man Forecasts the Michigan Wheat Crop

I always enjoy a fair contest and am reporting this one merely to prove that one which promised only bitter repercussions in the beginning could end amicably and with closer friendship between the contestants. After returning from the statistical class in the spring of 1928, we made an extensive study of the effect of weather upon Michigan wheat yields. We developed a highly promising formula and were anxious to put it to a practical test. The May 1 reports from wheat growers that year were very pessimistic. Considerable acreage was being abandoned and the remainder was reported as being in poor condition. On the basis of our long-used methods the indicated yield was only about 12 bushels and could be interpreted at not more than 13 bushels. Our new and untried weather formula indicated 16.5 bushels. Field men rarely recommended to the Board a figure differing by more than one bushel from the reported average, and the Board often decided against the field man's differing recommendation in favor of the crop reporters' opinion. In this case I recommended the 16.5 shown by the weather charts, but added a statement that, as my new charts were as yet untested, the Board should ignore my recommended figure if it did not share my confidence. I merely wanted to have the indication on record. Somewhat to my surprise the Board adopted a compromise figure of 15 bushels. When that figure reached the Farm Bureau office, I received an immediate call from the manager of its grain department. He wanted to know where I had obtained such a wild and crazy figure; said he had traveled about and inspected many wheat fields; and would wager a good suit of clothes that the crop would yield no more than 12 bushels. He was quite agitated and seemed to be using every possible effort to irritate me, but my confidence remained unshaken. I said nothing about the new charts upon which the report was based and, being in good humor over the situation, laughingly told him I would like to talk the situation over with him after harvest. The June 1 reports averaged 14 bushels, I again recommended 16.5, and the Board adopted 15.5. On July 1 the reports had advanced to 15 bushels, and the Board accepted my recommendation of 16.5. The final report on August 1 was 16 bushels; my recommendation and the Board's accepted figure was the same. The Farm Bureau man called me, acknowledged his defeat, and said he would leave all future forecasts to me. A year or two later I met him on the street. With him were two prominent men whom he introduced after stopping me. He related the story to them after which he said

he was resigning from the crop forecasting business and leaving it entirely to me. He added a further statement to the effect: He suspected I had something up my sleeve that I never made public about crop estimating. I did not get the suit of clothes, however.

Measuring the Advance of the Spring Season

During the spring months many crop reporters comment upon the earliness or lateness of the season, but always there have been considerable variations in their opinions for each season. It was appropriate and desirable for me to make a statement on the subject in my reports to Washington but, when one reporter would say the season was one week late; another, two weeks; others, three and four weeks late, I was unable to resolve these differences into a single accurate estimate. Reasoning that the temperature must be the chief weather element involved, I made up a table of accumulated temperatures in excess of a given base temperature. A comparison of the values thus obtained with a similar accumulation of the daily normals gave a measure that apparently was more accurate than individual opinions or observations.

Phenological records, such as blossoming dates, tree leaving dates, etc. had been used as the only available measurement in the past, but such records are available only for short and irregular periods. In my Weather Bureau days, sporadic attempts were made to collect such data from the co-operative observers but the results were poor and the efforts were finally abandoned. Such records would have been useful in testing my math-ematical tabulations, but I was able to find only a few at Michigan State College. These referred to the heading dates of various grains and did not check as closely with my computations as I had hoped. I began keeping a series of phenological records of my own and am still continuing them. They vary somewhat from my formula but, to my sur-prise, they do not agree any more closely between different plants and trees growing adjacent to each other. The same was true of the College heading dates. As yet I am unable to explain these anomalies in Nature, but the fact that they exist may account in part for the discrepancies in my computed formula. A friend of mine on the staff of the Grand Rapids Press wrote a story on this phase of my research work shortly before my retirement. Soon afterward he proposed that he call in a staff writer for the Satur-day Evening Post who would give it favorable Nation-wide publicity. While I appreciated his interest and kind offer, I declined the opportunity. I am still giving some thought and study to the subject, although my formula is being used regularly at my former off-ice as a basis for statements on the advancement of each spring season as it arrives. Mr. Borum also uses it as an aid to interpreting prospective yields from reported crop condition percentages.

Other Research Projects

From 1928 to 1942, I spent much time in assembling weather and crop data, and making correlation charts from them. I experimented with all the major crops grown in Michigan with varying degrees of success and failure. For some of these crops I made more than 100 charts each, found a considerable number that proved useful in improving our estimates, and gave me a better understanding of the effects of weather on plant development and production. These efforts were abetted by the Washington office, and many charts are now being regularly used there and in all field offices as well. Such encouragement was totally lacking in the Weather Bureau, where all research was performed solely in the Washington office, and where most of the results were never made known to its field offices. Its research actually was initiated by one of its field men who made studies of the relationship between weather factors and crop yields over a period of years and

wrote a book on his findings. A research department was then created in the Washington office and he was placed at the head of it.

Our own Bureau organized a research division about 1930, and Mr. Callander offered me the opportunity of becoming its head. I refused because I had no desire to live in Washington for the few remaining years I would be in the Service.

SPECIAL ASSIGNMENTS--Chapter XXXV

Our Chief, Mr. Estabrook, was invited to address the annual meeting of the American Pomological Society at Omaha in the fall of 1922. For some reason unknown to me he did not accept the invitation. Instead, he asked me to present a summary of the Nation's fruit crops for that year at this meeting, presumably because of my experience with and interest in these crops. Realizing my weakness as a public speaker, I was reluctant to undertake this important role but, the request being almost mandatory, I accepted. The meeting date was in November, and during the 8 or 10 weeks prior to it I collected the pertinent data and put it into manuscript form. About the time I began this preparation, my father went to a hospital in Grand Rapids for a major operation. His condition was not good and the operation was delayed for six weeks in an effort to improve it. I spent nearly every week end with him and was there for a day and night during and following the operation. During one of these visits I told him about the prospective trip to Omaha at the Chief's request and its purpose. Father seemed more elated over it than any other achievement in my past life. He smiled happily and said: "At the rate you are going, some day you will be given a trip to Europe".

He seemed to be making satisfactory progress after the operation and I returned home to my work. Mother and Lena remained in Grand Rapids to be near him and supply any needs required. For two weeks he gained slowly but at the beginning of the third week he took a turn for the worse and, in response to a call from Lena, I returned to Grand Rapids. I could see he had lost considerable ground and, although the doctor and nurse continued their assurances of complete recovery, I remained to watch developments. The Omaha meeting was to be on Saturday of that week and it seemed uncertain whether I should leave Grand Rapids under the existing circumstances. I would have to leave on Thursday night in order to be in time for the meeting. On Thursday morning the nurse told me it would be perfectly safe for me to leave, and the doctor made a similar statement to me that afternoon. I went to the station, bought my ticket, and secured my reservation on a sleeper, after which I returned and ate supper at a restaurant with Mother. During the meal she said she wished I would not go, and I assured her that if she felt that way, I would cancel all arrangements. Early in the week I had forwarded my paper to the Secretary of the Association and informed him of the uncertainty of my attendance at the meeting. When I first returned to the hospital and told the nurse I had decided to remain, she said she thought I was wise in doing so. I asked her why she had not told me so that morning, and she replied she was not permitted to give her personal opinion. Father's mind had weakened and at times I was uncertain whether he recognized me. Saturday the doctor resorted to the use of injected saline solutions, and about three a.m. Sunday morning I was summoned to the hospital and found he had been in a coma for some hours. He never regained consciousness and passed away about 11 a.m. that day. I had summoned Cora that morning and asked her to find a driver and bring the car, as I felt I would need it very soon. Will Fletcher drove the car and they arrived just a few minutes after he had breathed his last. Will returned to Lansing by train and Cora, Lena, Mother and I returned to Clarksville with the

auto. It was a sad homecoming, but I was very thankful I had not gone to Omaha.

Service as a Liaison Agent

Early in 1923 I was informed by the Chief that I was to make personal contact with the Extension Service in seven designated states, in an effort to bring about a better understanding and friendlier feeling between that Service and our own Division. This move had been instigated by the two chiefs. Our division was to pay my salary and the other was to provide the necessary traveling expenses. I knew nothing of any existing ill feeling or misunderstanding between the two services, and only a vague idea of what might be accomplished. The instructions which I received were brief and general. I was to call upon the Extension director and arrange with him for joint meetings with his working staff. These meetings were to be discussions of how our crop reports could be improved for their benefit and how our present reports could be used to best advantage. I was to proceed in accordance with instructions to be received from a field supervisor of the Extension Service whose office was in Washington, and to spend about one week in each of the designated states. An assistant in our Illinois office, Owen Dawson (Now U.S. Agricultural Ambassador to China), was sent to Lansing to look after my office during my absence.

Michigan being one of the designated states I decided to try my hand at home where I knew many of the Extension group, before going elsewhere. After a week spent at Michigan State College, I felt somewhat more confident to deal with similar groups in other states. My instructions took me to St. Paul, Minnesota; Lincoln, Nebraska; Columbia, Missouri; and Urbana, Illinois; in the order named. One item in the instructions was that I should contact the Extension Director before seeing the Agricultural Statistician. This seemed the height of absurdity to me and I did exactly the opposite in each and every state visited, because I wanted to get a line on the true situation and the disposition and attitude of the extension directors from the one with whom I was well acquainted. This knowledge would enable me to handle each individual case more confidently and more diplomatically. At the end of each week and before leaving the state, I made a written report of my findings, the action taken, and such recommendations as seemed appropriate for the betterment of the relationship between the two services. These reports went to Washington but no comments relating to them were ever received.

When I reached the State of Illinois I stopped to see our statistician at Springfield before going to Urbana, this being the only state where the two services were in different cities. While there I received a telegram from Washington requesting me to return home after completing my work in that State, except that I might spend one day in Indiana at Purdue instead of a full week. The reason given was that travel funds were insufficient for spending more time in Indiana and for a trip into Kentucky as prescribed in the original instructions. Whether this was the true reason or whether my work did not please the Extension Service, I was unable to learn. It was a profitable experience for me, and gave me the opportunity of visiting the various colleges of agriculture and meeting many leading agricultural workers in those states.

The Agricultural Census of 1925

When the Congress made provision for an agricultural census to be taken in 1925, the prospect of an additional check on our estimates was welcomed by the entire staff of our Division. We had freely criticized and questioned the data obtained from the regular decennial census in many respects. Some of the information which had been collected seemed incomplete, some needed items had been omitted, the wrong units were used in some cases, and some of the definitions and

instructions were inaccurate and misleading. We were anxious to have these deficiencies corrected and felt obligated to render every possible assistance in making this special census more complete and accurate than the previous ones. Census officials willingly accepted our offer of cooperation and adopted many of our recommendations. These friendly relations resulted in most of the statisticians being appointed as supervisor of one census district in their respective states. Michigan was divided into six census districts, and my district comprised nine south-central counties. This task involved an immense amount of administrative detail, and I was authorized to employ an assistant supervisor, a special stenographer, and as many clerks as needed to handle the work. I appointed Walter Strother as my assistant and obtained a stenographer from a small town in Ingham County. The latter went home ill at the end of about 30 days and never returned. Walter enjoyed the work and, having been a farmer for many years, was helpful in editing the long schedules and in helping to instruct the clerks in that phase of the work. I believe the maximum number employed in the office on this work was 13 people. The number of inumerators in the nine counties was about 125, and those positions were offered to our crop reporters. Many of them accepted or recommended a friend who was competent, and very little difficulty was encountered in organizing that portion of the staff. These were called to the county seat of their respective counties where I met them and gave a day's instruction in their duties. The enumeration was scheduled to begin on January 1, end on January 31, and our work of editing and correcting the farm blanks was to be completed and mailed to Washington by Mar. 1.

No enumeration had ever been made in January and Washington Census officials probably had little conception of the difficulties that might be encountered. We had our full share, perhaps more, of them. On the opening day, the roads were heavily coated with a glare of ice which made driving a car exceedingly hazardous. This condition lasted for two or three weeks on the county roads where most of the enumeration work had to be done. Many of our reporters who had accepted the job of enumerator were elderly men who disliked driving under such unfavorable conditiond. They were to receive 25 cents per farm with nothing extra for traveling expenses. They could average only about four farms a day because the days were short at that time of the year and farmers could not be interviewed outdoors or while doing their chores. Nearly all complained of the poor pay and I did not blame them. When I learned that the Government was paying from $1.00 to $2.00 per farm in some of the State's northern and more sparsely settled counties, I made a vigorous protest because the roads there were in much better condition for traveling at the time and the few extra miles traveled by car were of little significance. Some of my enumerators even chose to go on foot over their entire township rather than risk the bad driving conditions. The Washington Census Bureau must have recognized some justice in my protest because it generously raised the price to 30 cents per farm. Each enumerator was to be paid every two weeks. We prepared and mailed the first vouchers to them for their signatures at the 25 cent rate, and they had been returned when the increased rate was announced. As Government vouchers must not be altered, we were forced to prepare a new set and a letter of explanation, send them out, await their return, and finally send them to Washington. This delay did not please some of our enumerators very well, as they had to go deeper into their personal funds for car expenses while awaiting their Washington checks. Only a few had completed the enumeration within the month alloted; the remainder with one exception completed the work by the end of February.

Experiences Reported by Enumerators

One of my crop reporters slid off the road the first day and damaged his car to the extent of about $200. Allowing an average of 200 farms, or at most 300, per enumerator, how much did this man make for his month's work?

One enumerator found a certain farmhouse in his district continuously locked and no answer to his repeated visits to the farm, although he knew the owner was at home. In another district, a farmer circulated a statement that he would shoot the enumerator if he came to his farm. When these reports reached me, I assumed that these farmers would give false statements under compulsion. Following instructions from Washington, I authorized the enumerators to get the information as accurately as possible from neighbors.

One good enumerator, who did some marketing in Lansing each Saturday, and who personally brought in his blanks on those days, told me he had a neighbor with whom he had not been on speaking terms for 20 years. He asked me if it was necessary for him to call on the man, and added that he would if it was obligatory. I told him that, at the end of his services, he would have to sign a certificate that he had visited every farm, in order to get his pay. He said he would try and I wished him luck. The next week he brought in the blank and reported the man was fully cooperative in giving his information and no trouble was encountered.

Two brothers in one district were listed as the owners of a farm. When the enumerator called on one of them, he said the farm belonged to his brother and to get the information from him. When he called on the other brother he received a similar answer. This plainly was a subterfuge and I determined to see what I could do. I wrote to a county officer and found that the farm was jointly owned, and which brother was the operator. I sent him a letter in which I told him the plan of evasion they had tried would not work, quoted the penalty for refusing to give the information, and inclosed a blank to be filled out properly and returned within a certain number of days. The blank reached me within the time specified and was filled out in good order.

Each enumerator, at the beginning, was instructed to send in his first two days' enumeration blanks. This was for the purpose of making sure that he understood and was following instructions, before he had accumulated many defective schedules. I found several in the category and decided it was best to carry their schedules back to them, personally explain what was wrong and give such instruction as I found to be needed. One such case was a farmer living about two miles from the town where his postoffice was located. It was late in the afternoon when I reached the town by train. The road was so slippery I did not care to walk to his place, so got a taxi to take me there. After visiting with the old man for a little while, I was invited to eat supper with him. After supper I launched into the purpose of my visit and labored with him until nearly midnight. At first, he seemed quite cooperative but, as the evening wore on, his questions indicated he was not grasping the meaning of the instructions and I began to realize his case was hopeless. As he was one of our crop reporters, whom I did not wish to offend, I pondered how I could eliminate him as an enumerator. While sitting in desperate and silent thinking for the best solution, he suddenly asked if he was expected to comply with certain instructions I had mentioned. When I answered in the affirmative, he said he wished he had known that earlier because he would not serve under such circumstances, and that I might as well look for another enumerator. He had solved my problem and I summoned the taxi to take me to my hotel.

While on this same trip and in a nearby county seat, I called on the county

agricultural agent for his opinion on certain prospective enumerators. One of these was a crop reporter nearly 80 years of age. He was an excellent reporter and wrote very intelligent letters, but I was skeptical of his ability to get around over the icy roads and render efficient service. The county agricultural agent said he would not be able to do the work because of his age, and suggested a man living in the city and only a few blocks away. He took me to see this man, who was about 60 or 65 years of age, and I turned over to him a set of blanks and gave him some personal as well as printed instructions. Instead of sending in his blanks at the end of the first two days, as instructed, he sent in an entire week's enumerations in his first consignment. There were 20 or more of them, and not one that could be accepted. They were the worst I had encountered, and I decided it was necessary to contact him in person. I took the train and went again to his home city, with little relish for the task before me. At the hotel, I called him to my room. He came immediately after supper and I went over the bundle of forms with him. After pointing out what was wrong he claimed he could see what corrections were needed but, after working several hours with him, I still was dubious. In most cases, it would be necessary for him to return to the same farms again to get the information that was either obviously incorrect or entirely omitted. He promised to do that and I decided to give him a further trial, but insisted that he send in those same schedules as soon as they had been corrected. They reached my office within three or four days and I immediately inspected them. Not one was acceptable and, what was worse, seemed to have been doctored by himself without referring them to the farm owners. I immediately sent a wire to him, requesting him to return all supplies in his possession and consider himself discharged. As we were only to pay for acceptable schedules, I refused to allow him anything for the work he had attempted. He was the only enumerator I was compelled to discharge.

Having lost faith in the veracity and judgement displayed by the county agricultural agent, and because of the resulting delay of the enumeration of that township, I decided to again offer the appointment to the old man who had originally applied for it. This was not only humiliating to me, but, the discharged enumerator had taken his reports for scattered farms at random rather than in a group. It was necessary to tell the old man the full circumstances, give him a list of the enumerated farms, and ask him to visit each one again. This would involve unusual diplomacy on his part, and I feared he would refuse the assignment. To my surprise he not only accepted it but voiced no resentment. He chose to travel his township on foot, completed the task in reasonably good time, and all of his reports were correct. He enumerated more farms than was done in the previous census which indicated he had done a thorough job. Afterward I learned he was a wealthy retired farmer who had, for many earlier years, been supervisor of his township. He knew every family and was sort of a godfather to all of them. He craved and enjoyed the job because of the opportunity to visit and renew his acquaintance with them.

Not long afterward the County agricultural agent of that County was removed for mishandling official funds entrusted to him. Also, I learned that he had been having an illicit affair with the female clerk in his office, and that the discharged enumerator was her uncle. It seems she contributed towards his support and was the one who desired his appointment because of the supplementary income it would provide.

Refusal of Census Information by Some Farmers

Instructions from the Census Bureau required the supervisors to personally contact, if necessary, all farmers who refused to answer the questions. The only exception was the farmers who refused to answer only the questions relating to their personal indebtedness. When the Regional Supervisor was in the State to instruct the district supervisors, he called upon me. I asked him if it was intended I should comply with that particular instruction in all cases. He said I was held responsible for obtaining the information from such individuals but, after further questioning by me, he conceded that as far as he knew the penalty had never been invoked by the Census Bureau against any farmer who had refused. This indicated to me that, while the Census Bureau had a powerful Federal statute behind it, the district supervisors were to be made the goats in this disagreeable task without support from Washington. It was then I mentally resolved not to leave my office on any such mission regardless of the consequences to myself.

While such refusals were being reported to me by enumerators, the statisticians in some of the other states reported their varying degree of success with methods they were using in an effort to overcome this difficulty. Appropriating some of their methods and incorporating them with my own ideas, I evolved a plan of my own. I had a total of about 25 absolute refusals and 128 others who refused to answer the indebtedness questions. To each I first sent a courteous letter explaining the purpose of the census and need for completeness. At the end I quoted the penalty for refusal to give the information and asked that they comply by filling out the inclosed blank and return it to me in the inclosed franked envelope. This resulted in obtaining responses from nearly one-half of them. To the others I sent a curt letter together with another schedule and return envelope. The letter was worded about as follows: "Your signature on the receipt given to your rural mail carrier for this registered letter completes the evidence needed in your case. Unless your report in correct form is received by....date (6 days later) in my office, you will be deemed subject to the penalty quoted in my previous letter". This letter was sent at first only to those who had refused to answer any questions. The envelope containing it was registered and stamped: "To be receipted by addressee only" and "Return receipt demanded". This method resulted in a satisfactory response from all addressees except one. In that case the rural mail carrier had violated his instructions by accepting a receipt from a person other than the addressee. Being elated with this success I dispatched the same letter to those who had refused to answer the indebtedness questions, and, believe it or not, received a 100 percent response.

One loud-mouthed farmer told his neighbors he would never answer the questions under any circumstances. When the enumerator called he was husking corn in his barn and had several neighbors helping him. He was violent in his denunciation and refusal and, when the enumerator reminded him of the penalty for refusal, he retorted with filthy remarks about the census, my office, and the enumerator. In reporting the case to me, the enumerator asked that I inflict the full penalty and send him to jail. When the man's report was received in full compliance with my method, I informed the enumerator of the result and that the penalty was not needed.

Another case involved an Ingham County farmer in a district having a lady enumerator. She came to my office to make a report and ask my advice. The man had boasted he never answered the questions in previous censuses, and would not do so again. He also threatened violence to any enumerator who tried to get the information. She said the man's wife was a good friend of hers and was greatly worried by her husband's recalcitrant attitude. I asked if she could get the infor-

mation from the wife. She replied that she could but did not dare to do so because she feared the husband would physically harm his wife. I suggested she endeavor to get the information secretly from the wife and, in case of failure, do the best she could in getting it from the neighbors. Actually, she did obtain it from the wife but, in the meantime, I had started working on him with my high pressure method. In his particular case I added a statement that the records showed he had made no report for the previous census and that he still was subject to the penalty for that offense too. Within the time limit I had given him he came to the office during the noon hour. Jessie was being employed as a census clerk and, as she ate her lunch at the office, was alone when he arrived. When he introduced himself to her, she was greatly frightened but managed to invite him to take a chair and await my return. I was the first to return to the office and she lost no time in disclosing his identity. He had filled out the blank before making his appearance at the office, and handed it to me when I greeted him. He asked if it was satisfactory and, after examining it carefully at my desk and finding it no worse than some we were accepting, I replied it was apparently all right. In the meantime the other members of the staff had returned and were at work. I thanked him for the report, made no reference to his refusal, and chatted with him a few minutes. He had been respectful and almost cordial and I had fully reciprocated. When he arose to leave I followed him to the door but, while standing in the doorway, he opened up with a tirade against the Government. He said that his business affairs were of no concern to anyone but himself, and that he was under no obligation to the Government for anything whatever. This statement, following his assumed cordiality, greatly angered me and I said: "Sir, come back into my office as I have something to say to you". He obeyed and I closed the door so that the conversation would not be heard by persons passing along the corridor. Then I opened up on him by saying: "You declare you are under no obligation to your Government. No doubt you have an excellent farm and consider it worth a considerable amount, but how much would it be worth to you had the Government not supplied the original title and continued to protect and defend your undisputed possession of it"? I said further that i had no patience with men like him who disclaimed all loyalty and responsibility to his Government, and looked upon them as being nothing better than traitors. I told him I had been an employee of my Government for many years, was proud of that service, and stood ready to defend it at all times against its enemies. I concluded my remarks by asking that he ponder them well and perhaps in so doing he would arrive at a different and more wholesome viewpoint. He pretended half-hearted acquiesence and went on his way. I have never seem him since. When I had reconciled the statements in his report with those obtained from his wife by the enumerator, I had a fairly decent report for his farm.

How I Handled the Case of a Lazy Enumerator

A crop reporter with whom I had previously become acquainted and who had served as enumerator in the preceding census, was appointed to enumerate his own and an adjoining township. He made very slow progress and failed to speed up his task under such pressure as I was able to exert on him. At the end of February he had finished only about half of his own township and I redoubled my efforts to get action from him. Some weeks before I took his other township away from him and gave it to an enumerator who lived 30 or 35 miles away from it, and who already had enumerated two other townships. That enumerator finished his township in less than two weeks and before the end of February. My lazy enumerator came to the office about the middle of March with a bunch of reports, his portfolio of unused supplies, and his signed certificate of completion. I filed the sup-

plies away while the clerks examined his schedules. I had a suspicion that his enumeration was incomplete but he assured me he had enumerated every farm. Nevertheless I counted his schedules and found the total was 140 less than enumerated in the preceding census. When confronted with this he argued that many suburban farms in the Lansing area had since passed out of the picture and that many other farms had been merged into larger ones. While there were some grounds for his argument I was not convinced, because nearly all enumerators had found more farms than in the previous enumeration. As a further test for shortage, I had the clerks total the acreage he had enumerated and found a shortage of 7,000 acres. I took his blanks from the files, put them together again, and told him to go back and finish his job. He protested that he did not know where to look for any more farms, so I made a list of the enumerated farms, and told him to check it against his township supervisor's assessors' records. In a few days he brought in reports for 70 additional farms and, while there was still a feeling of some incompleteness, I reluctantly accepted his work. We enumerated a total of more than 35,000 farms in the nine counties of my district which, I believe, was about 3,000 more than were obtained in the 1920 census. Not more than one other supervisor in the State turned in any increase over the earlier census.

A Summary of This Census Project

This job had placed a tremendously additional load upon the statisticians, yet all were considered to have made a much better showing than the other supervisors in their respective states. We held a group conference shortly afterward at Chicago where we compared experiences and aired our grievances. Mr. Callander attended this conference and we resolved to call him to account for getting us into this thankless job which brought no extra financial compensation to us. Evidently he sensed our feelings and called us into his hotel room. After seeing that we were provided with chairs he seated himself in front and facing us and said: "Shoot, boys, for I am ready to take what I know is coming from you". We fired our heaviest artillery with the final result that he solemnly promised never to lead us into such a distasteful job again. Of course this was merely an indulgence in raillery as we were happy that the task was over. About this time I learned that one of our statisticians had not served as a census supervisor. When I inquired of a Washington official the reason, he replied the man was not considered as having the requisite qualifications. This seemed very strange to me and I considered such a lame excuse as being far from the facts. When I met that statistician a few months later, I asked him the reason for escaping that onerous assignment. From him I learned he had refused to serve as supervisor on the grounds that a Civil Service Regulation prohibited an employee to render service in another bureau without his consent. On the basis of his statement I readily believed his mental qualifications, at least, were not deficient.

The success of this census, in which we had a part and some of the credit, brought about another special agricultural census in 1935, and again in 1945. These precedents, undoubtedly, will have much weight upon the Congress to continue them midway between the regular decennial censuses provided by the Constitution. This reduces the interval from 10 to 5 years without a reliable check upon the Bureau's estimates of crops and livestock, thereby lessening the accumulation of erro2rs.

Service as a Reviewing Official

The development of the rural carrier acreage and livestock surveys greatly increased the number of available indications for determining each season's final estimates. To reconcile and correctly analyze these varying indications required much time and statistical ability. The indications were not available until

November 10 to 15 and the analysis and report for each crop had to be completed and forwarded to Washington by December 1. At first, reviewing officers were sent out from Washington to go over the indications in an effort to establish uniform methods of analysis, uniformity of procedure, and comparable results between different states. Each reviewer was assigned a group of states in which he spent two or three days in each office. As the number of indications and range of crops increased, the task became too great for the Washington staff to complete within the time limits. To remedy the situation, a few of the most capable field statisticians were drafted to augment the reviewing staff, the number of states in each reviewer's group was reduced, and his allowable time in each state was correspondingly increased.

Much to my surprise I was selected as one of the reviewing officers in the fall of 1930. This assignment took me to Des Moines, Iowa; Cheyenne, Wyoming; Denver, Colorado; Columbia, Missouri; Springfield, Illinois; and Lafayette, Indiana. At the conclusion of the work at the last-named station, I proceeded to Washington and worked with the Crop Reporting Board for two weeks or more. That was for the purpose of explaining the differing conditions in each of the states, the reasons for the figures adopted, and to assist in reconciling them with those of adjacent states. I enjoyed the privilege of becoming familiar with the office procedures used in the different states and the differing methods used in analyzing their indications, as well as learning about crops not grown in Michigan. I was invited to the homes of the statisticians and privileged to meet the members of their families. It was a very pleasant experience, too, to return to Cheyenne after an absence of 23 years although, unfortunately, the weather was so bitterly cold and windy I did not get an opportunity of looking about the City. The statistician was new at the work, his material was not in shape for immediate analysis, and we had to work through each day and evening, including Sunday, in order to finish within the allotted time. I also wanted to see the City of Denver but the weather was cold and snowy there too and no sight-seeing was attempted.

I was again appointed for this type of work in the fall of the following year, but the number of states was reduced to four. These were Iowa, Wyoming, Colorado, and Kansas. In the last named state the office was at Topeka from which I embarked for Washington when the review was finished. This time the weather at Cheyenne and Denver was a trifle better in some respects, although there was a great deal of snow which made it difficult to get around. I had wanted to contact my old friend, Pete O'Neill, the previous year but there was no favorable opportunity. This time I called him by telephone and found he was living alone in a cottage at the extreme outskirts of the City. He asked me to come out and have supper with him, but said he could not get his car out because of the deep snow. I did not relish the idea of the 2-mile walk through the deep snow, after dark, and seek out his place in a locality that was entirely unfamiliar to me. So I asked him to come down to the hotel and eat with me. He came and, as he was doing his own cooking at home, seemed to greatly appreciate the fine hotel dinner. He spent the entire evening with me and from him I learned of our numerous mutual Masonic friends and others whom I had no time to contact. We rehearsed our joint fishing trips of other days, and exchanged histories of our lives during the 24 years since our parting in 1907. At the time of this last meeting he was around 75 years of age, and it is quite probable he has ceased to be among the living although his mother lived well beyond the age of 90. Pete was somewhat rough and uncouth outwardly, but possessed a keen sense of public affairs and men, a desire to be helpful to others, and a sturdy upright character. He was custodian

of the State Capitol grounds when we began our acquaintance, and had living quarters with his mother in the basement of that building. He was deeply interested in Blue Lodge Masonry and served a term as Master of his lodge during our sojourn in the City. He was just one of hundreds of good friends who, either through having been cut down by Father Time's all devouring scythe or living too far away, are barred from providing us with the cheering comradship universally craved by all up to the time of the last heart-beat.

As in the previous year, I went directly to Washington at the end of the review work in the field, and assisted the Board in analyzing the indications submitted from all states. The inauguration of crop control programs in 1933 absorbed all of the time and energy of the statisticians, and prevented their further service as reviewing officers during the next few years. Hence, my service in that capacity was limited to the two years heretofore mentioned.

Administering Crop Control Programs

Excessive wheat stocks and extremely low market prices for the grain in 1932 and the early months of 1933 caused steps to be taken to reduce the acreage for the next crop. A certain percentage reduction in the acreage to be planted in the fall of 1933 was requested and a committee was appointed in each state to administer the program. The statisticians in charge of the state offices were delegated to serve on the respective state committees. If the evidence indicated that all instructions had been followed and sufficient reductions made, the reports were approved and forwarded to Washington. County data in my office were used in making the necessary comparisons and computations, and considerable time was required to assemble the data in convenient form for use. Difficulties were encountered in some counties but they were really minor in comparison with those that were to follow.

The Corn-Hog program was launched in 1934 and continued through 1935. Again I was drafted as a member of the State Committee; serving as secretary in the first year, and as chairman in the second. An immense amount of data had to be extracted from past records of corn acreage and hog production, the most of it by individual counties. From that basis, quotas were set up for each county the major responsibility for which fell upon me personally. The totals of the county quotas must not exceed the state quota set in Washington. It was the responsibility of the county committee to apportion the county's allotted corn acreage and hog numbers among the participating farmers on the basis of their production in the preceding two years, 1932 and 1933. No difficulties of consequence arose in adjusting the corn acreage, there being very little over-statement in the basic acreages raised and very little reduction required to comply with the program. In the case of hogs it was a different story. A sharp reduction from the number of pigs raised in the base years had to be made by each farmer in order to qualify for Government benefit payments. While a large percentage of the farmers were truthful and correctly reported the number raised in the base years, the temptation to overstate was too great for some and the county totals, as reported, exceeded our estimates by percentages ranging from two to as high as 45 percent. Naturally the county committee had difficulty in determining which farmers' reports needed scaling down, and in reducing their county total by those percentages of overstatement. Many of the county committee flocked to our office and bitterly protested the drastic cuts we had determined were necessary, and an occasional committee resigned rather than accept the responsibility. Those were hectic days for me and I did not relish fighting from one to four or five committees each day of the week. I had appointed four or five good men to go into the counties and assist each committee in methods of detecting over-statements,

fraudulent evidence, forged signatures to marketing slips submitted as evidence, and various other schemes calculated to beat the game. The best I could do to mollify the angry committees was to promise to send one of my men to help each of them. Their stock argument was that our data, being in the nature of estimates, could not be relied upon for establishing equitable quotas. They could not comprehend our highly technical methods of statistical analysis and, in the beginning, we had no other tangible proof to submit in rebuttal.

A few weeks later, the head of our livestock section in the Washington office came to Lansing. He unfolded a plan whereby such proof could be established, and one that was put into use in all states. In our office files were the livestock cards showing the number of pigs farrowed each spring and fall on the farms of those who had filled out the cards. We took these four sets of cards for the two base years from our files, and checked them against the numbers now claimed by those same farmers. For this matching process I recruited a force of 12 or 15 clerks and it took them several weeks to complete the task. Such matched farms were drawn off on a sheet for each county, showing for each the number of pigs originally reported before any benefit program was contemplated, and the number since reported, for the same years, in connection with the program. For important counties in hog production, we found from 100 to 250 or more farms that could be matched. No farmers' names were put upon the sheets but a number was assigned to each farm so that we could identify it. The omission of names was necessary because we never divulged the name of any reporter to outsiders. A comparison of the totals on these sheets showed the percentage of overstatement which, in most cases, was greater than that required to meet the quotas previously set. A few farms on each sheet were usually responsible for the entire overstatement. I kept these sheets, arranged alphabetically by counties, in the drawer of my desk. When a committee came in with its protest of unfair treatment, I brought out the sheet for its county, explained the sources of the figures, asked them to compare individual farms, then asked them what they thought of the evidence. This surprise move on my part seldom failed to change their attitude completely. Noting the few instances of gross overstatement, they immediately wanted to know the names of the individuals, but I explained the prohibition against disclosing them. They were ready to go home and to work looking for the cheaters.

Strangely enough, our most serious difficulties were with two county agricultural agents, who placed every possible obstacle in our way and with whose counties we were forced to use quite unusual methods in order to complete the program. In one case our field man had met with the committee and assisted it in making the necessary adjustments. He left instructions with the county agricultural agent to forward the sheets when the work was completed. As the deadline date for completion of the program approached, I sent a letter requesting the sheets be forwarded but received no reply. I sent a second letter in which I vaguely hinted his farmers would lose their benefit payments if he failed to act in their behalf. On almost the last day he appeared at our office late one afternoon with the sheets. While another member of the committee chatted with him, I examined the sheets and found only one-half the required number of hogs had been eliminated and those from five or six farmers only. When I called these discrepancies to his attention, he acidly replied this was the action of his committee and he would have nothing more to do with it. I explained we were only trying to help him and his committee get their figures into acceptable form so that they would pass the scrutiny of the Washington office and his farmers get the payments due them. I offered to send a field man to help his committee but

he continued to refuse further cooperation. Finally, I told him we would send his sheets to Washington, and when his farmers failed to receive their payment checks, we would tell them the failure was due solely to his fault. At this, he grabbed up the sheets, told us to send the field man, and prepared to leave. I told him our man would be at his office on the following Monday morning, and he should have his committee on hand to meet him and finish their work. When the field man arrived as scheduled, there was no committee and the county agent was out of town with his whereabouts unknown to his clerk. She searched for the sheets but failed to find them in the office nor could they be found at the county agent's home. It was evident he had taken them with him to circumvent any action on them. When the field man found he could do nothing there under the existing circumstances, he proceeded to his next assignment in a county farther north. As soon as he arrived there he telephoned the information to me.

I immediately went to the State Extension Director, related the circumstances to him, and asked that he compel his county agent to make the sheets available in the county office when our man stopped there on Friday as he returned to Lansing. The field man got the sheets and took them to the farm home of the committee chairman. The latter was an excellent farmer and fully cooperative. He said his committee had previously adjusted the figures and was surprised to find that they were incorrect. As they went over the figures together, they found that all of the committee adjustments for Farm Bureau members had since been fully restored to the original figures claimed, and that all reductions had been charged against non-members. It was clearly evident that the county agent had made these changes, in order to favor those farmers who cooperated with his office and to penalize those who did not. They readjusted all figures on the basis of available evidence, and our man was able to bring the corrected sheets back to Lansing with him. Neither of the two offending county agents herein mentioned ever communicated with me afterward, nor recognized me when we happened to meet.

While many incidents have been omitted from my recital of the program's difficul-ties, those I have related are sufficient to demonstrate that our part was far from an easy one. At that, it was comparatively mild in comparison with the troubles encountered by our statisticians in a few other states. In a far western state, there was a complete revolt by the farmers against the program. In an effort to quell the trouble, our Bureau sent one of our finest and most diplomatic statisticians from a mid-western state into the rebel state. Not only was he unable to quench the uprising but suffered the humiliation of being forced into a sheriff's car and taken to the state line where he was left at the edge of an adjoining state with the injunction not to return if he wished to escape bodily harm.

Despite the troublesome annoyances, the program was not without its compensations. It developed in me such latent administrative ability and diplomacy as I possessed; it greatly improved my self-confidence; and it added several hundred leading farmers to my list of personal acquaintances. The task of the county committees was a tough one. At first they were skeptical of the merits of the program and the size of their allotted quotas. As these men had been selected by the votes of the participating farmers, they were, for the most part, men of good judgement and unquestioned integrity. When they came to realize our sincerity and desire to helpfully assist them, they went to work and earnestly strove to impartially perform their duties. When each finished the task, the members were so elated they were generally inclined to bring their sheets to our office and treat it as a holiday for themselves. On these occasions, practically every committee spokesman voluntarily admitted that, in the beginning, they thought our quotas

were definitely wrong but had since come to believe they were really generous ones. When each shook hands and thanked us for our efficiency in handling the program and our courtesy to them, I felt fully compensated.

The basic quotas having been adjusted in the 1934 program, the work in 1935 was much easier. The only adjustments necessary were in the case of new partici-lpants who, not being in the first year's program, had to obtain a quota for his farm. My office, for the first year, was in the Agricultural Building at Michigan State College, as there was insufficient room in my regular office for the large number of helpers required. During that year our Lansing office was moved by Mr. Holmes into the newly-completed Federal Building. This greatly increased the available office space and with a lesser number of clerks required for the corn-hog work, it was transferred to the Lansing office at the beginning of 1935. The particular control act, forming the basis for the program, was declared unconstitutional by the U.S. Supreme Court in January, 1936, and our functions in connection therewith immediately came to an end.

Creation of the Agricultural Adjustment Administration

After the adverse Supreme Court decision, a different type of control program was devised. It retained such control features as were deemed essential and desirable, but the basis for benefit payments was changed in an effort to remove the objections listed by the Court. The Agricultural Adjustment Administration was created to direct the new program. While we, the State statisticians, were glad to relinquish further responsibility in control work, it seemed ironic that the newly-created administrative jobs should be manned by people from outside the Civil Service. This meant that the appointees were selected with due regard to their political affiliations rather than previous Government experience. We had established the organization pattern, endured the birth pains that followed its creation, and nourished it to the point where it could stand and walk alone. All this we had done in addition to our crop reporting duties and without extra compensation to ourselves. The one selected to head the Michigan office had served one year as a county committeeman and one year as a field man for my office. The salary at which he was appointed was more than double that received while working for me, and, within no more than two or three years, it was increased to a point several hundred dollars above my own, notwithstanding the fact that my Government experience exceeded his by more than 35 years. Within two years he had a minimum office force of 75 people which was expanded to 150 during certain portions of each year. Then, these people were blanketed into the Civil Service--given all of its protective benefits without the formality of even an entrance test examination. The head of the office attended all important political meetings of the New Dealers in the State, and went to Chicago to a meeting at which President Roosevelt was to speak. An announcement issued in advance that he was to ride on the President's train from Chicago to Detroit proved premature. The President's secret service men refused to allow more than 100 guests on that train, and our Michigan crop adjuster was not one of them. A further illustration of the waste of Government funds was an incident that I accidentally discovered. We had obtained the first comptometer for our office about 1928, and the second one two or three years later. For the corn-hog program I was allowed to rent two or three machines for that office, with the proviso that the rent could apply on any purchase subsequently made. On the strength of this I obtained another machine for our office at the end of the program. All of my regular clerks could operate this type of machine, but the three machines were all we had for our 7 or 8 clerks. When we were engaged in a rush computing job for the Agricultural Adjustment Admininstration, I asked that office if it would loan us a few extra machines for

a few days until the work we were doing for them was finished. The loan was readily granted and we were told to come and get as many as we wanted as they had 50 machines in storage which were not being used at that season of the year.

The foregoing must not be taken as a criticism of the personnel of that office, as their administrative staff was capable, friendly, and cooperated in every possible way with my office. My condemnation applies only to the loose-spending and political policies promoted by the New Deal Government in Washington.

As the adjustment program affected practically all crops, our office was called upon to supply county data for a period of past years for many crop and livestock items. During the first two or three years of that Administration the quantity of data requested from our office was large and required much time in preparation. Later, as it became better organized and data from us and through its own sources had been accumulated, less of our time and facilities were required. It developed a system of acreage surveys for all farms in each county, and that information was made available to us. It was helpful in determining our county and state estimates, and in making our crop revisions at the end of each year.

Member of State Defense and War Boards

When participation in World War II became evident, State Defense Boards were created. Later they were designated as State War Boards. Their functions were to organize and direct county boards, give all possible assistance to the war program, and promote increased production of food and other farm products. Agricultural statistics were the basis for many of the policies adopted, and our statistician in each state was designated as a member of his state board. He supplied data from his records, conducted special surveys where necessary, made analyses of statistical information used, and acted as a general statistical advisor to his board. His long experience and thorough knowledge of all phases of agriculture made his services of great value.

The Michigan State War Board consisted of abut 10 members, each of whom was the responsible head of some important State function. Four regular meetings were held each year, and special ones were called as needed, to meet various emergencies as they arose and to carry out such instructions as were received from the National War Board in Washington. Many highly important decisions had to be made, and a great variety of tasks had to be quickly organized and forcefully executed. As an example, food processors were put under rigid control for the duration of the war. They were invited to appear before the State Board for a hearing and, if found willing to fully cooperate by obeying all prescribed restrictions and their facilities adequate to meet requirements, were issued a license to operate and become entitled to receive the Government's established price for their output.

It was a pleasure for me to work with this highly efficient group of experienced administrative officers. In turn, they seemed highly appreciative of the statistical advice and service I was able to supply. At the last meeting I attended I announced my retirement and tendered my resignation as a member. The members expressed their regrets and immediately passed a unanimous resolution inviting me to attend future meetings held after my retirement. While I have not availed myself of that standing invitation, I felt deeply grateful for their sincere and courteous gesture.

In this chapter I have endeavored to outline the scope and character of the more important Governmental activities in which I participated during the last half of my active public service. They served to divert my interest away from the

more or less monotonous routine of my regular office duties, and gave me a broader experience and outlook in other, but related, fields of agriculture. Had my labors been restricted, as in the beginning, solely to crop-reporting, my story of these later years would have been shorter and less interesting.

CHANGES IN BUREAU ORGANIZATION AND ADMINISTRATION--Chapter XXXVI

Although Government crop-reporting dates from 1863, that work did not attain a bureau status until 40 years later. The Bureau of Statistics was created in 1903 and functioned under that name until July 1, 1914, when the name was changed to Bureau of Crop Estimates. Not more than a year or two later, the Congress created a new bureau known as the Bureau of Markets. Like many new bureaus, the spotlight of public attention and favor was immediately focused upon it. Lavish appropriations were showered upon it and, under an aggressive leadership and the sudden demands created by World War I, it grew rapidly in size and public interest and its functions extended into many fields. Meanwhile, the popularity of our own Bureau suffered by contrast and, although it was faced with steadily increasing demands from the War Administration and other Government Departments, commensurate increases in funds for its operation failed to materialize. Our entrance salaries as field agents had been mostly at the rate of $1,608 per annum. although, at the end of five years, they had been increased by about 50 percent and further augmented by a small bonus during the war period, the cost of living had increased 100 percent in the meantime and our buying power reduced by fully 25 percent. Many of our field men, including myself, began looking toward other fields where salaries had been kept nearer in line with the changed economic condition.

It was apparent the Bureau had reached the crossroads in its career and that something had to be done. Mr. Estabrook, who had been the Bureau's efficient Chief since 1913, proposed that the Bureau be merged with the younger and more popular Bureau of Markets. He generously offered to subordinate himself in order to bring about the merger. The plan went into effect on July 1, 1921 and the crop-reporting service became a Division of the Bureau of Markets and Crop Estimates. A year later the Office of Farm Management was consolidated with the Bureau, and the name of the latter changed to the Bureau of Agricultural Economics. Our branch was then designated as the Division of Crop Estimates, but a year later, July 1, 1923, it was officially changed to Division of Crop and Livestock Estimates. The next change did not occur until July 1, 1939, when our branch was designated the Division of Agricultural Statistics and placed under a newly created Agricultural Marketing Service. Our Division, without change in name, was transferred back to the Bureau of Agricultural Economics by Executive Order on February 23, 1942. That was only a few months before my retirement and no further change has been made up to the date of this writing.

The History of My Salary Changes

While one's salary and its changing level is of prime importance to himself and his family, it is seldom a subject for discussion with others. Regardless of that fact, I have seen fit to record in preceding chapters all changes that took place from the beginning of my Government career up to my entrance into the Bureau of Crop Estimates. This was for the purpose, primarily, of indicating the slowness of my advancement towards, what many term, Easy Street. Following my entrance upon crop reporting work, promotions in the first few years were nearly as tardy in arriving as they had been in the early years of Weather Bureau experience, and they lagged far behind the rapidly increasing cost of living until

about 1922. On July 1, 1915, my salary was raised to $1,800 which simply restored it to the level received in the closing years of Weather Bureau Service. Three years then elapsed before the next promotion--a salary of $2,280. on July 1, 1918. On February 1, 1920, a promotion to $2,400. was received; and on July 1 of the same year another one raised the annual rate to $2,520, with a change in title from Field Agent to Agricultural Statistician.

The war and its attendant high living costs caused much unrest among Government employees. The mounting complaints resulted in a bonus being granted to all. This amounted to 5 percent of the basic salary, began on July 1, 1917, and ended one year later. This further enriched me by $90. for that fiscal year. After the lapse of a year, because of mounting pressure, the bonus was restored on July 1, 1919 at a rate of $20. per month for all employees. This lasted for one year, at the end of which it was reduced from $240. to $220. per annum and was continued at the latter rate until December 1, 1921, when it was abolished. Including the $90. already mentioned, my total bonuses amounted to slightly more than $640. The abrupt ending of the bonus was equivalent to a material reduction in salary, and was definitely felt by all of us.

In January, 1922, a regional conference was held in Madison, Wisconsin. The attending Washington officials had prepared and mimeographed a program in advance. We quickly noted that "Salaries" was the last item on the agenda and, when the discussions on other topics mostly exceeded their allotted time limits, we began to suspect the subject in which we were most interested would not be reached before adjournment which had been set for Saturday noon. A few of us, commonly called "The Old Guard", met in one of our hotel rooms on Friday evening and held a council of war. We determined to have our cherished subject brought up during the next forenoon, even at the expense of the other subjects scheduled ahead of it. In the morning before the session opened, we cornered our good friend Charlie Gage--the Chief Clerk of the Bureau-- and told him of our plans and determination to have the matter of salaries discussed. Soon after the meeting opened and during a momentary lull in the program, someone shouted: "What about salaries"? This brought a round of applause and virtually forced the chairman, Chief Estabrook, to take up the question for discussion. This he did as diplomatically as possible, but the picture he painted was a gloomy one. There were no funds available for immediate promotions, and the prospects for obtaining increased appropriations in the near future were not rosy. A few of the more aggressive statisticians immediately voiced their displeasure in no uncertain terms, and a sharp discussion ensued.

In the midst of this turmoil, Gage came down to where we were sitting, tapped my good friend Paul Kirk on the shoulder, and together they left the room. About 10 or 15 minutes later Kirk returned, tapped me on the shoulder, and whispered that Gage wanted to see me outside. I found him waiting in the ante-room and he told me of his strong desire to get more money for a few of us. He outlined a plan he had devised and which he said was the only possible way to its accomplishment. The Bureau had given me an annual maximum allowance of $800. for traveling expenses. Our cooperation with the Michigan State Department of Agriculture had begun as recently as the previous July 1, and I was at the point of moving my office into the State Office Building at the time of the conference. If I could induce the State to assume my travel allottment, the Bureau could transfer the $800. it had reserved for that purpose to my salary. He had made the same offer to Kirk who felt certain his State Department would acquiesce to the plan. The prospect was alluring but I was less certain of success. I returned home after the conference ended and Gage accompanied me to Lansing. On Monday

morning we called on the new Commissioner, Mr. Halladay, whom I have already mentioned as being exceptionally courteous and friendly. We laid the proposition before him and explained that its acceptance meant a corresponding increase in my salary. He immediately asked the amount involved, and when I told him it was $800. he smiled and said he guessed they could dig up that much. Thus my salary was stepped up from $2,520 to $3,300. on February 1, 1922, and my traveling expenses were paid by the State for several years thereafter.

My next promotion occurred on July 1, 1924, at which time I was advanced to an annual salary of $3,800. On July 1, 1927 an increase to $4,000. became effective. For a number of years prior to this last-named promotion, a movement had been under way to reclassify all Government positions. Bills were introduced in each session of the Congress and spokesmen for the employees appeared before the congressional committees and pleaded for the enactment of such legislation. Action in behalf of the Nation's public employees has ever been deliberate and slow to materialize, and the passage of this particular law was no exception to that custom. However, such an act finally was passed, probably early in 1928. It provided for several specified grades into which employees were classified according to the nature of their positions and their individual qualifications. Fortunately, our statisticians were place in the Professional grade. Practically all other employees in our field offices naturally came within the scope of the Clerical grade and were so allocated. Within these grades were four classifications designated as: junior, assistant, associate, and senior. There were some higher positions provided in each grade but, in the beginning, no members of our field staffs were given those higher ratings. Generally, there were three salary steps in each designated classification, the highest of which being the same as the lowest step in the next higher classification. As a clarifying example, a junior agricultural statistician was to be appointed at $2,000, and his successive promotion steps would be to $2,200, $2,400 and $2,600. He could then be promoted to the position of assistant agricultural statistician, the lowest step of which was $2,600. and the highest, $3,200. Beyond that, the salary steps had a wider range so that, at my salary of $4,000, I would naturally fall in the grade of associate agricultural statistician. This did not seem quite appropriate for one who had been in charge of a state for 14 years when the law went into effect on July 1, 1928, and there were rumors afloat that some arbitrary adjustments would be made in special cases where circumstances seemed to justify such action. However, only a year had elapsed since my last salary raise of $200, and I could not hope for an additional raise of $400. so soon, which amount would be necessary to reach the lowest step of the next grade. It so happened that during the weeks our ratings were being established in Washington, my old friend Kirk was called to serve as a member of the Crop Reporting Board for that month. Of course I knew nothing about his receiving such a call, and was greatly surprised when he dropped into my office one day. He was on his way home from Washington and had asked special permission to return via Lansing and pay me a visit. Naturally, our conversation soon reached the subject of the ratings we were to receive in the near future, and I was anxious to hear what news about it he had gathered in Washington. I knew him to be of an optimistic turn of mind and, when he said he believed a few of our older field men would be given the senior agricultural statistician grade, I was ready to discount his opinion. I told him I was certain, because of my recent promotion, that I would not be one of the favored ones. When he asked me how I would feel if the unexpected did happen and I was to receive the coveted rating, I replied I would believe the Millenium had actually arrived. After some further casual conversation, he suddenly reached into

his pocket, pulled forth a paper, and handed it to me with a remark that he had been asked to deliver it. It was an announcement of my promotion to the position of Senior Agricultural Statistician at $4,400. per annum, effective July 1. This was his friendly, canny Scotch way of conveying the good news. He afterwards told me he had asked permission to bring the paper to me as he wanted to witness my surprise. It is needless to report that he had received a similar rating and promotion.

My next salary increase was to $5,000 which became effective on April 1, 1931. I was engaged, at the time, in making the wheat studies at Washington as previously mentioned. This broad jump may have been in recognition of that work, although the success of it was not known until the results of the harvest became available several months later. My salary remained at that figure for nearly 10 years, until November 1, 1940. It was then raised to $5,200. where it remained until my retirement on October 1, 1942.

In addition to the Federal salary as enumerated above, I received from the State a salary of $50. per month from August 15, 1927 to April 1, 1931. This resulted from a mutual arrangement whereby my traveling expenses, which had been paid by the State since February 1, 1922, were again assumed by our Bureau; the State to pay me a salary of $600. per annum in lieu thereof. On April 1, 1931, this State salary was transferred, at our request, towards the pay of an additional clerk in our office. Therefore, my Federal promotion of $600. as of the same date was merely an offset for the loss of the State salary and added nothing to my total income.

Beginning on September 1, 1929, I was employed as an instructor at Michigan State College and continued in that capacity for six years. The salary was originally fixed at $500. per annum but, because of the severe financial depression in 1932, a horizontal cut of seven percent was made in the salaries of the entire College staff on July 1 of that year. A year later the cut was increased to 40 percent of our basic salaries, and remained at that rate until the end of my service with the institution.

A Retirement Law is Enacted

For many years the Government steadfastly refused to permit the formation of unions by its employees. The pressure for such permission steadily mounted and reached its climax during the period of the European War which lasted from 1914 to 1918. This was especially true after our entrance into that conflict in 1917, when all employees were asked to redouble their efforts and compelled to labor under less agreeable conditions. The Government recognized the justice of their demands by lifting the restrictions against the forming of such unions, but stipulated that no strikes could be called under any circumstances. A Federal Employees Union was organized and began sponsoring various moves to better existing working conditions. Perhaps the most important one of these was a plan for a retirement plan for Government employees. Many congressmen, probably, were sympathetic to the bills introduced but action was postponed on them or they were sidetracked in the committees to which they were referred. Finally, William Green, who was then and still is the President of the American Federation of Labor, invited the Federal Employees Union to affiliate with his powerful nationwide organization. His invitation included a promise that his Federation would assure the desired retirement law for them. Many Government employees feared such a tie-up would be deemed a violation of their no-strike promise and might jeopardize their jobs. As a result two factions developed; one affiliated with the Federation of Labor, the other continued as an independent union. Green readily assented to the provision that the group which joined him would never be compel-

led to engage in any strike. True to his promise, Green threw his influence behind the retirement law and soon had it scheduled for passage by the Congress. The law was far from satisfactory, but Green counselled, wisely, that all complaints be held in abeyance until after the law was passed. He argued that its passage was the major obstacle to be hurdled, and that once it was on the statute books it could be amended without endangering the law itself.

The retirement law was passed by the Congress in 1920, and became effective on August 1 of that year. From that date, a percentage deduction was witheld from salary checks. These deductions were to be placed in a retirement fund, matched by an equal contribution by the Government, and the whole allowed to accumulate with interest compounded annually. The original witholdings from salaries were at the rate of two and a half percent. After the lapse of a few years, the Federal Employees Union discovered that the Government had made little of no contributions to the fund, and that it was being rapidly depleted by the payments being made to retiring aged workers and in the form of withdrawals to those leaving Government Service. The Union took immediate action and finally succeeded in obtaining a sizeable portion of the contributions to the fund which the Government had obligated itself to provide. However, the interest lost on the Government's portion was substantial and it was evident that the fund could not be fully sustained at the original rate of deductions. Accordingly, the law was amended and, beginning July 1, 1926, the percentage witheld from our salaries was increased to three and a half percent.

Although the law was liberalized in a few respects in subsequent years, many grossly unfair provisions were allowed to remain uncorrected. For instance, a $1,200. clerk could retire at $1,200. although he had contributed only $42. per year to the fund, while a $3,600. employee could receive only $1,200. upon retirement although he had contributed three times as much. Even at my maximum salary of $5,200. and an annual witholding of $182., my retirement allowance would have been only about $1,300. per year. Early in the thirties the employees in our Department formed the Organization of Professional Employees of the United States Department of Agriculture. It probably was the combined influence of many such groups that an amended law was passed in February, 1942.

This law provided that retirement was optional any time after sixty years of age (the old law required one to be 68); and the annuity was as many 70ths as the number of years of service up to a maximum of 35, this fraction to be applied to the average annual salary for any continuous 5-year period. Therefore, in my case, I was immediately eligible for retirement, and for my 40 years of service was entitled to receive the maximum of 35/70ths of the average salary for the last five years. Good luck had finally caught up with me. Not only was I free to retire as soon as I pleased but at an annuity nearly double that provided in the old law. Within two or three months after the law's passage I applied for retirement to take effect October 1. I had three months of accumulated leave, which allowed me to end my work on June 30 with full salary to September 30. Beginning on July 1, the retirement deduction was increased to five percent, hence it only affected my salary for the last three months I was on the payroll.

Mr. Leon M. Estabrook

As one's enjoyment of his work and progress in the Government service are closely linked with the attitudes of his immediate supervising officials, it seems fitting that a brief description of my personal relations with them should be presented. Had my relationships with the two chiefs under whom I served in the Weather Bureau been as friendly and cordial as those in the Bureau of Agricultural Statistics, and had they been as free from autocratic attitudes towards

their employees, it is quite probable that I would have remained with the Weather Bureau throughout my active career. I have already described the relations that existed during the first 12 years of my Government experience; now, I will endeavor to outline the contrasting experiences of the last 28 years.

I have given, already, numerous clues to my high regard for Mr. Estabrook and his administration, but no words of mine can adequately express the fine qualities we found in him. Although he could be firm when occasion demanded, his decisions were always based on sound logic. I never saw him angry but once, and, even then, he remained courteous and soft spoken. It was at a potato conference held at Buffalo, New York, and during its first session held in an evening. Mr. Sanders, our New England statistician, had complained that the potato dealers were dissatisfied with the potato estimates. After numerous letters from them had been received by Mr. Estabrook, he decided to call a conference at which he desired their presence to discuss, with the statisticians from leading potato states, their grievances. At this first session, the statisticians but no dealers were present. When the meeting opened Mr. Sanders was absent, but came in a half hour later. As soon as he was seated Mr. Estabrook asked him to stand up, then proceeded to castigate him severely for not being on hand when the session opened inasmuch as he had been the one statistician who had first reported the criticisms emanating from his potato areas and seemingly was critical of the estimates himself. Mr. Estabrook then explained that the letters of criticism he had received were phrased in almost the same identical words, which led him to suspect that they had been inspired by Mr. Sanders. He openly accused Sanders of duplicity in the matter. Sanders denied the accusation, but the evidence was so overwhelming that none of us had much sympathy for him. He was the only one with whom we never were able to fraternize. Incidentally, not one dealer accepted the invitation to attend the conference.

While attending a conference in Washington, several of us fell into the habit of eating dinner at Wallis' cafe. It was a fine restaurant and each evening's bill of fare featured a Wallis' special steak dinner. The cost was about $4.00, which sounded big in those years, but it was served on a large platter and was ample for four people. The service was perfect and the food excellent. By sharing the steak we had a better meal for the money than could be obtained elsewhere. As we walked uptown each evening after the conference, I notice that Sanders always broke away from us at the corner on some trivial pretext. I suspected he wanted to eat alone at some cheap joint, so asked the boys to help me drag him up to the Wallis Cafe. When we reached the corner that evening and Sanders was offering his excuse to leave us, I grabbed one arm and another grabbed the other one. We told him we had found a good eating place and we wanted to show it to him. Including him, there were five of us. When the waitress arrived and had taken our order, I asked Sanders if he wanted to share the steak with us or not. He said he was not feeling very well and told the waitress he only wanted a bowl of soup. When the food arrived she served the four of us first, then remarked "she would take care of the invalid". She brought his soup which he ate with scarcely a word of conversation to us. On subsequent evenings he did not even walk uptown with us.

After Mr. Estabrook had served as a Bureau chief for eight years prior to July 1, 1921, he voluntarily accepted the position of Division Chief when our Crop Estimates, through the merger with the Bureau of Markets, was reduced to the status of a Division. I naturally assumed that, because of this sacrifice on his part, his position would be assured for the future. Consequently, I was greatly surprised and mystified when it was announced that his service was to end on July

1, 1923. The inside story of this change was never made known to me, but, evidently, either he lacked sufficient political prestige or refused to compromise himself by accepting policies contrary to his principles. He had purchased a farm on the slope of the Blue Ridge Mountains near Frederick, Maryland, and moved onto it soon afterward. The Census Bureau, desiring to obtain a complete and uniform world census, decided to send an emissary to all foreign countries in an effort to secure their cooperation and effect the necessary arrangements. Mr. Estabrook was chosen as that emissary and spent two years in visiting 58 different countries. All but one or two heartily assented to the plan, and even these promised partial cooperation. A better choice could not have been made, as he spoke French very well, had some knowledge of a few other languages, and had an exceptionally pleasing personality.

It was probably in the summer of 1925 that I saw him for the last time. Several other field men and myself were in Washington to assist with the reports. Dr. Jones proposed a trip for a Saturday afternoon to visit him. Members of the Washington staff furnished the cars for the 60-mile trip and about 20 members were in the party. It was a very warm afternoon, the temperature being 105 degrees when we left Washington and only a degree or two less on our arrival at his home. As we drove through Fredrick, we passed a house placarded as the former home of Barbara Fritchie whose fame is recorded in Whittier's poem--notably the lines: "Shoot if you must, this gray old head, but spare your country's flag", she said. Mr. Estabrook greeted us warmly and, soon after our arrival, escorted us to a cold cellar constructed of stone in the side of a steep hill. There, he served us bottles of ice-cold beer to which some of us, and perhaps himself, were not regularly accustomed. However, it was extremely refreshing and appreciated because of the extreme heat. He showed us about the farm and we discovered he was much interested in growing choice flowers in addition to the usual field crops. After a fine dinner in his home, he escorted us to a building containing one large room. This he had fitted up as a den and in it were many curios he had collected in his recent trip around the world. These and his explanations of them were intensely interesting. Here he had his desk, typewriter, library, a bed, and several comfortable chairs. At the time of our visit he was engaged in writing a book describing his travels in the different countries around the world, and we looked forward to the time when we would be able to procure a copy for our individual libraries. I doubt that the book was ever finished as the next information I received of him was that he was suffering from diabetes and in a serious condition. I believe it was in 1927 that we received an announcement of his death. His will was prepared after he became ill and knew that his days were numbered. It was unique and Charlie Gage, his former chief clerk, made typed copies of it and sent one to me. It was also published in full in a Frederick newspaper and Frank Witter's relatives, who lived there, sent me a clipping of it. He specified the inscription on his tombstone should be simply: "Leon M. Estabrook, (year of birth) to (year of death). He concluded with a brief paragraph relative to the possibilities of a future existence, and clearly indicated he entertained no fears concerning it. Although he must have felt mortally wounded because of the loss of his Government position, no one ever heard a word of complaint from him.

Mr. William F. Callander

My first meeting with Mr. Callander was at the time of my first trip to Washington as a member of the crop-reporting board. A native of Canada, he had acquired U.S. citizenship, and entered the Government service as a stenographer. At the time of our meeting he was private secretary to the Secretary of Agricul-

ture, and came to observe the work of the Board in preparing and releasing the crop report. He had passed a Civil Service examination and plans were under way for his appointment as a field agent in our Bureau. Soon afterward he was assigned to the State of Wisconsin. While planning a trip through the Upper Peninsula, I arranged to have him meet me at Menominee for a Sunday together. We had an enjoyable and profitable visit. His experience in Washington had given him an insight into administrative procedures, and I found him well supplied with original ideas for the good of the service. I gave him the benefit of my first year's experiences in field work, and he has since said many times in the presence of others that I gave him his most profitable instruction in it. I could easily recognize his ability as being far above average and, coupled with unlimited energy, he would gain a prominent position in the bureau. Before we separated, I told him that, at the rate he was progressing, he would eventually become chief of the Bureau. He took the remark lightly but I am sure it pleased him.

When Captain Cochrun left Ohio for France at the time of our entry into World War I, Mr. Callander was assigned to the vacancy. At the end of the War, Cochrun returned to Ohio and resumed his former position. This left Mr. Callander without a state and he was transferred to the Washington office. He succeeded Mr. Estabrook as Chief of the Division on July 1, 1923. His advancement produced no change in his friendly attitude towards me. I was frequently invited to his home where I met all members of his family and enjoyed their hospitality. On Saturday afternoons, I played golf with him and his two sons at Rock Creek Park or took long drives with him about the city. I always felt free to ask any desired favors for my office, promotions for deserving clerks, or anything else I wanted. I freely criticized anything I did not like, bantered him about errors he had made and, in some instances, proffered advice concerning administrative matters. All these he accepted in good spirit. Sometimes he sought my advice on important matters and occasionally imparted semi-secret information to me.

When I was about to depart for the west on my first acreage reviewing trip, he requested me to make a confidential report to him on two employees. One was Mr. King, the statistician in charge at Cheyenne; the other, an assistant in the Denver office by the name of Paulson. The latter I found to be utterly worthless, non-cooperative, and undeserving of any favorable consideration. My report was extremely unfavorable in his case, and much stronger than the one on file from his superior official. He was discharged without delay but demanded an investigation. He enlisted some political backing and secured some sort of an appeal. However, Mr. Callander was able to justify his reasons and his appeal availed nothing. Mr. King had been in the service less than a year and, having succeeded a man of very limited ability in organizing an office or system of records, had no precedents for his guidance. Probably his early reports were weak in quality which led Mr. Callander to doubt his efficiency. I found him to be an earnest and hard working young man, eager to succeed, and unusually bright. He deplored the fact that he had no adequate instructions or precedents to follow. He had no regular office help and his wife did his stenographic work without pay. He plied me with questions on the best methods to pursue and was very grateful for the help I could give him. I felt he would make a good statistician and, in my report to Mr. Callander, I urged he be allowed to work in the Denver office for a few weeks where he could handle his Wyoming reports under the guidance of a competent instructor. This was done and he is still in the service. Today he is in charge of the Bureau's research laboratory at Ames, Iowa, and has a fine record to his credit.

Mr. Callander continued as Chief of the Division until August 15, 1935,

when he resigned and took a position with the Agricultural Adjustment Administration. On May 1, 1937 he returned to his former position and continued as Chief until June, 1942. My old friend Marks was retiring as Florida statistician on July 1, and as I was leaving at the same time Callander called us to Washington for a sort of farewell visit. Mr. Callander then went to Florida to take Marks' place as State Statistician. I jokingly told him he could not stand the pace in a field office, and made the prediction he would not last two years there. I believe it was less than two years later he returned to Washington to become chief of the agricultural section of the Census Bureau. When the 1945 agricultural census was completed he again became Chief of the Division of Agricultural Statistics and Assistant Chief of the Bureau of Agricultural Economics. While he frequently expresses an intention to retire, I doubt if he does so before reaching the age of compulsory retirement three hears hence. His Government service now totals 40 years or more.

Mr. Joseph A Becker

Mr. Becker was Chief only about 21 months, the period during which Mr. Callander was with the Agricultural Adjustment Administration. Shortly after his appointment to that office he was stricken with tuberculosis and was on sick leave during the greater part of a year. He made a remarkable recovery under expert medical treatments and surgery, and was able to return to duty. However, he was unable to fully regain his former strength and, evidently, the powers that be considered this too much of a permanent handicap and displaced him when Mr. Callander was ready to return. As there was an extremely close friendship between Mr. Becker and myself, he confided to me how badly his feelings were hurt by this action. While he remained loyal to the division, I am certain he never afterwards felt the same toward it. In August, 1944, he severed his connection to become Assistant Chief of Foreign Agricultural Relations, Commodity Branch. Later he was advanced to Chief of that branch. He supervises the collection and assembling of statistics in foreign countries concerning agricultural products. His work takes him to many different countries and he tells me he is enjoying it.

I first met him shortly after his entry into the Service in 1917. He was drafted into the army but did not get outside the United States. He was married in 1918 and I accidentally met him and his bride while they were on their honeymoon in Chicago. At the end of the war he was assigned to Wisconsin, his native state. In a few years he was transferred to Washington and became one of our best statistical analysts. He acquired a home in Takoma Park, Maryland, and, on practically all of my trips to Washington, I was an invited guest at his home. He raised a fine family of seven children all of whom I have known since babyhood. Mrs. Becker died eight or ten years ago, since which time he has continued to maintain the home and supervise his family's education, all of whom are doing exceptionally well. While this was a Catholic family, I never had any closer or better friends.

Such is the story in brief of my pleasant relationships with the three chiefs under whom I served in the crop reporting service. My acquaintance and association with the other members of the Washington staff was equally satisfactory. I was entertained at the homes of many different ones on numerous occasions, and came to know their families more or less intimately. The total number of days that I worked with these men over the long period of years cannot be estimated with any degree of accuracy, but it was sufficient to establish close and lasting friendships that will never be forgotten.

Friends in the Field

Through service with the rotating membership of the crop reporting board,

and attendance at National and group conferences, I had the opportunity of becoming acquainted with the officials in charge of all of the field offices and nearly all of their statistical assistants. This privilege was in marked contrast to the Weather Bureau, where I met very few outside of the offices in which I worked. At these conferences we spent the late evening hours in groups in our hotel rooms, exchanging personal histories, experiences, hopes, aspirations, and whatever else happened to be of current interest. These were punctuated with good humor, banter, and occasional practical jokes, all of which tended to establish firm and lasting friendships. The only regrettable circumstance is the fact that some have since passed to the Great Beyond, and others who have retired are too far away and too widely separated for further association. I miss them very much because, after all, one's closest friends are among those whose occupational interests have been akin to his own. Meeting people in other walks of life broadens one's knowledge and perspective, develops new interests, and adds to the enjoyment of living. But deep and lasting friendships are seldom produced to as great a degree as in groups with a single well-defined community interest.

THE EDUCATIONAL VALUE OF TRAVEL--Chapter XXXVII

Our living for varying periods in different states added materially to our knowledge of the United States. Not only are there wide differences between distant sections of the country in weather, climate, crops, scenery, and topography, but also in the habits and customs of the people, their language, and their viewpoints. The information we thus acquired outweighed the financial and other difficulties entailed in leading such a gypsy-like existence, and we have never regretted the experiences encountered. Our years in the Weather Bureau would have been even more profitable if financial and other considerations had permitted a greater indulgence in excursions and side-trips into surrounding areas. We heard much of the many interesting points in those localities but were able to visit comparatively few of them. Although there usually is more homogeneity within the boundaries of a single state, I found much of interest and educational value in my travels about the State of Indiana.

Michigan, with its greater area and greater range of topography and climate, offered a wider variety of scenery and interests than Indiana. In the course of my extensive travel over the State, I became acquainted with many people, the conditions existing in the different localities, the abundant natural resources, and scenery as beautiful as any to be found elsewhere. Volumes would be required to adequately describe the beautiful inland lakes, rivers, streams, bays, islands, dunes, forests, mines, mountains, waterfalls, rock formations, and other objects--all the free gifts of Mother Nature. Also, the past and present achievements of Man afford much of interest to the studious and observing traveler, Michigan is rich in history, tradition, and literary settings. One of my chief regrets was the lack of time to delve into these and be able to associate them with the many places visited.

While driving my car one morning along the main highway in the vicinity of Hudson, I noticed a rough boulder standing on its end at the roadside in front of a modest, neat, white cottage. Being curious as to the rock's significance I slowed down and, discovering a brass plate attached to the crude monument, I stopped to read the inscription. I was quite surprised when I learned it was the former home of Will Carlton, who was Michigan's favorite poet during my boyhood days. I had read several of his books among which Farm Ballads was my favorite, probably because they closely paralleled my own humble farm experiences. I be-

lieve he died at a comparatively young age, a victim of tuberculosis.

During an inspection trip of the cherry orchards on Grand Traverse Peninsula in company with our fruit specialists from Washington, we ate dinner in a restaurant at Old Mission near the north end of the Peninsula. While eating, I told my companions the town acquired its name from the fact that a Catholic Mission had been established there among the Indians when they were the only inhabitants. As a verification of this statement and the possibility of obtaining further information on the subject, I made inquiry of the waitress, who served us, what she could tell me about the Indian settlement and its history. She replied that she had never seen any Indians around there and did not believe there were any. I concluded her knowledge of the town's history was no more definite than my own, even though she apparently was a permanent resident there.

Visits to other spots linked with the State's past history were numerous, but the two just mentioned will suffice as illustrations. Perhaps some of the little incidents of my personal travels may be worthy of mention even though they were unrelated to historical events or places. These mostly had a humerous slant which contributed something to experience which, in a way, is education.

A Chautauqua in Eaton County

I have already mentioned that some of my first travel trips in the State were made in company with Mr. Fessenden. One day we got off the train at a station in Eaton County which was some distance from the business district. We boarded a bus but there seemed to be some confusion because of an unusual number of passengers and pieces of baggage. After some delay the bus driver had the baggage stored away, but, before leaving, he thrust his head in the door at the rear and inquired: "Is the bunch all here?" A prim and precise middle-aged lady wearing glasses attached to a long cord leaned forward and, in a broad Bostonian accent, said: "Sir, I presume you are referring to the Chautauqua people; if so, they are all here". Mr Fessenden was full of humor and a good story teller. He afterwards told this incident many times and often referred to our group as "The bunch". Evidently the austere Chautauqua lady failed to appreciate the term in its collective sense.

A Protracted Call at the Hillsdale County Court House

While in the City of Hillsdale on a certain trip I went to the court house one afternoon for the purpose of interviewing the county agricultural agent. His clerk told me he was out in the country but she expected him back later. She invited me to wait and, as I had no other scheduled calls in the City, decided to do so. I proceeded to write up my reports in the meantime and was still thus engaged at 5 o'clock when she was preparing to leave for home. She said I was welcome to remain and finish my writing while waiting further for the return of the county agent. I finished my writing shortly before six and decided to wait no longer for his return. The office was on the second floor and I went down to the first floor. There was an air of quietness in the building and it was evident that all business had ceased for the day. I found all of the outside doors locked, so went down to the basement where I found a similar situation. I began inspecting the windows as a possible means of escape and, when about to make an attempt in that manner, I noticed a car stopping at the curb. It appeared to contain a surveyor's outfit and I reasoned that it must be the county surveyor returning his equipment to the building. That proved to be the case and, after explaining the circumstances to him, I left through the door he had unlocked.

A Room with Bath in Bad Axe

This incident occurred on my first overnight stay in Bad Axe. I had boarded an evening train at Port Huron which, being a slow local, did not reach Bad Axe

until about 11 p.m. I knew there were two or three old hotels there but did not know which was considered the best one. Accordingly, I fell in behind a group of traveling salesmen and followed their lead. All of them went into the same hotel and I followed. The desk clerk happened to be out of the room at the time, so one egotistical fellow stepped behind the desk, stuck the pen over his ear, and turned the register for the others to sign, as though he were the clerk. He courteously handed the pen to each in turn and as he signed he would blandly ask if he wished a room with bath. Of course this was intended as a joke as the old hostelry was of the traditional wash-bowl and pitcher type. As the last was signing the register, the clerk appeared in the doorway, stopped and listened to the would-be joker, then came forward to the desk. He did not seem to be in a very placid state of mind while assigning the rooms to the group as he said nothing. After they had moved away I stepped up to the desk and signed the register. Without a smile he leaned toward me and said in a loud voice: "We do have one room in this hotel with a bath and you are welcome to it if you desire". I enjoyed both the bath and the favored consideration. Meekness sometimes pays good dividends.

My First Trip into the Northern Peninsula

My original mailing list of crop reporters in the 15 Upper Peninsula counties was too small and too poorly distributed for a true picture of the crops grown in that area. My efforts to build up a larger and better list by mail proved somewhat disappointing. The land devoted to crops was in local areas with vast tracts of unimproved land between them, and I needed to learn the location of the agricultural areas and solicit additional reporters in them. For that reason I determined to make an exploratory trip at the first favorable opportunity. I believe this was in June, 1915. Our train was taken across the Straits on a car ferry to St. Ignace. My first stop was made at Rudyard, about half way between St. Ignace and S. Ste. Marie. I knew it to be one of the best and probably the best agricultural area above the Straits; furthermore, several acquaintances from Saranac had located there some years before. Among these were: George Potts, a former editor of the Saranac Local and who since had become the owner of a good stock farm; Alice and Charlie Bretz, former schoolmates at Saranac; and Theodore Baker, a second cousin of Cora's and a farmer. Arriving about noon, I went directly to the town's only hotel where I ate dinner and secured a room. In order to get my bearings and locate my friends, I went to the local bank as was my usual custom in strange towns. While waiting for the cashier who was serving a customer, I noted a large birthmark on the side of his face. I was certain there was only one person in Michigan with that particular kind of a mark, a former Saranac schoolmate by the name of Emerson Bardorf. When I stepped up to the window I greeted him cheerily and held out my hand. He took it rather gingerly and suspiciously remarked: "I guess you have got the best of me". At that, I produced my card and when he read my name he uttered an exclamation of surprise, opened a gate, and invited me inside. We had been excellent friends but had completely lost track of each other. As we had been separated for at least 20 years, we had much to talk about and spent the entire afternoon together. As he learned of my work and the object of my visit, he introduced me to a number of leading farmers who came into the bank during the afternoon, and helped me solicit their cooperation as crop reporters. After the bank closed, he took me to his home, introduced me to his family, got out his car and took me for a drive in the surrounding country. The roads were unimproved and the black soil had become deeply rutted from heavy rains. Travel by car was difficult and slow, so we had no time to call on my former acquaintances. However, we did pass the Baker farm and came near enough to the Potts farm to see the buildings in the distance. On our return

to the town, he insisted that I have supper at his home and spend the evening with him. I had a splendid visit and learned much about the crops and agriculture of that section. I had expected to find the Bretz family on a farm but found they had left the farm some years before, been in business in Rudyard for a time, and moved to another small town a year or two before. I was disappointed in not seeing them because they had been close friends during my school days.

From Rudyard I went to S. Ste. Marie, Newberry, Chatham Experiment Station, Marquette, and on west to Houghton. There were very few grain dealers and my chief contacts were with the county agricultural agents. The latter introduced me to some of their best farmers and I secured a number of correspondents among them. At Houghton, the agent proved to be quite different in type than any I had met elsewhere. His name was Leo M. Geismar, a man somewhat past 50 years of age, very talkative, egotistical, and a pronounced individualist. He declared that Houghton County produced the highest corn and potato yields in the State, a statement that I was inclined to discount very heavily especially with respect to corn. Not only was the county bordered by Lake Superior on two sides, but it was at least 400 miles north of the northern limit of the recognized corn belt. When he asserted the average corn yield for the county was 40 bushels per acre in the previous year, I nearly choked but managed to mask my thoughts and maintain a poker face. I yearned for the chance to trap him on some extravagant statement and, when he claimed he knew the locations of every acre of crops and the name of every person in the Upper Peninsula, thought I saw my opportunity. I had forgotten the present location of Charlie and Alice Bretz although it had been stated to me at Rudyard just a few days earlier, and I was particularly anxious to regain it. So I asked Geismar to give me their location and, much to my surprise, he promptly informed me that they lived at Engadine, operated a general store there, and added a brief outline of their earlier activities in and around Rudyard. As the former was 100 miles, and the latter 225 miles from Houghton, I gave up all further attempts to question him and decided to move on.

Strange Bedfellows

There is an old saying that "Politics make strange bedfellows", but, writing from personal experience, politics is not necessarily the sole cause. I left Houghton in the evening on a mixed train bound for Ontonogan, county seat of the adjoining county on the south. This slow train passed through a section of high hills of semi-mountainous altitudes, the scenery being entirely obliterated by the night's darkness. Progress was slow because of the sharp curves in the road bed and frequent stops at sidings for the switching of freight cars. As a result, the entire evening was consumed in reaching our destination. Upon arrival, in company with three or four traveling salesmen, I made my way to the village's only hotel. The lobby was primarily a barroom which was nearly filled with its nondescript patrons, many of whom had evidently patronized the bar very liberally throughout the evening. With reluctance I approached the desk and registered, and then was informed by the proprietor that he had no available vacant room for me. The best that he could offer was the sharing of a room and bed with a traveling man who had already retired. I demurred at this arrangement but he insisted the occupant was entirely respectable and had been told before retiring that it was probable a late arrival would be assigned to his room. It was then one o'clock and I felt obliged to accept the situation. When I reached the room, I found its occupant had obligingly limited himself to one-half of the bed and was soundly asleep. Quietly undressing, I was soon occupying the other half of the bed and lost no time in entering Dreamland. When I awoke, it was daylight and my bedfellow had already departed. Neither had spoken to the other, knew his name, nor

ever saw him afterward.

A Day's Journey to Crystal Falls

My stay in Ontonogan was very brief. The only train for the day in the direction I wished to go left either at nine or nine-thirty that morning. After breakfast I rushed out, managed to obtain one interview, then, not wishing to remain another 24 hours in a town where so little agricultural information could be found nor spend another night at that hotel, I boarded that eastward-bound train for Crystal Falls. The train was made up of freight cars with a single coach attached to the rear end. This coach consisted merely of a few low-backed wooden seats in one end, a partition in the middle, and space in the front half for express packages and trainmen's office. There were not more than a half-dozen passengers, one of whom was a traveling salesman for a liquor house. He was evidently a German by birth or at least by parentage, and made this route every two weeks. He had become somewhat acquainted with the train crew and, as the door in the partition was left open, we spent some of the time in the front part with the trainmen as they had arm chairs which were more comfortable than the seats in the rear. The side door was open and we had a good view of the scenery as we rode along at little more than a snail's pace. The most of the country was wooded and the principal activity was logging and lumbering. There were few houses and practically no towns, but numerous railroad sidings. Our train stopped at many of these to leave empty cars and pick up cars loaded with logs. Our progress was very slow and as the noon-hour approached we had covered less than one-third of the 75 miles to our destination. I remarked to my companion that this looked like one day that we would have no dinner. He replied that we would have dinner and a good one at that but, with nothing in sight except trees, I was extremely skeptical about his unexplained statement. However, about noon the brakeman came to us and asked if we would like some dinner to which we replied in the affirmative. Nothing more was said, but in a few minutes the train stopped in the thick woods. The brakeman hopped out of the door, made off through the woods and was soon out of sight. In about 15 or 20 minutes he returned carrying a large dishpan filled with food. He climbed into the car, opened a desk that was attached to the wall, extracted some wooden forks and spoons, then set out a milk pan filled with hot baked pork and beans, a loaf of bread, a pound of butter, a whole cake, one or two whole pies, and a large pot of steaming coffee. We were then invited to "help ourselves" which we promptly did. The food was fine having been prepared, as I later learned, by the cook at a lumber camp. We all ate our fill and there was a considerable quantity left. I believe it was the best meal I ever had on a railroad train, and when I asked the brakeman how much I owed him, he replied "twenty-five cents". The remainder of that day's ride was uneventful. We did not reach Crystal Falls until six o'clock making it the slowest train-ride I ever experienced.

The following day was spent inspecting crops and interviewing farmers in Iron County with the county agricultural agent, who had occasion to make such a trip in connection with his own work. The most of the farmers were Poles and Finns who had bought tracts of cutover land, cleared a few acres, built a small home, and were energetically working to develop their land into good farms. I visited several other counties and learned much about the agricultural conditions in each through the aid of the county agents, but no further incidents of this trip worthy of mention can be recalled.

Other Trips About the State

I have related some of the travel experiences encountered. The most of those mentioned occurred while traveling by train and by hired automobile and

driver. About 1921, it was finally ruled at Washington that it would be legal for field men to use their personally-owned cars for official field travel and to receive mileage-pay for their use. Previously, such use had been declared illegal. Soon after this liberalized interpretation was announced I bought my first car and proceeded to use it for the greater portion of my travels about the State. With comparatively few exceptions these trips were made alone. While I missed the companionship which a hired driver afforded, I was absolutely free to choose the routes that best suited the objectives sought and apportion my time solely in accordance with my own judgement. In this way I was enabled to visit practically every important agricultural township, become familiar with its crops, topography, soil, drainage, highways, local markets and, at the same time, acquire some knowledge of its people, its points of interest, and its history. I am certain that relatively few of the State's inhabitants have had the similar good fortune of such an education in the geography of Michigan. I visited as many of the crop reporters as time would permit. These contacts not only enlarged my list of good friends but produced much detailed information about their respective localities. These crop correspondents answered the questions on inquiry blanks sent out each month. They were faithful to the extreme in attending to this task for which they received no monetary compensation. A large percentage continued to serve in this manner as long as they remained on the farm and physically able to do so. It was a pleasure for me to meet these men and their families, see their homes and farms, and learn something about their individual interests. In the beginning, I resolved to visit every reporter in the State, but, with the steady expansion of office work and need for speed in my field travel and investigations, I soon discovered my resolution was impossible of fulfillment. Much to my regret I succeeded in contacting only a fraction of them--probably not more than ten percent of the many hundreds on our lists.

A PUBLICATION FOR CROP REPORTERS--Chapter XXXVIII

Following the creation of the State Department of Agriculture and our cooperation with it, I was encouraged by some of its officials to write articles setting forth the State's unique position in agriculture. Some of these were sent to the Michigan Farmer, while others were used by the leading daily newspapers. With a wealth of statistical data at my disposal, it was not difficult to make such stories interesting and informative. These writings pleased the State Department and also increased my prestige with the general public. In this manner I indulged in my hobby for writing over a period of several years. While doing this, I had an insatiable desire to undertake some sort of writing that would bring our office into a closer and more friendly relationship with our crop reporters. Finding that I could not rid myself of this feeling, I finally decided to inaugurate such a publication and mail it with each monthly questionnaire to all regular crop reporters which, at that time, numbered about 1,500.

The WHEELBARROW

There was no question, in my judgement, of the legitimate status of such a publication or use of the government frank in mailing it; especially, in view of the fact that it was to be mailed in the same envelope with other inclosures of a strictly official nature. There were ample precedents for this conclusion. During the preceding ten years a publication of somewhat similar nature had been sent to the various field offices at varying intervals. Its originator was Charlie Gage, chief clerk of the Bureau, and was sent out by him over a period of several years. After he left our Section to become Chief of the Tobacco Division,

it was occasionally written and mailed out by others in the Washington office. Gage could write well and in a highly humorous vein that made his effort very popular with the field men. He covered the news of the Washington office, its personnel, instructions to the field men, all in a style that made it exceptionally readable. His publication was dubbed The Omnibus because, as he said, an omnibus carries everything, passengers, mail, express, freight, etc.

When I made my decision to establish a publication for the benefit of our Michigan crop reporters, which I believe was in 1932, my first task was to select an appropriate name. Two or three other states had already adopted such a publication but I can recall the name of only one, The Trailer, which was explained as carrying what the big trucks had left behind. After lengthy and intensive consideration I came up with THE WHEELBARROW, which I explained as being the handiest tool on the farm for moving small loads of anything. The name and the contents of the publication made an instant hit with our reporters. I believe the number of reports received monthly increased by at least fifty percent and their comments probably were doubled in number and quality. I injected as much humor as possible and many of their comments were in like vein. Many commented how greatly pleased they were to find that there was one Government office that was really "human". I played up the fact that I was reared on a farm, that most of our office force likewise were products of rural areas, and I made frequent use of colloquial expressions commonly used by farmers. Many of their comments became so interesting that I repeated many of them in the publication which, in turn, inspired still more and better comments. I was further advantaged by having this medium of conveying instructions to reporters in an effective manner. Instead of giving them in the usual Government formal language, I gave them a humorous slant that not only prevented any feeling of antagonism but made my desires so clear that no misunderstanding could develop. I pointed out some of the monstrous results we would get if a misplaced figure or wrong unit went through our hands unnoticed or, if noticed and discarded, benefitted no one. There were decidedly fewer mistakes thereafter in their reports, a happy result accomplished without offending anyone.

The History of the Wheelbarrow

After this publication had been in existence for some time, I read a short article in the American Magazine which stated that the wheelbarrow had originated back in Biblical times, traced its history down to modern times, and concluded with a brilliant eulogy of it. It seemed so peculiarly appropriate for the readers of my pet publication that I wished to reproduce it. I noted it was the product of the pen of Bruce Barton who, at that time, was a brilliant writer of syndicated articles. As the article in question was copyrighted it was necessary to obtain permission for its use. Accordingly, I wrote to the American Magazine stating the nature of my publication and reasons for wanting permission to use it. The magazine forwarded my letter to Mr. Barton in New York City. He replied promptly and graciously gave me unrestricted authority to use it. I never knew where he got the information for his story nor if his statements were really authetic, but I had the satisfaction of using it and humorously claiming it proved all the good points I had ever expressed about this particular tool. Not long after that Mr. Barton was elected to the U.S. Congress in which he served for a number of years. I have seen but little of his writings since his entry into the political arena.

Voluntary Suspension of THE WHEELBARROW

Within two or three years after we first issued our little publication, about one-half of the other field offices had adopted ones of a similar nature.

A large percentage of then were well written and wholly creditable, but there were a few that resorted to off-color stories as their brand of humor. Finally a couple had degenerated to the extent that some of their stories were positively offensive to refined readers. I happened to be in Washington at that time and Mr. Callander said he would issue an order that, hereafter, all field publications must be sent to Washington for approval before issuance. I protested that such censorship would cramp our style of writing and that those of us who had not used any improper material should not suffer for the sins of the guilty. Although he admitted that only two offices had used objectionable material, he insisted on issuing the blanket order. As we had to have these mimeographed ready for mailing with the monthly inquiry schedules, which invariably went out on the 25th, our tentative copy had to be sent to Washington about the 10th. This prevented using the most recent material and set our available news back two weeks. In addition, sometimes the copy was not returned from Washington in time and we had to wire for approval. It was finally ordered that the paragraphs of our copy be numbered before submitting, so that any of them could be deleted by number in the wired approval. My contempt for the original order of censorship and the cumbersome and senseless setup for obtaining approval increased with each succeeding monthly issue. It was apparent that the employee serving as censor had little comprehension of the psychological purpose or value of the items we had selected for use, or adequate judgement of their relative news value.

The climax came when a simple announcement of the birth of a child in a certain reporter's home was deleted. There was no doubt in my mind that the family submitted the item with the expectation that it would be published, and would be disappointed and resentful if it was omitted. I reasoned further that, had it been an item telling of a brood sow having given birth to an unusual number of pigs, the censor would most certainly have approved it. Before copy for the next issue was due I had decided upon a course of action. In the opening paragraph I stated that, owing to circumstances beyond my control and which I was not at liberty to explain, THE WHEELBARROW would be discontinued with that issue. That paragraph was not deleted by the censor nor did I receive any comment from the Washington office concerning my action. However, I did receive many letters from reporters voicing their disappointment at the loss of the publication. Some of the other states continued to issue their monthly newssheet, but several discontinued them about the same time that ours was dropped.

After a lapse of about two years, field offices were notified that censorship was being discontinued. We immediately resumed THE WHEELBARROW and there has been no break in its publication since. The signature attached to it has always been "The Office Crew". My purpose in this selection was to preserve the anonymity of whoever prepared the copy and prevent invidious comparisons being made by readers. I also hoped it would inspire the various members of our staff to assume alternately the responsibility of writing it. In this I was disappointed. None seemed willing to accept the task except when my absence made it necessary. The January, 1948 issue is No. 1 of Volume XV, a survival of sufficient duration to seemingly justify its origin, existence, and continuance.

FROM VOCATION TO AVOCATION--Chapter XXXIX

After an assistant was assigned to my office in 1926, a portion of my monthly field trips about the State was delegated to him. He and the others who succeeded to that position at intervals of a few years were comparatively young men. Each was anxious to qualify for advancement and appreciated the privilege

of making trips about the State to better acquaint themselves with its agriculture, its people, and its scenery. On the other hand, I was glad to relinquish the field work and be able to spend more hours at home and in the office. During the last ten years of my official work, I rarely made more than one field trip during the crop season and in some years none at all. Aside from occasional trips to Washington and on special missions to other states, my time was wholly devoted to administering the office and special programs to which I was assigned from time to time. As a result, there was little of an exciting nature in my daily work or that would be of interest to anyone who may chance to read this historical document. Accordingly, those later years are being lightly passed over without further comment concerning my official activities.

I Go to a Hospital in Chicago

After my recovery from the illness encountered in 1913, and which continued for some months after my entry into the Bureau of Crop Estimates, my health remained reasonably good for a period of fully twenty years. The crop control programs which I was called upon to administer, began in the fall of 1933 and continued until the spring of 1936. The close confinement, long hours, and strenuous nature of those particular duties produced a nervous condition that increased in intensity during the period of such assignments. Late in April, 1936 I was called to Chicago to meet with the statisticians of other states involved in similar crop control programs. The Agricultural Adjustment Administration had been recently created and we were to meet with its newly-appointed officials, turn over to them the statistical material we had accumulated, and aid them in assuming the duties and responsibilities we had organized and carried forward to that date.

I left Lansing on Sunday afternoon and arrived in Chicago about 8 p.m. During the trip the weather turned much colder and the train crew failed to turn on the heat in the coaches. As a result, I became thoroughly chilled and felt slightly ill throughout the evening. For several years I had sensed a growing tendency towards urinary troubles and was gravely apprehensive that ultimately I would be forced to undergo an operation known as prostatectomy, such as my father had experienced in 1922 and which had terminated fatally in his case. I had a good room at the Stevens Hotel but was unable to sleep because of the extreme pain throughout the night. In the morning I telephoned the desk clerk and asked to have breakfast sent to my room. After breakfast, being almost frantic with pain, I called one of my friends and asked him to come to my room. We concluded the house physician should be called and this was done. However, he was not in his office but an interne responded to the call. He took me to the office and succeeded in relieving the pain and putting me at ease. He asked me to wait for the doctor who soon arrived. He urged that I go to the Illinois Central Hospital of which he was the head surgeon, for a complete checkup. Realizing that such was needed and being warned that an operation would eventually be necessary, I assented. A part of the afternoon was spent in the conference room with the other statisticians, my sheets of figures were turned over to them, and I announced my intention of going to the hospital.

My good friend Surratt, our Illinois statistician, offered to take me to the hospital in his car which he had driven from Springfield, and he, his assistant, and my good friend Kirk from Minnesota accompanied me. On the following Thursday afternoon, the surgeon reported the checkup had been completed, my condition found satisfactory for the ordeal, and scheduled the operation for Saturday morning. When that was over I seemed to feel very good but the shock must have been far greater than I realized or the hospital staff would admit, for some unfavorable developments occurred, some steps taken that doctors and nurses re-

fused to explain, and recovery was comparatively slow. I received excellent care although much of it was due to the fact that I had a special nurse throughout the seven weeks of my stay there. I also had a second special nurse during the first 18 days following the operation. These extra nurses added materially to my expenses but afforded much better care than could be provided by the regular hospital nurses. I was finally discharged about June 20th but still in a very weak condition. My Chief in Washington very considerately had my sick leave extended to the extreme limit possible under existing regulations, which was from May 1 to August 28. When the latter date arrived I was still weak but, having urgent need for the continuance of my regular salary, reported at the office for duty. My services, at first, were considerably below par but gained in value as my health improved, and within a few months I found myself able to carry my usual share of the load. When account is taken of the relatively high percentage of fatalities resulting from that particular kind of surgery, I feel very grateful that I am able to write these lines almost twelve years later.

We Build a House

In the summer of 1935 we bought three lots on Hagadorn Road in Brookfield Addition, Meridian township. The largest of the three, a lot at the corner of Roseland Avenue, was selected as the site of the house we hoped to build. During the following winter we drew several sets of plans and then amended them numerous times. In the early months of 1936, we engaged a contractor who took the final form of our plans to a draftsman in the employ of a lumber company. The latter made the drawings and blueprints, and preliminary operations were started in March. The first step was to secure a water supply which was accomplished by driving a well. Water was encountered at several different depths but, upon test, a satisfactory soil type to insure a good quality and ample supply of water was not found until a depth of 172 feet was reached.

The next step was the cellar excavation which, unfortunately, was let to a local workman to be done with team and scraper. This proved to be a much slower and more expensive method than if power equipment had been used. Heavy rainfalls occurred at intervals during the operation which further delayed progress. as a result, the foundation walls were only completed by the time of my departure for Chicago. On my return from the protracted stay in the hospital, the framework of the house was in place and the brick-laying was well advanced. Thus I was deprived of the privilege of scrutinizing some of the hidden construction, but such as was in evidence indicated good workmanship throughout, and no serious faults that can be attributed to poor workmanship have developed since. We moved into this, our first new home, on September 10, 1936. It has provided comfortable and pleasant living, and we hope it will continue to fulfill our needs and happiness as long as we require an earthly home.

The grading, seeding, and planting of the surrounding lot area was delayed until the following spring. In selecting a contractor for this work and in choosing a source for our nursery stock, we were less fortunate in each instance. However, changes and replacements we have since made have partially remedied the faults. Some types and varieties of fruits and shrubs failed to develop properly, some unwanted kinds were substituted without being so designated, and some were ill-shaped and disease infected. Michigan statutes have always been woefully inadequate in protecting the buyer of nursery stock against fraud. The most discouraging feature is that such often cannot be discovered until a dozen or more years of growth have taken place; then, an equal number of years must elapse for replacements to reach a like stage of developed growth. However, much of our labor and planning has been productive of pleasing results and we are thankful that we

have been permitted to enjoy the fulfillment of these long-cherished desires. The original plantings and the building of a pool, rock garden, and summer house were all accomplished in the years I was still fully employed at the office.

A Life of Leisure

When the liberalized retirement law became effective in February, 1942, which made me eligible for optional retirement, our Country was waging its greatest war on two widely separated fronts. While I felt reluctant to leave the service in the midst of the Nation's distress, I noted there was no dearth of available statistically-trained personnel for replacing those being drafted from our Bureau into the armed services. Then, too, I was within three years of the age limit of 70 when my services would automatically be ended, which would be long before the end of the war according to forecasts being made at the time. A type of palsy, known as Parkinson's disease, began affecting my right hand about 1940. By the following year I was forced to abandon its use in writing and substitute the left hand instead. Later, when that hand also became affected, I could no longer write except in a very limited way by using both hands. This handicap reduced my efficiency in routine office work and perhaps was the deciding factor in asking for retirement.

Leisure is not idleness unless one chooses to make it so. According to my interpretation leisure is freedom from important responsibility. Idleness is a state of unfamiliarity with work. Those afflicted with it serve no useful purpose, experience no satisfaction in living, and should be relieved of their misery by legal execution. I have never felt commiseration for any person, young or old, who complained that he could find nothing to do. I have never experienced such a condition and sincerely hope I never suffer that affliction. Hence, in retirement, I merely looked for a quiet and leisurely existence, an opportuity to indulge in profitable reading, sufficient exercise for good health, and pursuing further studies in the mysteries of Mother Nature. All of these have been attained to a measurable degree, yet, there is so much more that I would like to do and there is so little time. I have no difficulty in outlining research projects that would require one or more lifetimes to complete, there are books I would like to read, there are studies I would like to pursue, and I can think of a multitude of other activities that might be undertaken for self-improvement, pleasure, and recreation. I cannot foresee any need for sinking into a state of absolute idleness while mind and body continue to function normally.

Our Golden Wedding Anniversary

Having attained fifty years of wedded life on November 10, 1947, it was fitting that the day should be observed and appropriately celebrated by the Church clan, their other relatives, and friends. Accordingly, our children began laying plans well in advance of the date. It was decided to hold the festivities on the preceding day, Sunday, November 9, for the reason that a larger number of relatives and friends could be present on a non-working day. An announcement of the event was given advance publication in the Lansing newspaper, and special announcement cards printed in gold ink were mailed to friends living at a distance from Lansing. No invitation cards were used because we did not wish anyone to feel obligated for a gift. A report of the event later appeared in the Clarksville Record, the Saranac Advertiser, the Michigan Farmer, the Lansing Commandery News, and in at least one of the Detroit dailies.

In accordance with pre-arranged plans, the relatives brought a potluck dinner to which we added a cooked ham. The dinner was served on two long tables and a round dining table in the basement recreation room, at which 32 relatives and three close friends--Mr. and Mrs. Will Fletcher and Mrs. Belle Collar--were sea-

ted. Aside from the good wife and myself there were three--Harriet Harker, Lena Church, and Claude Harker--who were present at the original wedding in 1897. The house was opened from four to eight o'clock that afternoon for the friends who called to extend their congratulations and good wishes. There was a steady flow of these callers throughout the four-hour period so that our first-floor rooms were not unduly congested at any time. On the dining table was a five-tiered wedding cake prepared by a Lansing chef, a glass punch bowl of golden punch, plates of small cakes, mints and nuts. These were served to the guests by our three daughters and our three eldest granddaughters. The table decorations consisted of lighted candles in glass candelabra and bouquets of flowers. In our bedroom, the guests were shown a snapshot taken of the original wedding, numerous photographs of that period, and a photostat of pages from Jesse Harker's diary describing the wedding, preparations, decorations, etc. The combined guest book and wedding certificate were also displayed. These mementos proved of much interest to many of the guests who were unacquainted with our earlier history.

Many of the gifts were cut flowers and potted plants, the majority of which were chrysanthemums in yellow and bronze colors. Other gifts were useful and decorative articles in appropriate colors. The gifts and cards of congratulation came from many friends and relatives in Michigan; and from others in Maine, Long Island, Washington, D.C., Florida, Texas, Ohio, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Nebraska, California, Utah, Arizona, Maryland, and Virginia. One gift that was exceptionally pleasing to the elderly "bride" was an orchid corsage from The Office Crew, it being the first orchid that had ever come into her possession. She placed it on the front of her velvet formal gown, worn on this anniversary occasion, and its delicate colors harmonized perfectly. Later, she placed it in the refrigerator and only removed it for showing to friends who called on subsequent days. She was able to wear it at an East Lansing function 24 days later, after which she was compelled to discard it. Naturally, she was reluctant to part with it, but its drooping petals indicated its usefulness and beauty were lost. Nevertheless, the tender memories associated with it will not fade or be lost. In the guest book provided for the occasion there were 120 signatures of relatives and friends. A comparatively small percentage of all wedded couples live to reach and celebrate a golden wedding anniversary, and we are deeply grateful for being permitted to share in such an enjoyable and memorable occasion.

The efficient planning and management of the celebration by our children rendered its consummation as nearly perfect as could be desired, and we are proud that such efficiency was available within our family circle. Not all families, unfortunately, are held together by the ties of love and devotion or so faithfully strive to do honor to their parents.

MY LIFE IN RETROSPECT--Chapter XXXX

The story of my life has been told and there is nothing more to be added than a perspective review. It has been neither an exciting nor outstanding one in a relative sense. I cannot pose as a candidate for sainthood or a place in the Hall of Fame. I have simply tried to do my best with the limited endowments that Nature provided and ability acquired through personal effort, study and experience. As already recorded, chance played an important part in establishing the sequence and character of pursuits followed. Capable advice and direction in the beginning might have led to greater accomplishments, but neither I nor anyone else can supply any positive proof of such result. Be that as it may, I have no

regrets for the wavering paths chosen. I never had any desire to accumulate wealth to an extent that its management would be a burden or its worthwhile use a problem, hence there is no disappointment from that angle. A more ample cash income in the earlier years would have afforded more pleasures, less self-denial, and a far greater peace of mind; aside from that fact, we are grateful that it became sufficient in later years for current and prospective future needs.

My parents and those of my good wife worked hard throughout their active years, and acquired sufficient means for modest living. However, this result was accomplished only through the constant exercise of extraordinary thrift on their part and that of their children. Likewise, it was that admirable trait, instilled into us during our years at home with them, which made it possible for us to weather the financial droughts that persisted for more than three decades of our wedded life. I believe it was Shakespeare who wrote: "Sweet are the uses of adversity." The profound truth of that statement can be visualized best from a distance that embraces both cause and effect.

Golden Era of Achievement

The approximately seventy years within the scope of my memory seem to have been the most productive of any like period in the world's history for the material betterment of mankind. In earlier chapters I described some of the crude equipment in common use during my youthful days and which is now practically unknown to the present generation. Only those of us who have actually experienced the remarkable effects of the transition can fully appreciate them. To enumerate and describe all of them would be an impossible task, but the most of them resulted from new applications of a very few basic discoveries.

A better understanding of the nature of electrical energy probably accounts for a greater number of useful inventions than any other single source. To mention only a few that occurred within the period of my recollection and the vivid impressions they left with me are: the electric light, cable and electric street cars, the electric motor, the storage battery, the X-ray, the phonograph (first called graphophone), radio, radar, and the myriad of gadgets adapted for shop, factory and household uses. The internal combustion engine revolutionized transportation methods by making possible the automobile, truck, tractor, and airplane. I was two years old when the telephone was launched commercially, twenty years old when the human voice first travelled 1,000 miles over a wire, and 40 years old when similarly transmitted without a wire. I was ten or twelve years old when Edison succeeded in recording the human voice on a wax cylinder and reproducing it therefrom. We heard the reproductions from the early model through rubber tubes placed in both ears. It was about that same time that Appleby managed to build a machine that would tie a knot in a string, and brought out the first grain binder which cut the grain, separated it into bundles, tied a string around each bundle, and discharged the bundles onto the ground. That was a wonderous and time-saving marvel, now largely supplanted by the more modern combine. Many of the farm operations during my 24 years on the farm were accomplished only by hand labor. Practically all of these have since been performed by machinery adapted for specific purposes. The main source of power on the farms in our locality was supplied by horses when I began working. An occasional farmer still owned an ox team, and even I had the opportunity of learning to drive such a team when Father rented one to plow his apple orchard. I could continue at great length with the multitude of remarkable changes I have witnessed within the average lifetime, but will conclude the theme by simply stating that I am very glad for having lived during a period of such rapid change.

I could be far happier if like progress had been made in other directions.

In my humble judgement, a corresponding improvement is not evident in such fields as art, sociology, theology, morality, and politics. Many of the present day paintings, much of the music, and most of the political objectives foisted upon and complacently tolerated by the public do no credit to either authors or recipients. Little or no gain is perceptible in reducing crime, intemperance and immorality. The divorce evil is definitely increasing; the sanctity of marriage and home is not being fully maintained; punishment of serious crimes is being lessened in severity and paroles are being granted in steadily increasing numbers, yet our prisons are overflowing with criminals; and much enacted legislation is based on expediency in behalf of the ruling party rather than on its virtue or the welfare of the public. The idolatrous worship of dollar-wealth is producing serious deterioration in the moral and social virtues.

But I am not a philosopher, preacher or pessimist, so am hopeful that these and other seemingly unfavorable trends will be arrested and reversed when economic conditions, disturbed by the repercussions of war, return to their former normal course. However, a reawakening to the need for greater appreciation of moral and spiritual virtues is evidently necessary, if the greatness of our nation is to be maintained for the benefit of future generations. My earnest prayer is that it may arrive before it is too late.

A Realistic Inventory

In this volume I have shown that the good wife and I began our wedded life as tillers of the soil in the open fields more than fifty years ago; gravitated to Main Street of a small Michigan town; joined the teeming crowds in several large cities for a time; then returned to a semi-rural existance where we again can dig in the dirt, grow beautiful flowers and fruits, and view the green carpeting of a spacious lawn and the more distant open fields. The cycle is nearly completed and I feel it has been a wonderful experience.

The family circle still remains intact although time inevitably will break the chain. The dear wife, who uncomplainingly endured the inconveniences of the years of meager income and frequent changes of domicile, continues to be my daily companion. Although now subjected to infirmities incident to old age, she retains a fair measure of health and buoyancy of spirit. I cannot express adequately her worth to me as a true and loyal helpmeet, as a capable mother of our children, and as a loving companion throughout the years.

Our most valuable joint asset is the four children that entered our home during the period 1900 to 1910. After a normal childhood, each passed through high school and college and, later, went to homes of their own. Each has demonstrated more than average ability in his chosen field, assumed various social responsibilities, and adopted a proper code of life; all of which is a matter of pride and satisfaction to their parents. Their filial devotion to their parents is as complete as any father and mother could reasonably desire.

Then there are nine grandchildren, each of the four homes of our children being represented with one to three. In their varying stages of growth and development each possesses bounteous health and vitality, and gives unquestionable promise of becoming an upright and worthy citizen. We, the grandparents, are cheered by their frequent visits and are made happier and younger in spirit by their presence in our home. They, too, comprise an asset of incalculable value to us.

And, finally, there are our other relatives and the many good friends living about us, some near and some more distant. Many we do not see at all, others only infrequently; but the possession of these friendships is highly prized. Even the more distant ones live with us in memory, and the postman does his best to

keep us in touch with them.

Our choicest possessions, as enumerated in the preceding paragraphs, comprise our principal wealth. As a result, we feel that God has showered his most priceless blessings upon us. What greater reward could we seek or crave?

With these happy reflections I conclude the recital of the more important events in my life as drawn from memory's storehouse. Regardless of the extent to which others may differ, to me it has been a great life thus far.

The story was completed about March 1948.

THE CHAIN IS BROKEN

The heavy line at the end of the preceding paragraph was intended to mark the end of my long story. In approximately five months after the final line was written, the warm and tender heart of my dear wife, Cora, ceased forever its rhythmic beat. She had read with deep interest each page of this book as soon as possible after it was written, and, whenever I was inclined to dicontinue my writing project, she supplied the encouragement and inspiration which impelled me to continue and bring it to completion.

About two o'clock a.m. on August 21, I awoke to find her pacing the floor in distress. We had retired only two hours before at which time she remarked that she had felt exceptionally well throughout the day that had just ended. I immediately arose, switched on the light, and inquired about her feelings. She said she guessed she had bragged too quickly abut herself. I tried to think of something I might do to aid her but managed only to support and keep her from falling. I urged her to lie down on the bed and she willingly complied, after which she asked me not to touch her. Immediately realizing the situation was serious I rushed to the telephone, and summoned a doctor and an inhalator crew. Returning immediately to the bedroom, I discovered her soul had taken its flight during my brief absence--the chain was broken.

Two days later, on Monday afternoon, August 23, friends and relatives assembled for the final rites. She sleeps on a gentle southern slope in Lansing's Evergreen Cemetery, near an elm tree whose late afternoon shadows in mid-summer will spread a cooling mantle over the hallowed spot. The beautiful and happy memories accumulated through the more than fifty years of our loving companionship will abide with me during the remainder of my life.