

My Recollections



Loyal O. Bacon

MY FATHER'S ANCESTORS

My great grandfather was named Orrin Bacon, born October 4, 1822 in Barnstable, Maine. He had two children, Edgar Orrin and Emily.

Edgar's children were Donn Franklin, Burton Earnest, Ralph, Orrin Elroy (my father), and Orrin's twin brother (he was sickly and I never found his name, but he died at an age under two and is buried in the same plot as his mother is. She died shortly after Orrin's birth).

Edgar O. ran a flour mill that his father had had built in Monticello, Wisconsin. After his wife died, he sold the flour mill and left the area. Since he was also a carpenter he found work in Iowa, where he remarried. He died of cancer.

My brothers and I never met grandad, but I remember that his carpenter tools were willed to my father he received them in 1920. I was 5 years old at that time, but grandad's tools were not for my use, by dad's My brothers and I never met grandad, but I remember that his carpenter tools were willed to my father and orders.

Incidentally, I knew nothing of the background until after dad and mother died. At that time I went through the things mother had always kept in a locked desk. There was a letter there that had been received in 1920, after Edgar O. Bacon died. It was from his second wife, written to tell about her husband wanting my father, Orrin Elroy, to have his carpenter tools. From this letter I finally found where he had died and was buried. It was in Iowa, about 60 miles from where my father had bought a farm in 1915. My dad and mother knew where grandad was but never told us boys.

I went down into Iowa, visited the graveyard in which grandpa was buried, but couldn't find anyone who knew where his grave was. I've never

gone back to find the people who had records. They were in another town, and I only had a Saturday afternoon to find this information. I meant to go back, but never did.

My Recollections, by Lloyal O. Bacon

CHILDHOOD MEMORIES

I was born on the homestead of my parents in western South Dakota. However, there are only two things that I remember from there. The first remembrance is of three trees, which I was later told were the three willow trees near the well, just north of the house. The other thing that I remember from the South Dakota area was the time that my older brother, Wilbur, was throwing blocks from the kitchen into the bedroom (a two room house). He said there was something under the bed. So I picked up some blocks and threw them in there too. Now, since my parents moved from South Dakota to Minnesota when I was three years old, I still can't remember any items from the west, but I do remember the farmstead that he bought in southern Minnesota near a little country store, called Pilot Grove.



Lloyal at three years of age, on the farm in Minnesota.

EARLY DAYS ON THE FARM

I moved to Minnesota, with my family, to a farm in Faribault County (nine miles west of Elmore, our postal service), in 1919, when I was four. I had difficulty talking. In fact, mother and dad wondered why I could not speak English. I apparently had my own language. I only remember two words. One was “udden.” The other was “bumachow.” Udden was pig and bumachow was tomcat. Whenever I became angry with my older brother, that’s what I’d call him; an “udden bumchow.” Sure, he was a pig and a tomcat. The name for the pig, udden, was approximately the sound of the mother pig when nursing her little ones. We also had a tomcat, which would sit outside in the evening on top of a fence post and yowl. It sounded like bumachow to me.

My parents tried to teach me English, but I had my own way. They were very concerned, but by the time I could go to school (I had to be at least six years old), I was nearly seven. I guess I learned fast that year. Had no trouble in the country school.

The grade school that I went to was a little country school, one room, with an entrance hall. And the furnace was in the back corner of the main room. There were about 20 seats for students, and black boards across the front of the room.

The school was at the center of four sections of land, and each section of land had three or four farms associated with it. However, when I started there were only about five or six students. After the first two years there were only three students, Kenneth Steuer, Rosalind Bergman, and myself. That’s all there was. Kenneth and I were in the third grade, and Rosalind was in the second grade. Of course, we had to walk to the school, and carry our lunch. There was a very good flowing well, down

near the road intersection, with some of the best water I've ever drunk. And we would always have to run there for a drink. But we were never permitted to leave during the school hours. We had to wait till recess or the noon hour.

Kenneth Steuer and I were in the same grade, and we couldn't find much to do during the recess period, because there were only the two of us, and the one girl which we both ignored. So we had to try to establish our own games. We did have a ball and a bat, although the bat wasn't a very good one. However, we did make up some of our own games, and always managed to enjoy ourselves when we were not in the school.

Our teachers were ladies, usually very pleasant; although there was a little history that occurred a few years before I started the school. And that was that there were some large boys that were going to the school, and they were in the 7th and 8th grades. They were bothering the teacher, and running away during the day. They would probably go in the morning, but at the noon hour would go off and do something else the rest of the day. And one of their particular places to go was about a quarter of a mile north of the school. There was a ditch with water in it. This was called a dredge ditch, because it had been made artificially to drain the ponds that occurred naturally on the farm land. Usually the farmers would put in a line of tile, about three or four feet beneath the surface of the ground, that would lead from the low land areas that collected water over to the dredged ditch. And the water would run into the ditch and then flow from there to the nearest river. At our location that ditch extended another 10 miles before it got to a river to empty the water out.

But everybody enjoyed going down to these because they would have little pools of water in them, as well as water flowing between the little pools. And they could go wading and try to catch small crabs, or minerals.

No one, to my knowledge, ever ate any of them. But they did like to catch them and take them home in their dinner bucket. And put them in the water tank where the cattle would drink their water.

We used to find some kinds of games to play during the recess and noon periods. One of them was called "Knock the Tin Can." We would have a block of wood with a can on it, and everybody had a stick about four or five feet long. First they would put the can on the block, and hit it. The person who had to do the searching would to run and get the can and put it back on the block, before he could find anybody. Well, by the time he got the can and got back, we had generally disappeared. But at the school grounds there weren't many places to go, so it was easy for him to try to find us. However, when the adjacent fields had corn on, we would always run into the corn field. And not come back until the teacher was ringing the bell. So that meant that the person who was the searcher had to look all the time. Well, this wasn't very easy with just three people. But a few years later there were three other families that moved in, so altogether there were about 12 students in the school. Then the games became much more fun, and we were able to play ball with sides of about four or five kids on a side. And we could have some very interesting games.

Other games we used to play, not at the school, but at our own yards at home. All the yards had groves of trees around them. There it was easier to play the game of knocking the tin can. It was easier to hide. We added rules to the game. When the players who had been "found" were standing by the block of wood with the can, if someone who was hiding could come and knock the can off, all the others would be freed to run and hide again. So it was very difficult for the searcher, called "It," to ever find everyone and be free to run and hide while someone else did the searching.

However, in the farm groves it was very common for the young people to make their own play farm. They never had any toys, because nobody could afford to buy any. But it was very common to get a small limb, maybe an inch and a half in diameter, and with a saw to saw a few short lengths, about an inch long off the limb. Make a hole in the center of them and tack them onto a board, so that you had a wagon or a car with wheels on it. And then they could be pulled around the make believe farm. All the grain that was raised had to be just imagined. But they did plow the fields, and make little corn stalks out of some dirt and a few twigs. So that they could take their wagons out there and load the corn stalks, or just a piece of the corn stalk to represent the ear. And haul them back to the little play farmyard. So we were all trying to do in our play games the same things that our fathers were doing on the farm. And we always had similar types of wagons, or wagons with racks on them, so we could pile a few leaves on them and haul them around. And we tried to make cultivators so we could use them in our fields. We kept busy.

LLOYAL'S YOUTH

I had mentioned the school before, but once we had got to a larger number of students we could always change our activities. Sometimes we would even play school during recess times, in which we had somebody play the teacher. They would ask the rest of us questions. And I think the teacher rather enjoyed it because it was usually done during the lunch period. She just sat at her desk and had an enjoyable period for eating her lunch; and the kids were right in front of her. So she knew what they were doing.

We did have a little problem with that school. I had mentioned before that there had been some bigger, older students there, that is from the sixth to the eighth grades. They were very mean, and they would run away from school, get into fights, and cause the teacher a large amount of trouble. So the school developed a very bad reputation for the way they treated the teachers during the period before I started there. Nobody ever forgot that that is the way some of the kids had acted at one time. And even though we didn't, we were painted with the same black stripe. But as we grew older, towards the seventh and eighth grade, as I mentioned before, we had more time for playing games during the recess periods. But we also had much more enjoyable class periods, because this was a one room school, and there were classes for reading, arithmetic, and writing. Much of the writing was done on the blackboards. And though we were in different classes, we were all in the same room, so those in the lower grades were watching those in the higher grades, and consequently they were learning quite rapidly.

All in all, it was very interesting school to be in. There were no buses, but no one lived more than about two miles from the school by road,

because the school only took the students from four sections of land. Each section was a mile on a side. So we always had very good exercise hurrying to the school in the morning to be sure we got there in time. But then after the school was over about 4:00 in the afternoon we just had a leisurely walk home, although we were always in a hurry to get home because I think every one of us had chores to do before the six o'clock meal, or supper time. All in all it was a rather pleasant memory.

Most of us did not have automobiles at the time that I was going to grade school. I did not start grade school until 1921, when I was six years old. And my father did not obtain a car until the summer of 1926. So that was about five years, and the only way of getting there was to walk. If the weather was particularly bad, then my father or mother might take us by horse and buggy over to the school. But usually if the weather was bad in the morning we just didn't go to school. However, if we had gone to school in the morning, and the weather turned bad during the day, then there was a possibility that they would come and get us. But we were told which route we should take to go home, and they would come after us on that route. So if we had started home we would probably wouldn't have to walk all the way home in the really bad weather. But sometimes we did when we thought they should be there to get us, yet nobody came. We actually had three directions that we could go to get home. The short direction was across the field from the house to the school. That would be about one and a quarter miles in distance, with about four or five fields to cross, and at least as many fences. Then we could go north from our farm for 3/4 of a mile, and then east for one mile to get to the school. By road that was the shortest distance. However, there was no one in that direction who went to the same school. So if we went that way we had to walk by ourselves. And that was not nearly as much fun as to meet with some of the

neighbors. So we usually took the long way which was roughly a mile and a quarter. We would go south for a quarter mile, east for one mile, and there were three different families along that mile of road. So we would get together and walk along, and then go north one mile to the school. That was the way we preferred to go, or to return home, because then we could be with someone else. I mentioned that Kenneth Steward was the other boy when I started this school, and he lived a quarter mile south and a quarter mile east of the school building. So usually when I walked to school that way I would wait at the corner, and we would walk together the last mile to the school.

Usually the parents were busy. By the time we left for school they were already into the fields, doing whatever they had to do. It might be plowing, or cultivating, or other means of preparing the ground for seeding. And they usually started into the field at 7:00 in the morning. They were up at 5:00 in the morning to do the chores like feeding the horses and milking the cows, and taking care of the livestock in the farm area. So we seldom ever got a ride, and had to walk at all times. In fact, as we got a little older we seemed to think that what we should do was get home in a hurry. We would run to get home, and most of us could run the mile and a half or two miles to get home. But I couldn't remember anybody running in the morning to get to the school.

Then I mentioned that up near the schoolhouse, the Bergmans had Rosaline and Ruth as their daughters. I don't remember either his name or his wife's name. To the east of the school, about a half mile, there were the Sinsors. They had a daughter, Jean, who was about three years older than I. They moved into that area when I was in the fifth grade. Their daughter, Jean, was in about the eighth grade. So she only attended the country school one year before going on to high school.

I mentioned that one of the students was Kenneth Stuart, and that he lived one and a quarter mile east of us. Well, he had three sisters, all of whom were older than he was. One of them I never knew at all, and the other two I only met briefly when I stopped over at his place.

The other thing of interest is to realize that when you have no way of traveling except to walk, that your neighbors probably are never more than about two miles away from your homestead. That was true with us. We had about 1/8 of a mile north of our house, but on the other side of the road there were the Peragous, Floyd Peragous, and his wife, whose name I do not remember. Floyd's brother, Pete, lived with them. They did have a daughter, about five years younger than I was. I can't remember her name, either. Then about 3/4 mile farther north of us there were the Jensens. There was Maggie and John, the parents, a daughter, Helen, and two sons, one named Laurence and the other named Loyal. It was spelled with one L at the beginning, instead of two L's as I have in my name.

Then, as we go to the south of us about 1 1/4 mile, there were another family of Jensens, a Hans and his wife and their daughter. To the east of us there was a little country store, operated by Edwin and Rose Holm. They had three daughters: Rose, Ruth, Lucille, and one son, Harold. Lucille was the oldest of that family, and she was the same age as I was. Harold was a year younger, and the twins, Rose and Ruth, were about three years younger than Lucille.

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To the east of the Bacon farm was another quarter section farm owned by the Hillpipers. They were French. They had three sons and one daughter. They had a fairly large garden, but almost half of it consisted of grape vines. Mr. Hillpiper made his own wine. I think they had plenty of wine on hand because they had three barrels of it in the basement, at least in the fall. But his sons got into trouble with their dad one time when they drilled a hole through the back of the cherry wine keg. And then they would use a straw, put it through the hole, and drink the wine out of the keg. Then when it got down to where the straw couldn't touch it any more, they would drill another hole a little lower down. And you can guess what happened when that wine disappeared much sooner than their father thought it should. Anyhow, they all seemed to enjoy it.

I think that just about covers all the close friends. There were some that lived, oh, about a half mile south of us and a mile west, but we didn't really associate with them. At least as kids we didn't. So we had a very limited number of people to see. We had to find our own methods of

playing. One of these methods was to have something to shoot with. And once they had a few cars that had blowouts from the inner tubes, we were able to get a hold of the inner tubes. We cut strips of rubber from them and made slingshots. Then we would go hunting birds. Frankly, I don't think I ever hit a bird. But I sure shot at enough of them.

We would also try to kill a gopher with a rock from a slingshot. I do remember hitting one once, but before I could get to him he got down in a hole, and I never saw him again. Maybe I did hit him serious enough to kill him. And my father would be happy because the gophers had a habit of digging holes in the pasture land, and leaving piles of dirt. That would kill the grass underneath it, which would reduce the amount of grass the cattle could eat. So my dad always wanted us to snare the gophers. That would be a simple solution. We would have a long piece of twine, make a loop in one end that would move quite freely. We would put the loop over the hole that the gopher would go in. It would be long enough so we could lie down about 25 feet away from the hole. When the gopher stuck his head out of the hole to see if there was any danger, it was already too late because we would pull on the string, and suddenly we had the gopher in the loop at the end of the string. We could then either dispatch him or play with him for a while before we did get rid of him. They were not wanted in the field at all. The larger gophers could make a hole large enough so that a calf might step in it. And if the calf had been running, there was a possibility of it breaking its leg. So father always was ready to give us a penny for every gopher we could kill. And a penny at that time would buy much more than a penny does now. We always were trying to make a few pennys here and there, one way or another.

We used those slingshots, as I mentioned, for hunting or for target practice. However, as we got older, we found another use for them. And

that was just before the 4th of July when firecrackers became available. We would buy firecrackers, put the firecracker in the slingshot, have somebody light the fuse on it, and shoot it up into the air. Our object was to do this quick enough that it wouldn't explode in the slingshot, and not too close to us. Fortunately, we were very lucky. They would mostly explode up in the air, although some of the firecrackers had a long fuse on them. Then the danger was that we would shoot it 50 feet up into the air but the fuse was so long that the firecracker could fall back to earth before it exploded. Well, of course, when you have a problem you try to find a solution. The solution was to cut the fuse in half. That meant that you had to light it and shoot it quick. We got to be pretty good at it, so that the firecracker would finally explode at just about the highest point that we could shoot it. And they always made lots of noise. We liked to do it at night time because we could see the flash of the flame when it exploded. I don't recommend it for other people to do now. And I would never have let my kids to anything like that. But things change from the time you are young until you get older.

Mother's religion was Christian Science. It was a religion that her mother had become interested in when Nettie and May and Sadie were small girls. They continued in the Christian Science religion until the death of each. Of course, the Christian Science religion says that you should pray to God, or have someone pray for you. In fact, it was a standard situation that if someone was ill they would call the reader in the Christian Science congregation, and have them pray for them. And pay them approximately as much as one would pay a doctor. The Christian Science religion had been started by Mary Baker Eddy in Massachusetts, and had gradually spread westward to become a fairly prominent church organization.

We lived 20 miles from the only church in Christian Science that I was aware of. That was in Fairmont, Minnesota. And in the summer time we would attend the church on Sundays. I would go to Sunday School. Then afterwards we would drive out to the local park, and spend the afternoon out there, either swimming, or, preferably, rollerskating on the only rollerskating rink in the vicinity. It was a very interesting time, and mother's religion was more or less looked down on by some of the other religion, such as Lutheran, and Presbyterian, etc. But, to mother, it was a part of her life. And she would spend about a half hour a day reading the works of Mary Baker Eddy, particularly her interpretations of the bible. The main portion was healing by prayer. Mother was committed to that. Whenever I was ill, or one of my brothers, they would call the practitioner and have her pray for us. And, I guess, since we all recovered eventually from whatever was ailing us, it was believed by my mother that the prayer was what caused it. She had ultimate belief in the healing by prayer until her sister May became ill with cancer. And then they thought that since the prayer did not seem to help, and the cancer was getting worse, she should go to a doctor. Of course, by that time, there was little the doctor could do. And my aunt May died. My mother continued to believe in healing by prayer until she finally became ill and eventually died.

Since we are talking about illness here, I should mention that I had a very common illness that happened to occur almost every school year at about Christmas time. It was called a croup. It was a kind of a cold, but would get very thick and heavy phlegm in the throat. It would cause coughing, and would make breathing difficult. In fact, it was a standard situation for me to be ill during the Christmas holiday from school. And when I was about 13 years old I was very ill one Christmas season. It was to a point where I could hardly breathe, and I was struggling. My

grandmother was living with us at the time. She said, "Well, he needs something to get rid of the phlegm in his throat. I'll fix something." So she got a teaspoon of sugar, mixed about a half teaspoon of kerosene with the sugar, and told me to swallow it. Well, the odor of the kerosene was such that I didn't want to do it. But nothing else was working, so I finally gulped it down and got it down my throat. Well, I think my throat just turned right around and came back out. Because everything I had eaten did. I just coughed and coughed. I had phlegm all over. I had a dish there to bend over, but I was just throwing up all over the chair that the dish was on. Well, that was a horrible five minutes. But after that I was breathing normally. I had no phlegm in my throat. And I was able to eat. In fact, I would now say that that was not only the end of the croup for that season, but surprisingly was the last year that I ever had the croup. So I guess, perhaps, there is something to be said for old time treatment of sicknesses.

The next thing I would like to tell you about is the kind of farm work I was engaged in when I got a little bigger, and was able to help in the field. You can say I simply graduated from watching the cattle in the pasture. In fact, I had a younger brother seven years younger than myself, who was graduating to that job. So I was then out in the field driving a team of horses, plowing the land, and disking the land. After that was done we would use what we called a drag. It was made of multiple metal bars with spikes on them. What they would do is break up the clods that were left after the plowing and disking. Then there was also the planting of oats and corn. We seldom had anything else, though a couple of years we did raise some flax. We sold the flax seed to the elevator, and I never did know what they did with it. We never used the stems from the flax plant except as a bedding for the horses in their stalls in the barn. It was pretty good for that because it was very strong and would absorb quite a bit of moisture.

Then after the oats had grown and tassled out, and the grain matured, there was the harvesting of the oats. We used what was called a binder, which had a cycle on it that would cut the plant about four inches above the ground. The plant would fall onto a canvas, that would carry it over to another canvas, that would carry it up a little bit where it would then move downward into the binder. This was nothing but a very large sewing machine that would take about four or five handfuls of grain, and tie a twine string around them, and tie a knot in it. Then it would cut the twine string behind the knot, and let the bundle fall out onto a carrier. About five or six bundles would pile up on the carrier, and then they were dumped. The object was to dump these so they would be all in a row. That is, every time it came to a particular location we would dump a group of bundles, then store the bundles on the carrier until the next row of bundles, and dump those there. This simply meant that we could come along that row of bundles, and take about eight bundles to make a shock. In other words, we would stand the bundles on the plant ends with the heads standing upwards, and put about eight of these together so they would support each other. And this was our shock. They would then stand there and dry in the nice dry summer days. But, of course, if it rained, they would just have to dry out in the clear days after that.

YOUTH: LIFE ON THE FARM

And then the next stage after that, after the grain was dried, was to do the threshing. And there was always one of the neighbors who had both a threshing machine and a power supply. The first power supplies that they had were steam engines. The steam engine had lots of power, and they did a very good job of driving the threshing. The threshing machine usually had an entrance for the bundles. They would be hauled in from the field on hay racks. Usually one hay rack on each side of the threshing machine. Then the person would throw one bundle at a time into the machine. It would chop up the straw, shake it, filter the grain out. The grain would come out of one spout into a wagon and the straw went out the big stack. It was blown out the back end of the threshing machine. Usually someone would then be stacking the straw so that it would make a very large, well organized stack of straw. My first job in the threshing business was to run the blower that delivered the straw out the back end of the thresher. And it was, of course, my job to try to put a little bit of straw in each place so that the person doing the stacking would not have to move it too far. He kept it organized, but it was up to the person running the blower to move the blower around so that the straw would fall where it would be next needed. And it was rather an interesting job, because you would really get cursed out if you blew the straw all over the person who was on top of the straw stack. And that was not permitted.

This is the first job I ever had in which I gained some money. I used to get about 25 cents a day, and that was a good eight hour day. But there was a thresher's dinner at noon time. And that made up for it there. As I got older I was doing a little better job and finally it got up to where I could get a dollar a day. And then I was asked to run the blower. I was asked how much I wanted for doing it, and I said two dollars. Well, they looked at

me kind of funny. I was paid the \$2, but that was what the men who were hauling the bundles in from the field and putting them into the threshing machine were getting. But, anyhow, that was my first big salary. Of course, it only worked for one day. Then the rest of the people knew what I was charging, and they wouldn't pay that much.

We had other work that we had to do when the grain was growing. For example, we had corn which was planted in rows. And actually in hills along the row, such that there was one hill of corn about three feet from the next hill of corn. The dropping of the corn seed was controlled by knots on a line of wire. Then after one row was planted; rather two, since two were planted at a time, they would move the wire over and plant going back. You could look down the row and see the nice, even rows. But since they were all planted the same distance apart, controlled by the wire, you could look crosswise and also see down the rows. Then they could cultivate down the rows lengthwise, and then crosswise in the opposite direction. That way we could get most of the weeds out.

Of course we always had cultivators which straddled the rows, and we could cultivate on either side of one row of corn. We would do that in one direction until we covered the field, and then we would do it in the cross direction and cover the field. Usually we would cultivate the corn about four times until the corn got so tall that we had problems of breaking the corn stalk off if we tried to do any more cultivating. But in the corn we also had morning glories, which had the habit of growing next to the stalks and winding around the stalks so that there was no way of cultivating to get rid of all of them. They would tend to bind the stalks together and they wouldn't grow quite as well. So dad had us boys out there pulling the morning glories. We had to go down each row pulling them. However, they tended to be in big batches in the field. And there would be spaces

where there were no morning glories. It probably depended on the type of soil, but I never looked into that. Anyhow, dad always wanted them pulled, and we never liked to pull them. So he developed a little procedure. If we pulled all the morning glories in that field over there, we would go fishing one day. And since we always went fishing in the lakes around Fairmont, Minnesota, which was about 20 miles from home, it meant that dad would drive the car over and rent a boat, and we would spend the day fishing.

That was a very sure way of getting the morning glories pulled. But we also had a couple of patches in the field that had Canadian thistles. They are very difficult to control, especially before there was any type of weed killer. So we would have to go out and hoe the thistles. Dad used the same type of mechanism to get us to hoe the thistles. But we also got a little fishing done that way.

Well, I mentioned that we had corn and oats. Once in a while some barley, which is a nice grain except that it had bristles on it. They had a habit of breaking off into your clothes, and penetrating through the pores of the cloth. And pretty well scratched the body. So every time we worked with the barley we had to have a bath afterwards and clean off all the stuff that had gone through the clothes. But we did have one other crop. That was potatoes. Sometimes my dad would have as much as seven acres of potatoes. They were pretty good. But they seemed to grow the best in a field that had a lot of peat in it. But peat has another problem. If dry it is a very fine powder, which would be all over the body and would scratch like mad. So it was another of those crops that made us take baths much more than usual. The usual was to take a bath every Saturday night before going to town. But if you were working in peat you took a bath every night. But we had no running water, so it had to be heated on the kitchen stove. So we got in the habit of peeling our clothes off when we got to the water

tank, and jumping into the tank. Even though the water was cold, at least we got the dust off in a hurry, and we would slip into clean clothes and then we could enjoy the evening.

The potatoes grew very well in these peat beds. We had one potato field that was about seven acres in extent. Then we had the problem of digging those potatoes. It wasn't too bad. We simply used a type of a plow that would plow the potatoes up and across a screen, so that the peat would fall through the screen and the potatoes would be left behind it. Then all we had to do was pick the potatoes up and put them into sacks or baskets and take them to the farm yard where they were usually stored in the basement of the house. Only once in a while did we have acres of potatoes, but every year we had enough potatoes to last us for a year's time. They supplied five or six people. And we had potatoes nearly every day. So it was quite a few potatoes. They were stored in a pile in the basement. There was always a little dirt with them, so they tended to keep very well. And if they didn't freeze in the winter we had potatoes for the whole year. Some people, if they were on a hillside, made a little cave in the side of the hill where the temperature kept constant year around. Potatoes would keep better in such a place. But we didn't have a hill near the farm yard, so we had to use the basement.

Besides all of this we had chores to do. And these chores consisted of feeding the pigs, watering the pigs; feeding the chickens and watering them. And ducks, if we had ducks. We really only had ducks during the time that grandmother lived with us. That was about seven years. She just wanted to have some ducks because she liked the duck meat. That way she would have a little spending money when she sold some. Of course, she was in the house, so she was working all the time helping mother in the house, cooking and washing dishes. And all the other things. Well, ducks

make an awful lot of noise during the night. My dad just hated the ducks. Something would scare them at night and they would make a terrific racket. And then he would curse them. But that's all they ever did do.

Well, with the amount of chores we had in the evening, we also had chores in the morning. You have to milk cows twice a day. And you have to see that all the livestock and chickens had water and feed in the morning as well as the evening. And they had to have their place of abode with manure cleaned out. So we had many things to do. Our days in the summer time usually started at about 5:30 in the morning. We first milked the cows and fed the horses. Then we would have breakfast. Then would feed the pigs and chickens, and get ready to go to the field. So we were busy most of the time. And the days came to the evenings. We would usually quit in the field about 5:30 in the afternoon. But then we had all those chores again to do. Many times it was 9:00 before we were through with the chores. But we always had supper time about 6:00 or 6:30. So after 9:00 in the summer we were usually ready for bed, and that's where we would head. In the winter time, of course, there was no field work, so everything was much easier. But also colder.

We always had to keep the chores done. And if dad went to town, sometimes he did not get back until after milking time in the evening. We had moved to Minnesota, to the farm there, in 1918. And we didn't get a car until 1926 or 1927. So if we had corn or oats to sell, or flax or potatoes or any of the grains, we had to take it by horse drawn wagon to the nearest town which was 10 miles away. And if you drive a team of horses pulling a load of grain for 10 miles and back, that takes a full day. And sometimes he would not get home until after dark. That left all the milking to be done by us boys. Those times mother would come out and milk cows with us.

We always enjoyed that because she could milk twice as fast as we could.
It always seemed so much easier.

LIFE ON THE FARM CONTINUED

When one is on a farm where there are animals, such as cattle, horses, pigs, ducks, even cats and dogs there is always the possibility of danger, either to the animal or to the person from the animal. So I'll mention a few of those. We will start first with the cattle. Of course, I mentioned previously that one of the things that we had to do as children was watch the cattle in the pasture so they would not see the better looking grass on the other side of the fence, and break down the fence and go from the grass into the corn or the oats. They could also damage themselves by eating too much, particularly if it was alfalfa grass. They could become very ill if they ate too much. So what we had to do is to keep them out of there. The cattle, mainly cows, had to be milked. When we were milking them there was the possibility that the cow could be affected by the milking, if we were not careful how the cow's tits were squeezed. It was possible that we could be knocked off the milking stool, either onto the ground or, if in the barn, to be knocked into the gutter.

There was one other thing that we found out early in life. The straw stacks when we harvested the grain were usually placed in the yard where the cattle would be in the evening. And, being young boys, we always enjoyed climbing up onto the stack and sliding off. But the cattle liked the straw stacks, too. And they would simply go around the stack rubbing the flies off their back. By doing so there was always a very dense straw stack with a place where they rubbed the flies off them but also rubbed the straw off the stack. Some of these were essentially one or two feet deep into the stack. Well, being kids, we liked to climb up on the stacks. And one of the things we liked to do was slide off onto the back of one of the cows. We

thought that this was fun because it would scare them. They would run around for a while, and we would hang on as long as we could, then fall off. But some of the cattle were a little smarter than that. They knew how to get the flies off, so they just tried it with bigger insects. More than once we just got pushed off by the cow pushing up against the stack and rubbing us off.

Of course, we had to work with horses when we got a little bit older. Even when we were young we had to feed the horses, clean out the stable, put new straw down for them at night. And all of these things posed dangers. There was the possibility that we would surprise the horse and the horse would kick. This could be very dangerous. Some of the neighbors were seriously hurt by being kicked by a horse. Begin I, myself, was once kicked by a horse. It was because I was showing off the horse to some of the neighbor boys

The high school team played scrimmage with teams from the seventh and eighth grades. And some of these players were much better than I was. Our gymnasium was small. In fact, the center jump circle intersected the loops of the two free throw circles. It was tough playing basketball on regular sized floors.

HIGH SCHOOL GRADUATION

I graduated in 1934 and was the valedictorian of the class. There were 17 students in the senior class, which was the largest class that ever graduated from that school. In fact, the year that I graduated there were only 53 students in the four years of classes, from freshmen to seniors. One of the girls was a pretty good student. She resented the fact that I was the valedictorian; because, she said, I never studied. Well, that wasn't true. I did most of the studying at school. I did some studying at home after the

chores were done and it was time to go to bed. I would study by lamplight for an hour or so. But I guess it just came easy to me. If I read it once I remembered it. The salutatorian, one of the girls, said I never worked. So I didn't deserve to be valedictorian. I guess that's one way of looking at it.



Loyal's graduation day from East Chain Consolidated High School.

The next couple of years I stayed on the farm to help my dad. Two of the students from the high school who had been in the year behind me, Mr. Floyd Johnson and Mr. Floyd Nelson, after they graduated went to college. I graduated in 1934. So after my two years on the farm I decided to go to the University of Minnesota. That was 1936. Though I had promised my dad that I would stay on the farm and help him until I was 21, he agreed that I should go in the fall when I was 20 instead of waiting until my birthday in December. Anyhow, I went to the University of Minnesota, and when I went in to register they wondered what course I wanted to take. I said I didn't know. Well, they said you should probably take a test and we can help you that way. So I took the test that they gave me, and afterwards they said that I should be in agriculture. I told them, that's why I am here; not to be in agriculture. Well, they said, what would you be interested in? And then I recalled a book I had read about the Civil War; and the hero of that book, after the war was over, went to college and became a geologist.

So I told him, well, it would be geology or engineering. Well, he said, that's easy. We have a course offered in engineering geology. Actually mining engineering and geology. So I was signed up for that, and was very thankful that I did because I enjoyed every minute of it. Often, a minor thing a future brings.

I did have to work there. I was getting \$35 a month working for one of the government sponsored programs to assist students. In addition, I had about \$35 a month saved up. So I was able to attend the university since the fees were \$35 tuition per quarter, or \$105 per year. Now as I look back on that and compare that with the present tuition that is charged, I admit that I was quite lucky or I would never have gone through college.

The first year I found a room about seven blocks from the university. It cost me \$5 a month. It meant walking seven blocks to get to the university as well as seven blocks within the university grounds to my classes. I had to eat in restaurants, and you would be surprised how many meals I had in the White Castle hamburger joint, which had hamburgers for 5 cents each, and a small pot of beans for 5 cents. So I could get by on 15 cents for my meal. And then I was able to get into a cooperative eating plan at one of the churches, where it would cost us \$3 a week, provided that we work an average of an hour a day helping. Doing the dishes or setting the tables or cleaning the dining room. That lasted for one year, and the next fall term. But after that I had to drop out of school for a year because I was out of money.

Gramma.....we couldn't provide her with money. We simply didn't have any. But she thought if she could just raise some ducks they would give her something to do. Something she could call her own. And when she sold them in the fall that money would belong to her. Well, my father agreed to that, but he came to regret it very much, because the ducks

would simply live in the yard, around the barn, and in the woods; finding whatever they could to eat as well as being fed corn and oats and other things from the house and barn. But at night they had a habit that if anything disturbed them, and they were sleeping in a group; one of them would jump and quack, and then they would all quack, and wake everybody in the house. My father regretted very much that he had allowed her to keep ducks. But he had no way of providing her with any other money, so he just lived with that situation. But those ducks sure could make an awful noise in the middle of the night.

You might wonder why I never seemed to have any money. Well, after 1929 the farmers crops and cattle and so forth could not be sold for very much money. In fact, my father took a load of corn to town one day to sell it. He thought he might buy some coal for the winter. Well, he had about 80 bushels of corn in the wagon, and he had to use a team of horses to take him to the elevator at Elmo, Minnesota, 10 miles away from home in order to sell it. And he only got 10 cents a bushel for the corn. That meant he got \$8 for the 80 bushels of corn that he sold. He had to pay \$2.50 a ton for coal. That means he only got about 3 tons of coal. That didn't last very long during the winter. Well, from then on it was much simpler just to burn the corn rather than taking it to market and buy coal. We could get more heat out of a load of corn than we could from the coal that we could buy with the money we would receive from that load of corn. Furthermore, we would not have to shell the corn off the cobs. We would simply burn the whole ear. It was much simpler that way. But, of course, we had many more ashes from the burning of corn rather than coal. But sometimes you have to do the things that are most convenient and cheapest.

I mentioned the ducks, and my dad would like to get rid of ducks. One year we tried to raise geese instead. But the geese had a habit of

wondering off into the corn fields and just disappearing. So we had to go look for them. They are not like ducks. They don't make much noise. Sometimes it is hard to find them out in the corn fields. The net result of that was that we only tried raising geese one year.

MOTHER'S RELIGION: CHRISTIAN SCIENCE

Well, I think I'll leave that for right now and talk about mother's religion. I mentioned previously that she was a Christian Scientist. I think she was the only Christian Scientist within the entire county in which we lived. If she went to church it would be at Fairmont, Minnesota, 20 miles from the farm. She could never get there before we had a car. Eventually we did get an old Model T, a second hand car that I think cost us \$200. But \$200 at that time was big money. So we could only get to the church in Fairmont in the summer time. And we usually tried to make it a combination of going to church in the morning at 11:00 o'clock, and then going to the Interlachen campground in the afternoon for a picnic lunch and a chance to go swimming. And then back home in time to do chores again. You must remember that with a Model T Ford if you averaged 20 to 25 miles per hour over the roads that existed at that time, you were doing very well. So it would take us an hour driving both going and returning home. But it was an enjoyable break from being on the farm all week.

Mother continued to study her religion every day, using the booklet written by Mary Baker Eddy, the organizer of that religion. She continued this until at a later age after they moved into Fairmont, Minnesota she could attend the services whenever they had one in the church. Then she became very active in that, and became the reader. The reader being the equivalent of a pastor, in that they would read the writings of Mary Baker Eddy as well as from the bible, in place of having a pastor. She was active in that until just shortly before her death.

HOLIDAYS

Well, one thing I haven't mentioned. And that is what kind of holidays we had. Of course, I did mention that in the summer time we enjoyed the 4th of July. We always tried to have a little money saved up to buy a few firecrackers and other things, so we could celebrate that way. But our main holiday was Christmas. We always had 2 weeks off over Christmas and New Years. And usually Christmas, since we were I would say very poor, was the time we would get new overalls or trousers, or perhaps a new pair of shoes. And that would be our Christmas gifts. Once in a while we might get such things as a pair of ice skates. We could then skate during the winter on the few ponds in our fields because we were 7 miles from the nearest lake. And in the winter time we would never go there to skate. In any case, there would usually be snow on top of the ice, and we couldn't skate anyhow. But I think I mentioned previously that there were such things as a dredge ditch to drain water off the fields to run to the nearest river. These ditches always had about 2 to 3 foot wide streams. In the winter time they would freeze. We could get on the ice there and skate for quite long distances. But just remember, if you skate a mile in one direction you have got to go back. That's 2 miles. We never quit too many of those. But there always was some little danger, and that is that the ice might be very thin in spots. And those spots would occur when there was a tile below the surface of the ice and the ice would be very thin. Well it was more than once that we went through up to our waist in water, and quite often we were a mile or two or three away from home. So we would have to walk home in the cold with wet pants. Mother often wondered why we didn't get more colds than we did. But just getting cold doesn't mean that you are going to catch a cold.

I mentioned that we lived 7 miles from the nearest lake, and I also mentioned that we had moved to Minnesota in 1918. And we did not have a car until the end of the summer of 1926. So in the horse and buggy days we might get to the lake once or twice on Sundays during the summer. Mother and dad would ride on the seat of the buggy, and my brother Wilbur and I would sit in the back behind the seat. We could enjoy the picnic lunch once we got to the lake; and, of course, the fishing. It was a pleasure to catch fish. But then it got to the point where our parents would not go once we were old enough to go by ourselves, or take the two Jensen boys who lived a half mile north of us. We would take them with us to enjoy a day of fishing and swimming at the lake. That would be always on a Sunday. We had a horse that had been brought from South Dakota. It was a relatively small horse, but he could trot at a very respectable rate of speed., seemingly forever. We would swim and catch fish, and bring them home. Those were some very pleasant times.

GOING FISHING

Of course, my younger brother, Carrol being 7 years younger than I am, and my older brother, Wilbur, being 4 years older, well by the time that we got a car I was 11 years old. But my younger brother was only 4 years old. So he never got to go with us on those trips swimming and fishing. Our fishing was for bullheads. We would catch them and take them home. We just put them in a sack and threw the sack in the back of the buggy. The bullheads have no scales on them, only a skin. But they could live for a long time out of water, so most of them were still alive when we got home. It was up to whoever caught them to kill them, take the skins off and dress the fish. We got the technique down very easily. We would drive a nail through inside the lower jaw so they could not get away from us. We would then cut the skin with a knife just below the head. Take a pair of

pliers and pull the skin off. Cut the head off and take the insides of the fish out and throw those into a bucket that we would feed to the chickens. The flesh of the bullhead would be left in the cold water and washed, and we would have a very pleasant fish dinner, and probably breakfast, and then noon the next day. And if we were really lucky there would be enough for a couple of days.

Now, there were other kinds of fish. There was the carp. The carp was a fish that had scales on, and it could be relatively small size, from the minnow on up. We never liked to get anything less than 7 inches in length, because that had enough meat on that we could at least get some to eat. But in the spring time the carp would run up the stream to spawn, and then we could get some that would weigh up to 3 to 4 pounds. The best way of getting them, though, was to spear them, because when they were running up to spawn they apparently didn't eat. We would dress the fish when we got them home. We might cook a few. Mother liked fish no matter what kind they were. But one time I found a recipe for making salmon in a magazine, and I decided that I would make some salmon out of the carp. Well, I did. We got quite a few carp one Saturday afternoon, and put the flesh in the jars so we had 2 jars of about 2 gallons each. I added the appropriate amount of salt, etc., following the recipe. It took about two weeks for the fish to become essentially the equivalent of salmon. The trouble was no one else in the house liked it, but I did. And I think I ate the whole thing during the next month without any help from my family. That was the last time I tried to make salmon out of anything.

FAMILY CARS

My father did not buy a car until 1926. It was a Model T Ford that had been owned by the neighbor for a couple of years. I think my father paid about \$250 for the Model T. Then, of course, he had to learn to drive, as

well as my older brother. I was not supposed to drive the thing because I was not old enough. I was 11. This was a 3 pedal jalopy. On the left was the clutch, in the center was the reverse, and on the right was the brake. There was no electric starter. You had to crank the thing from the front. Generally it was necessary to set the gasoline at a low amount so when you cranked it would start up and idle. Usually, though there was somebody sitting behind the wheel, and usually my older brother Wilbur would crank the car. It was in good condition, at least for that time. It had a canvas top on it, and had side curtains that could be attached to the top and to the car body, so that there was some protection from the wind. Now, of course, my dad thought he was the only one who should drive it, but since Wilbur was 15 years old he would drive it as well. Mother was willing to learn to drive it. Of course, I wanted to sit behind the wheel whenever I could even if I wasn't driving. But it wasn't very long until I would be permitted to steer the car down the road when we went to the neighbors. It was a very simple thing to learn to drive because all that was necessary to step on the clutch and the brake at the same time to stop it. And if you wanted to reverse it you would step on the middle pedal, and it would back up. I'm not sure what the gas mileage was at the time, but it was probably 11 or 12 miles to the gallon.

The seats in the car were at least wide enough for two people, but you could crowd in a couple extra. And it wasn't very long before I was driving the car as well. I could drive it if I was with my mother or my brother. But my dad thought no one should drive the car but himself, so when he was in it he drove. It was a very good car for the first one. We had that car for about three years, and then bought one of the first Ford Model A cars that came out. That one had an electric starter on it, a shift,

clutch and a brake. It was really no problem to learn to drive it. We thought it was a very excellent car.

One time with that first car my Dad figured that if we had pulled all the morning glories in one patch in the corn field he would take us fishing. Well, that was a good idea. So he and the neighbor were in the front seat and my brother and I were in the back seat, and we were almost to the lake near Fairmont, when all at once the back end of the car on the side I was sitting dropped down and the back wheel kept rolling on past us. We had broken the shaft and the wheel came off. Fortunately, we were about a mile from Fairmont at the time. My dad went into a farmer's yard. The farmer said, well, you can put your car in the garage to have it repaired, take my car and drive it home. Then you can bring my car back and I'll take you in to get yours. Well, that was a much better car than that Model T that we had, so that's why my dad decided he had to get a Model A so he wouldn't have those troubles with the wheel coming off.

One thing was very common, having flat tires. The tire had an inner tube in it, but the rubber was poor and if it got pinched there would be a crack in the inner tube and it would loose air. The only thing we had to pump it up with was a hand pump. So for quite a while we would do that until we could afford to buy a new inner tube. All in all, it was an interesting situation in which I learned to drive a car, and some of the things that might go wrong with them.

We had that Model A Ford for about 5 or 6 years. When I was in high school my dad bought a Chevrolet. It had windows on the sides and was a much better automobile.

HIGH SCHOOL DAYS

When I finished the eighth grade in country school, I decided to go on to high school. But the nearby East Chain High School, which was about 4 miles from our home, had a principal who everybody thought was absolutely terrible. So my dad and mother arranged for me to go to the town of Blue Earth. They drove up to the town to find a room for me to spend the week there. They found a house about 2 blocks from the high school, owned by a German lady. Her son was a senior in the high school. The rent for room and board was \$3 a week, that is 5 days. On Friday night my parents would pick me up and bring me back on Monday morning. So I spent one year going to high school there, but it was an awful lot of driving for my father and mother. Friday night was not so bad because they always went to town one night a week, usually Saturday night, to buy groceries. So they just changed it and bought groceries on Friday night. But it meant an extra trip on Monday morning to take me into Blue Earth. They had to be there before 8:00 when school started.

It was a very pleasant school. They had a superintendent who was a short German, and he just let it be known that if any of the students did not behave they had to be sent to his office. And the teachers did not mind doing that if the students were being difficult to get along with. Well, the first time he would give them a lecture. The second time he would tell them that if they ever came down again, they were going to go to the basement, and the janitor would hold them, and he simply would give them a spanking with a good leather strap across the rear end. Well, I didn't really think that would be done, but I talked to some of the fellows, and even the son of the place where I was staying had made the trip down. And he said, never again. That was the general situation. If anybody had to go to the basement and be chastised with a leather belt, they didn't misbehave any

longer. I thought it was a pretty good idea, but after that fellow retired no one else treated the students that way.

Anyhow, the second year the East Chain High School had obtained a new principal. And that was only a short distance away. And besides that my father obtained the bus route, so all I had to do was get in the bus and either my brother or my father would drive me and the rest of the students on that route to the high school. It made it very easy for me so I enjoyed that much more. That high school was very small. There are 36 sections of land in a township. Usually there would be about 4 farms per square mile. So on the average there would be about perhaps 6 to 8 students per square mile. That would be all grades from kindergarten through the high school. In the high school there was normally only about 40 students. So it was an extremely small school. In the high school they offered only 4 courses a year, and they did not offer typing because they only had one typewriter in the entire school. They did play basketball and softball. I would go out for them, but I was a very poor athlete, so I never made the team except on my last year in high school. I was a substitute because there were only 8 students out for basketball, and I was #8. There was a 7th grader who was a much better player than I was, in fact he was probably the best player in the high school. But they couldn't play anyone in the grades on the high school team. Consequently, I was one of the great athletes of that school that hardly won any games. That wasn't my fault, since I only played in an emergency when someone was so tired that they couldn't play.

I finally graduated, in what was up to that time the largest graduating class of any year. There were 17 seniors that year, and I was fortunate enough to be valedictorian. One of the girls there said it was entirely incorrect because I never did any studying. She studied all the time, and

still I got better grades than she did. She thought that was unfair. She was the salutatorian, of course.

THE STORY OF THREE FARMS

Well, about the time that I finished the high school we had gone through some other problems at home. My father had lost his farm in 1929. It was foreclosed on because we couldn't make any payments. He then rented the farm. The same farm. The loan that he had was a state loan, so when the foreclosure was made on the farm it became the property of the state. They simply rented it to him. The only thing that was rather difficult was that my father would write to them about the first of January and say he wanted to rent the farm again for the next year. All the farms were rented from the 1st of March to the 1st of March, so that they could be ready to go into the field in the latter part of March to begin planting their crops. Well, we spent about 3 years there. The state did build a new barn on the farm, and a new hog house for the pigs. And they rebuilt the house that we lived in. They enlarged it and made it a 2 story house, and put a big basement in it. So it was a much improved from the original house that we lived in, the one that had only 3 rooms downstairs and an attic for the upstairs.

The State of Minnesota had taken over so many farms that the legislature decided to renew the older buildings on the farms so that they could more easily sell them. Of course, they wanted to remove the oldest buildings. So they started with the hog house. Replaced it entirely at a new location. When they were rebuilding the house dad and mother decided to move all their furniture into the new building that would eventually be the hog house. Good thing that it was a mild winter, because there was no insulation in the building that would become the hog house after that first winter. They had a few cold days, but had two heating stoves

besides the cooking stove in that hog house. We moved into the new house in March. Completion of the rebuilding occurred in the spring. Also the barn was completed and a new windmill provided and erected to pump the water. Ah, all new buildings.

My father got into a little bit of trouble there, because one day about the middle of March a fellow drove in with a hay rack filled with machinery. He wanted to know where he could unload it. My father said well, what makes you think you can unload it here. He had bought the farm 3 weeks before, but the owner never bothered to tell us that it had been sold out from underneath us. Well, my father had no place to farm. So he moved the cattle to the neighbor next door, who had lots of space around his yard. We moved all our machinery there. And my father found a house about half way to Blue Earth, about 7 or 8 miles away from the farm where they could live. And since I was going to the East Chain High School at that time, I lived with one of the neighbors and helped them with all their chores for the privilege of staying there.

Then my father was looking for a farm to rent, and he heard about one over near East Chain, which would have been about 6 miles from where we originally lived. He went over to see the fellow who owned it. His name was Herman Nord, a good Norwegian. Well, he said, I don't have any place to live. I've always lived here. And I would like to continue to live here. I would pay room and board. Also, I have always raised beef cattle, and would like to continue that. So I would have to have some space. But if you are interested under those conditions, the rent will just be half the crops. And then I'll feed my beef cattle here. Well, my dad said, I guess we could arrange that all right. Oh, he said, there is something else. I want to meet your wife. So my dad said, all right, let's go. So he took him over there to the house that they were renting at that time. They went into

the house, and dad introduced them. Mother says, well now, would you like to sit down and have some coffee. I have just finished baking bread, so we can have some fresh bread and preserves. Well, Nord sat down and had two cups of coffee and two or three slices of bread. Then he said, you can rent the house. I will only want to use one bedroom upstairs. There were two other bedrooms upstairs and one other bedroom downstairs. Consequently, they moved onto that farm, and I left where I had been staying because this was in the East Chain Township where the high school was that I attended. So we lived there, and got along with Nord very well. He liked all the food that mother cooked, but particularly there was one thing that he had never had before but he really enjoyed. Mother used to make toast, then cook lots of milk, and put the toast in the milk. And that was the meal. We simply called it milk toast. And he just enjoyed eating that so much because he didn't have to chew it. She always put plenty of butter on the toast, and enough salt and pepper so he could taste it. So everything went very well.

Anyhow, I graduated from the high school. But I had promised my father that in order to go to high school I would stay with him until I was 21. That meant that I would have to work at home for 2 years before I could go to college, if I could find some way of financing it. Well, after one year there, after my dad had been on Nord's farm for 4 years, and the crops were very good since the soil was good, he made enough money on his half of the crop that he could buy another farm. So by the time I was 21 he had the other farm, and my younger brother was old enough to help a little bit with chores. And my older brother, Wilbur, who was 4 years older than I, was able to help my dad whenever there was any heavy work to be done. He had rented a farm across the road from where my father bought the

new farm. Dad saved enough money to put a down payment on a 160 acre farm just one mile north of the previous one he had owned. He did well.

After about five years on the new farm dad came home one day and said "Nettie, I want you to come up to Fairmont with me. I just bought a house up there. Now Carrol and his wife can run this farm." Mother was very upset. He bought a house without letting her see it, or asking her opinion. They drove uptown and into a house yard. Mother said "Is this the house? I've always said I'd like to live here. Why didn't you tell me?" Dad replied, "I was sure you would like it, but was afraid somebody else might buy it if I drove home to get you." It was their last home.

SCHOOL DAYS

I worked one summer before leaving for college, in the canning factory. They had a minimum wage of 35 cents an hour. But that was also the maximum wage. So the only way I could make any money was to work full time. That simply meant work while the factory was running. This became quite a problem because the longest day that I put in was 28 hours. That's from going to work in the morning. Then I would have to drop out for lunch for a half hour and a half hour for supper. But I put in 23 hours before I would crawl into bed for a couple of hours. Then go back to work again. The busiest week I put in 123 hours working. Now, that's a little better than three 40 hour weeks. But, since I was paying only 50 a day for room, and \$1 a day for board at a boarding house, which was close enough to the canning factory that I could simply check out, go over, eat my meal, and be back to work in a half hour. It was kind of a long job working there, but I made enough money that I could go up to the University of Minnesota. And I obtained a government job at the university that paid \$35 a month. I had to work there, and only got 35 cent an hour

for that, but then the federal government made up the difference so that I got \$35 a month.

I had to get by on \$35 a month, plus what little I had saved. It was rather interesting, because the tuition was \$35 for one quarter of university time, or \$105 for the full year. Well, I could make enough money to pay my tuition, room and board. The first room that I had was about three quarters of a mile from the university, but it only cost me \$5 a month. Then I ate with a group of students that ate in one of the church basements. That only cost us 50 cents a day, plus having to work about 10 hours a week washing dishes or setting tables, or cleaning the floors. There were enough students so that it wasn't difficult to do this.

Well, I didn't always have enough money to go to school, so I had to drop out after one term of my second year. I ran out of money. And that's the story that I'll take up next, because one of my roommates was Floyd Nelson. The other was Floyd Johnson. They had been there one year longer than I, so they were sophomores when I was a freshman. Those two were rooming together and I roomed in another place. But Floyd Nelson did not have any money, so he had to drop out of school, as I did. That will be the next thing that I will talk about. After a time away from home I worked in the canning factory again, so I had enough money to go back after being out of the university for a year. I'll take up next what I did for the year that I was out.

I had told my dad that if I could go to high school I would work at home until I was 21. He agreed to that. So I attended the Blue Earth High School my freshman year, whereas I could have gone to the East Chain High School only 3 miles away, with a bus going past our door. The parents of the students attending the East Chain High School did not like the principal there. And they were not alone. I don't think any of the

parents did. He had already been notified that his employment would be terminated at the end of the school year. So therefore I went to Blue Earth, which was the county seat of the county in which we lived; whereas the East Chain School was in Martin County. We lived on the border of the two counties. Blue Earth was 10 miles from our place and my parents had to drag me up there on Sunday evening, and then pick me up on Friday evening. We paid \$5 a week for room and board, part of it paid with dressed chicken or canned meat, or vegetables in the fall when the garden crop was ripe.

I obtained a room about 2 blocks from the high school for my freshman year. The landlady was of German descent. At first I couldn't remember her name. But when I thought of her son I remembered that his name was Lester, and their last name was Sohn. Her husband had died, and her 18 year old son, Lester, was a senior in high school. He was not a little fellow. He weighed about 220 pounds. I guess it was the good German cooking that did it. It was excellent except for one dish Mrs. Sohn bragged about. It was named blood soup. Apparently they killed a chicken. They caught some of the blood and put some of it in the soup recipe. It was bragged about so much that the first time she made it I had to try it, since I think she made it especially for me. Well, the first couple of spoonfuls went down ok. But on the third spoonful the spoon came up with what was actually was a very cooked prune. And, of course, the prune was coming apart and dribbling down, and my imagination took over and made me feel like I had to vomit. But I did make it to the bathroom, and that ended it. No more blood soup for me!

I was a freshman in the high school. About 60 freshmen were seated in one home room alphabetically. Lots of noise made studying there difficult. Some of the bigger boys were always shooting lead shot against

the metal ceiling, with the use of rubber bands. Most of the teachers there were very good, except for one man who taught only general science. He could not keep order. He would send the worst behaving students back to the home room. And once he tried to evict a misbehaving student from class. The student wouldn't go, and pushed the teacher, Mr. Anderson, around. He was then reported, and sent to the superintendent's office. The superintendent was a short man, but very well built and muscular. He talked to the student about his actions and then said, if you are sent down here a second time we will visit the furnace room. He had a way of enforcing his orders. The bad student who was taken to the furnace room was held by the janitor and whipped across the seat by the superintendent using a belt. It was reported that no student had to go down there a second time. They felt that once was enough. Consequently there was very good order in this high school most of the time.

I had good grades at that time because I studied every night, although after school I would usually play softball or backyard football. Once when playing football I chased the one carrying the ball and made a running leap, caught my arms around his ankles and bashed my face against his boot heel, splitting both lips. Oh, well. I survived, but was glad that my sophomore and remaining years of high school would be carried out in the East Chain High School.

I always seemed to have good grades. There were only about 50 students in the four high school grades. Most of my studying was done at school, because I had chores to do at night, and in the morning. When I was at home I traveled by bus to the school. My dad had one of the bus routes. I traveled that one, of course. The first year the bus was built on a wagon pulled by one of our horses. My brother usually was the driver. He had only attended one year of high school. My dad needed him to work in

the fields every year. So he was happy to drive a team of horses to the East Chain High School. Most of the time it was on a high wheeled wagon, but in the winter, when there was snow on the ground the bus was placed on a sled and pulled by a team of horses. That was more fun. We could stand on the runners, holding on to the back of the bus, since the runners extended a foot or so beyond the back of the bus.

I was not a good athlete. My first year at that school was the time I got kicked in the thigh by a horse. It made my entire leg stiff. It didn't regain the normal bending of the knee until the next summer when I had to use the leg when cultivating corn. The movement of the cultivator blade sideways loosened my leg joint, and that made it possible to enjoy sports the next year at school. I played softball and basketball, but was never on the first team until my senior year. Then we were permitted 8 players on the basketball team, consisting of 5 players and 3 subs.

THE TRIP TO TEXAS BY MOTOR CAR

We left East Chain area farm January 17, 1938, since Floyd Nelson had come from just east of Blue Earth, Minnesota, where his sister lived, to our farm near East Chain Lake.

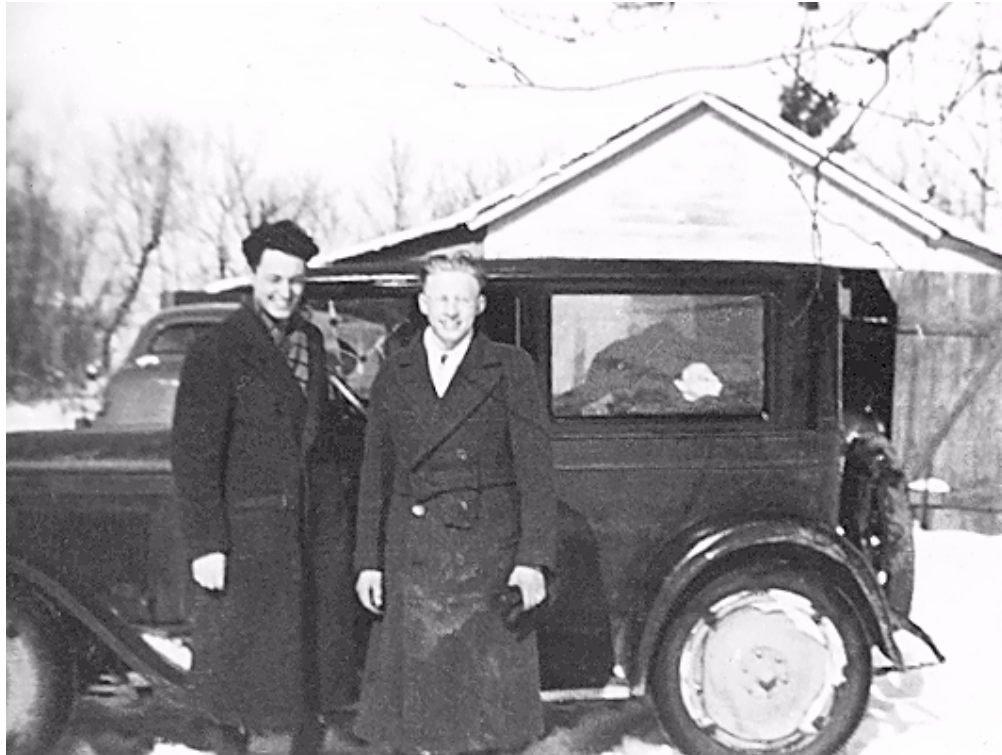


Figure 1 shows Loyal and Floyd in front of the Herman Nord farmhouse, 1 1/2 miles northeast of East Chain, Minnesota. The car is between the house and the garage.

My father had rented Herman Nord's farm, and Herman then rented a room in the house from us and ate with us, paying for his room and board. The location was five miles east of Fairmont, MN and six miles south on a county road. Floyd stayed overnight and we left the next morning.

There was about three inches of snow on the ground. We left there about 10:00 am, and drove westward through East Chain Village to

Country Highway 15, south into Iowa to Iowa #9, then west of Spirit Lake to Sheldon; then Highway #76 southwestward through Sioux City, Iowa (108 miles). Then U.S. Highway 77 Southward 166 miles to Lincoln, Nebraska (about 6 hours' drive) since we felt we should drive as far as we could at a speed of about 45 miles per hour. We wanted to get as far south as we could the first day, or even drive continually, changing off driving and sleeping. We decided to continue on southward on U.S. 77. Another two hours got us to the Kansas border. It was beginning to snow, so we continued southward. Gas was getting low, snow was getting deeper, and we were getting sleepy. About 20 miles south of the Kansas border we saw a gas station and "Lunch" sign. Snow was about six inches deep, so we stopped for gas and food.

We filled the tank and had breakfast. Snow was coming down steadily, so we stayed there. More people came in, as the snow was getting deeper. We had an early lunch, and were glad we did. The restaurant ran out of food and table space.



Figure 2. Snow in Kansas on the first day out.

About 4:00 p.m. a snowplow came from the north, stopped at the restaurant for lunch for the driver. No food, so they headed south. Our car

was the first one behind the snow plow.

We stopped at the first town, either Blue Ruprels or Randolph, where we rented a cabin for the night, at only \$2.00. Then we headed for the nearest eatery, one of those dining car conversions. It was snowing heavily. There were no other customers. Dinner was pork chops (2), potatoes and green beans with bread, butter and coffee, for 25 cents. How about pie for desert? Yes, we'd have some. One quarter of a pumpkin pie. We were charged 5 cents each for that.

We had a good night's sleep. The snow stopped during the night. We headed southward on U.S. 77 again, and entered Texas just north of Dallas-Fort Worth. The car was using oil and had a slight knock.

The next day we drove to Fort Worth, slowly. The knock was worse. We got on Highway 180 heading westward. Got about 20 miles to Weatherford. We saw a garage, and stopped to see if they could check the engine. We thought we might have a bad connecting rod. They didn't do any repair work. Floyd wanted to know if we could borrow tools and he'd check out the troubled engine. We pulled it out of the way.



Figure 3 is a picture of the car after Floyd replaced the piston rod.



Floyd repairs the car with borrowed tools.

He got the tools, pulled the oil pan and found we had a bad connecting rod to one of the pistons. The station attendant told us where we could get a connecting rod in town. The place had one: \$1.50. We slept in the car overnight. The next morning Floyd got to work. He replaced the bearing, returned the tools, and we filled up with gas. We remained at the location overnight. These were the first of many overnights in our car. We were comfortable enough, and very tired.

While in Weatherford we inquired about work in the oil fields. Most were closed down because of an oil and gas oversupply. Gasoline at the station was only 8 cents per gallon. Comment from locals was that most oil and gas was coming from west Texas. We decided to head farther west. We headed west on U.S. Highway 180, and inquired of local people in Mineral Wells, TX and Breckenridge about oil drilling jobs. Same results--most drilling was suspended due to surplus oil availability. Gasoline costs at oil stations were usually about 15 to 20 cents per gallon. All persons

inquired of said that oil well drilling was essentially stopped except for a few test wells being drilled to check oil potentialities. The companies doing that work brought in their own drill rigs and drilling personnel.

One company person said that the Hobbs, New Mexico, field was quite active. We continued westward on Highway 180 which passed through Hobbs. We reached Hobbs about January 22, and spent about four days in the area checking on possible work. There was some oil well drilling being done, but the rigs were brought in from other areas and the drilling personnel were brought in with them. No jobs available.

The Hobbs, NM area is very flat. No trees grew naturally in the area. Grassland seemed odd to us. The grass was very scarce. Cattle ranches were very large and cattle herds were small. We guessed they brought in cattle for the range only during the “wet” season of the year.



Figure 4. Mobile kitchen.

Of course, we slept in our car and cooked our meals on a two-burner gas camp stove. We usually drove out north of town, about two miles, on a

county road, parked, cooked our meals, and slept in the car. We were bothered by the lack of bathroom facilities, as well as lack of vegetation to hide behind. Cars on the road were not plentiful, but seemed to be more numerous when we needed bathroom facilities. Vegetation was so sparse and small that we had to walk 200 to 300 feet off the roadway to find a bush big enough to hide behind when we squatted down.

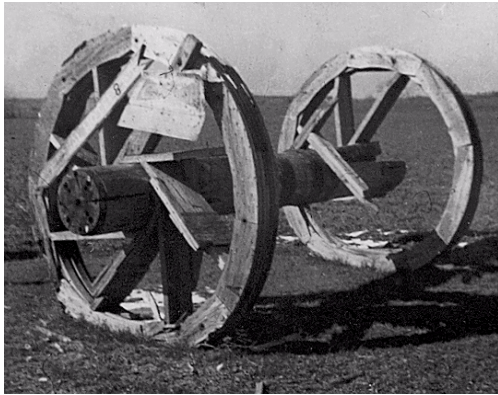


Figure 5. Remains of prairie schooner that brought settlers to

After four days in the area we headed westward to Carlsbad. We thought we would check this area because there were oil fields around Artesia and Roswell, New Mexico. We could also see the caves in the Carlsbad Caverns National Park, the largest in the

United States. So we drove over to Carlsbad, about 60 miles west of Hobbs and on the way to El Paso. We had to go to El Paso, because when Floyd Nelson asked Floyd Johnson if he could take the car that they jointly owned for the trip we were suggesting, Floyd Johnson had said “If you can get that car to El Paso, you can have my half.” I guess they paid \$50 for the car when they bought it. Johnson said we’d never get the car that far. Floyd replaced the piston rod, and the car was ready to go again.

While traveling through the oil country, we often saw relics of old prairie schooners that people who settled the West had used and discarded when they became broken. There were also many completed oil wells.

Pretty soon, as we traveled west from Hobbs, NM, we passed through some desert-like country, see Fig. 5; just east of Hobbs, NM and east of Pecos River. Finally we arrived in Carlsbad, NM. We thought we'd look around a while, and drove out to the edge of town at the rodeo grounds. This was a suitable place to park. Some trees, no leaves in January, but a place to park for the night. We walked for a little exercise, and cooked outside of the car.

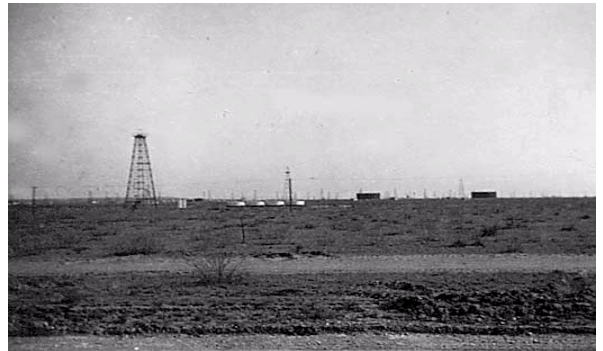


Figure 5. The flat Texas landscape was punctuated with oil wells.

We asked around Carlsbad about scenic areas. One person said that there



Figure 6. Landscape in the region of Carlsbad, New Mexico.

was a cave at an area, Sitting Bull Falls, north of Carlsbad, that we could visit at no cost. It was a little ways north of Carlsbad. He gave us the name of the road to turn off onto to get to the cave. We drove sixty miles before we found the road, still 10 miles from the cave. It wasn't worth it. Only about 50 feet into a hillside--nothing else. Back to Carlsbad again. We had spent several days there so decided to go to the Carlsbad Canyon National Park, about 25 miles southwest of Carlsbad.

We drove out to the park and headed towards the cave site. About 5:00 p.m. we got close enough that we could see the location on top of the ridge. We drove on, going down into the narrow canyon. Then we saw a place in the canyon where there was a small side canyon and a trail

towards it. We thought we'd drive down there by some small trees for supper and spend the night, since it was about four o'clock in the afternoon.

We got out our stove, boiled some potatoes and fried some bacon. Supper consisted of mashed potatoes with butter, two slices of bacon apiece and a couple of slices of bread. Then we walked down towards a narrow side canyon and found a little creek with a small pond in it, Fig.7. We tasted the water. It was cool.



Fig. 7 Pond with dead frog.

Then we saw a dead frog in it. Since the water was cool, we had some more, from a point just upstream from the frog. We went back and got our water pail and filled it, then cooked some coffee. While we were having coffee, Floyd thought he saw some one move down near the creek. I told him that was probably a deer or some other animal.

A little later we saw a narrow plume of smoke coming from the upstream direction. So we wandered down that way. We came around a very large boulder and there was the fire and two fellows, Fig. 8, cooking supper in a Dutch oven.



Fig. 8 Don and Smokey Felts welcoming Floyd to their campsite.

The younger one was shaving. We were invited to join them in the campsite for supper. We told them that we had just eaten, but would have a little of the stew. Glad we did, because a couple of days later Don told us that if we had refused the offer of food, his dad would have never forgiven us.

“Smokey” Felts had been a rodeo contestant and finally a rodeo clown. After his two sons were born Smokey’s wife got tired of the rodeo life, took the boys and went to California. She never contacted Smokey after that, although Don told us that Smokey considered that Carlsbad was his “home” and that’s how Don found him. He came out to Carlsbad and enquired until he found where his dad was working on a ranch. Don was 18 when he found his dad, just two months before.



Fig. 9 Billy The Kid’s hideout.

Well, we stayed around for a few days, walked the trap lines with them. Enjoyed walking over into a nearby canyon where Smokey had some traps set. There were remnants of an old rock shack there. Rumor was that this had been “Billy the Kid’s” hideout back in the hills. Fig. 9. It was interesting to me because there were some arrowheads in the area. We never found any good ones. The ones I found were broken. I guess there were too many rocks in the area, and if shot the arrowhead would break on the rocks.

On one of the trap rounds with Smokey, we found he had caught a fox, Fig. 10



Fig. 10 The fox.

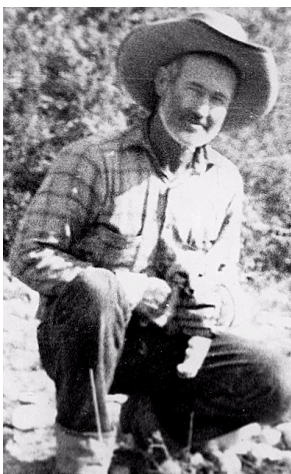


Fig. 11 Smokey Felts, the trapper.

Fig. 11 shows Smokey holding his catch after killing it. There were quite a few wild burros in the area.

Smokey said they needed to get to town to sell their “catch” and buy more food. So we loaded Don and the furs and headed for Carlsbad. We stopped at the fur dealer’s place and Smokey got rid of his “catch.” We then headed down to buy groceries. Smokey went into the bar next to the grocery store. After a while we went in. He was nursing a drink, but not slowly. Floyd, Don and I went out, bought some food, then drove out to the rodeo grounds for supper and a night’s sleep. Don stayed in town somewhere after we took him back in.

The next morning we went to find them to see if they were ready to go back to their camp in the park. Smokey was still in the same bar. Don showed up soon. Smokey said we had to go out to get their camp gear. He had taken a job as cook for a fellow’s sheep camp. He introduced us to his new boss; who said, if you two need jobs I might have something available. So he gave us his card.

We drove Smokey and Don back for their gear and took them back to Carlsbad with thoughts of moving on the next day. By morning Floyd had a toothache. We found a dentist, who relieved us of the tooth and three dollars. Short of cash, I wrote home to see if my last check, from last fall, had been received from the U. of Minnesota. We left our names at the post office, and said we’d be around to receive a letter from home.

We looked up Smokey’s boss and hired out as shepherders, at the same place as Smokey and Don had gone. The fellow, Bud Jackson, told us he’s give us \$30 a month and board. We were short of cash, expected to get about \$20 or \$25 in the check from home, so we took the job. It consisted of herding sheep, on alfalfa ground alongside the Pecos River, about 10 miles S.E. of Carlsbad.

The sheep were pregnant ewes and would deliver their lambs within

about three to four weeks. Smokey was the cook. The boss in charge, named "Old Sam," was half owner of the sheep. Another herder was a young person, Johnny, about 19 years old. He couldn't walk because of a lame leg, so rode a horse. He had a good sheep dog who could corral the sheep and keep them in one area on the alfalfa grounds. Really, Floyd and I weren't needed right then, but would be as soon as the lambs began to be born.

In addition to the 200 or more pregnant sheep, there were five goats. The idea was that the goats were good leaders and the sheep would follow them. Thus since it was assumed that the goats would stay where the good alfalfa was, the sheep would stay there too. Well, one goat had ideas of its own. That idea was to explore the brushy, rocky areas around the alfalfa fields. So we were kept busy chasing the goats back into the alfalfa fields. We also had to watch along the river. The fields were fenced along the river, but some ewes would head for the water. Most were stopped by the fence, but some would squeeze through under the lowest barbed wire. If they got down to the river through the willow trees, there was a possibility of them being caught in the water and carried downstream. One of us had to watch along the river all the time.

Smokey was the cook. Fig. 12 shows the grub box, the stove, a charcoal pit with pails and the charcoal.



Fig. 12 Smokey with his chuck box, Dutch ovens, coffee pot, and wreck pans. The bush behind is mesquite, probably several hundred years old.

In addition there was a kettle type charcoal grill which belonged to Smokey. There were always beans in one of the pots. If beans got low during the meal, Smokey would just throw more cold beans in the pot. If you weren't the first to get the beans you might end up with some only partly cooked. We always had coffee; usually no meat. But Smokey did make good sour dough bread. Well, we kept alive. We could eat at any time we wanted to, whether the food was cooked or not.



Fig. 13 Smokey in his kitchen out on the ranch. The “Goncho” hook that he is holding is used for killing snakes, stirring the fire, and lifting the lids off the ovens.

“Old Sam” didn't like us being there. We slept in our car while everyone else slept on the ground under a simple tent made of canvas over a pole, open at both ends. Old Sam was the only one who slept in a small tent. We found out that he was charged for half our salary. He didn't think we should have been hired. It was obvious to us that we weren't doing much except when the lead goat would get off into the brush and be followed by the other goats and the sheep. It was then a lot of work to get them back on the alfalfa fields.

Smokey told Old Sam that since we had no meat we should kill that lead goat. Sam said that would be ok. We chased the goat onto the alfalfa field. Smokey borrowed the horse and took a rope to lasso the goat. He chased it, but every time he tried to lasso it, it would evade the rope and try

to get away. Finally, Floyd and I caught the goat. Then Smokey slit its throat with his hunting knife and proceeded to skin and dress the carcass. That was done by 11:00 am. Smokey sliced some meat from one of the legs and put it into a can of boiling water. At noon we had beans and goat meat. We couldn't chew it into small enough pieces to eat, so we sliced the meat into very small pieces and chewed on them a bit; then swallowed the pieces. Well, it was meat. But was it worth it?

Bud Jackson, the fellow who hired us, came out that evening. We had more boiled goat meat. Jackson said we had too much goat meat, so he took most of it back with him to put in a refrigerator. Smokey hung the remaining leg over a fire and smoked it so that it wouldn't spoil. It was meat, but not-the-very-best. Mixed with beans it was better than beans alone.

A couple of days later I was down by the Pecos River trying to find some sheep that had crawled under the fence. I guess they wanted water or the green willow leaves down near the river. When I came up for lunch Floyd was gone. Old Sam had sent him with Johnny to take about 50 sheep about four or five miles back toward the Haroun farm to another alfalfa field and other shepherders. Smokey told me that Old Sam had really blown his top at Floyd because he had to pay half of Floyd and my salary. Smokey said he threatened Floyd and complained about his bad leg slowing him up, etc. I went out and told Old Sam to leave Floyd alone. No more complaining and berating him, or I'd beat the devil out of him. He was mad, but wouldn't fight. I'm not sure I would have either.

Floyd got back about 7:00 pm, dead tired. The next morning we drove into the Harune Ranch where Bud Jackson was staying. We told him we couldn't continue under these conditions. We asked for our money for the nine days we had been there. He was reluctant to have us quit, but

wrote out a check for nine dollars. We pointed out that we'd been told we'd get \$30 for the month, so that should be \$18. Jackson said "No, I hired you for \$30 a month. We only needed one man, but out here we never separate pals. That's not done."

So we took the money, drove back to camp, picked up a few things in our camping area, said good-bye to Smokey, Don and Johnny. Then drove back to Carlsbad. We spent the night on the rodeo grounds again. The next morning we went to the post office, and found that my letter from home and check for \$25 were there. So we headed back past Carlsbad Caverns on Highway 62 to El Paso. We drove through Guadalupe Mountains National Park, and took a picture of El Capitan, the highest mountain in Texas; Fig. 14.



**Fig. 14 El Capitan the
highest mountain in
Texas**

We drove to the west side of El Paso, where we would park the car, eat our supper, sleep in the car overnight, then drive around the town. It wasn't quite the city we had expected it to be.

The day after arriving in El Paso we decided to visit Ciudad Juarez. Juarez was in Mexico, so we drove to the north end of the bridge over the Rio Grand. We found a good parking place (we hoped), then walked across the bridge into the town (or city) of Juarez. The street leading from the bridge was the main business district that we saw. The bridge was a toll bridge. It cost 2 cents each to cross it into Juarez, but only 1 cent each to

get back into the U.S. See Fig. 15. It looks like a railroad bridge, but it was for car and pedestrian traffic.



Fig. 15 El Paso into Juarez by toll bridge. The cost was 2 cents.



Market Street vendors. Almost any food was available.

Almost any food could be bought there, but we wondered who could eat it. We got over into the side streets. One of them parallel to Main Street had women at every doorway. They were charging \$2 for their services. Floyd asked if they could put on a show for us. Of course, but the charge for that would be \$15. No thanks, we didn't have money for such things. Frankly, we were beginning to be afraid as we walked that street. Several fellows started to follow us, so we headed back to the main street.

We did take three other pictures. Fig. 16 was a picture of a Spanish Mission building



Fig. 16
Spanish Mission

Another picture is of a better class Mexican home, Fig. 17.



Fig. 17
Affluent Mexican
home

Then we took a picture, Fig. 18, of a poorer class Mexican home, made of adobe, a mixture of clay mud and straw, which had been dried in the sun until it formed hard bricks. They are piled together with a little water sprinkled between them. The water would soften the surface of the bricks and then become dry and hold them together.



Fig. 18
A poor Mexican home made of adobe, a mixture of clay mud and straw.

To tell you the truth, we were glad to get back on the U.S. side and found that our car was still where we left it. We went back to the west side of El Paso, to our gravel pit. It seemed to be a safe place. We never saw anyone out there.

The mountains just north of El Paso are called the Franklin Mountains. These were the only ones we were close to, so we spent one day climbing up them. I got to the top of the mountain just north of El Paso. Floyd took my picture. I was very careful where I walked. Several people told us that rattlesnakes could be out on a warm day. Fig. 19 is one of me at the top of the Franklin Mts., just north of El Paso, looking down on the city.



Fig. 19
Loyal on top of one of the Franklin Mountains just north of El Paso, looking down on the city.

We also visited the Texas Mining University in El Paso. I had been enrolled in Geological Engineering at the University of Minnesota. The Geological Engineering School at the University of Texas, El Paso was small. I thought that when I got back to Minnesota I would be content there.

We headed for at least Arizona. My brother's wife, Marie (Abbas) Bacon had a cousin out there. She thought we should stop at his orange grove and say hello. "His" orange grove was one his boss owned, but "He" was in charge of it.



Fig. 20
Entering Arizona

We stopped in Mesa, Arizona; and went to the post office to find where William Johnson lived. "No information given out of the post office." So I went to the Mesa Chief of Police. He called the post office, got directions and gave them to us.



**Floyd picking oranges at “Red”
Johnson’s grove.**

“Red” Johnson was glad to see us come. His cousin had written to say we might stop by. Anyhow, “Red” was not there, but showed up later. His wife made us coffee. I asked if we could go pick a few oranges. We’d had no fruit since leaving home. “Oh sure, there’s a group of trees right outside. Oranges have been picked but there is always some left. They are very ripe and very sweet.” We ate about 6 or 7 apiece, then were told we would have dinner with them. At that time we were sorry we’d eaten so many oranges.

When we got back to the car there was a man sitting on the curb. “What part of Minnesota are you from?” We told him. “Not far from where I came from, “ he said. We then asked him if we could take him home. “Ok, I live out in the country about 4 miles. Sure, let’s go out and have some coffee.” We did. During coffee this fellow was telling us that he was unemployed, but worked two days a week north of Mesa building a bridge. There was another fellow working there who showed them a bottle of gold nuggets. He panned gold the days he didn’t do relief work on the bridge. Well, Nelson wanted to go up towards Prescott to pan for gold.

We left Mesa headed toward Prescott, nearly broke. We headed north on U.S. Highway 17. Switched to State Highway 69. Road mostly

uphill. Our car had a vacuum pump to get the gas from the back tank up to the carburetor and then to the pistons. If we were going uphill for too long a time the vacuum pump couldn't keep up. We'd not get gas to the carburetor and would then have to stop and blow into the tank to get gas into the vacuum pump.

Well, we went uphill a long ways and turned a corner. There was a parking space. We could stop and blow some gas into the vacuum pump. Oh well, it's 12:00 o'clock. Let's have a sandwich first. We did. While we were eating a fellow came down the road and stopped to see if he could help us. He wanted to know where we were going. Floyd said we'd like to pan some gold and mentioned what that fellow in Mesa had said. This fellow listened, then reached in his pocket and pulled out a bottle of gold nuggets. He said, "I've been working down there. This is the bottle that guy saw. I've been panning a little gold from a small creek below the hill here. It's getting pretty deep to bedrock now, but I want to see if there is any gold there. I think the little stream I've been following may be covered by at least 6 feet of dirt and clay. If you want to come down and help me, I'll give you half of any gold found. He said that he thought it would be 7 or 8 feet to bedrock, then scrape the clay and dirt out of cracks in the rocks and pan that. We went to work; see Fig. 21 and Fig.22. Had little food but had a .22 rifle in the car. Shot rabbits and ate them.

Anyhow, we got a few gold specks; Fig.23. Estimated that there was maybe an ounce of gold. The fellow looked at it and said, "You might as well take all of it. No use looking any farther."



Fig. 21 .22 .23

Digging down to bedrock.

Hard work; little gold.

**Panning produced a few
flecks, about an ounce. We
called it quits.**



We pulled out. Went back to Mesa and stopped at my friend's place. We mentioned that we were nearly broke, would try to sell the car, and hitch-hike home. "Oh," he says, "I have a friend over here who has been talking about buying an old cheap car and driving back to Missouri. What do you want for it?" We said \$20. The fellow came over and bought the car. We decided to go the next day.

We headed out, back to Tucson. Said goodbye to the Abbas' and headed for the railroad. A freight train came into the station. There were people riding on top. We simply crawled into one of the open, empty cars and rode eastward. Got to El Paso. There were lots of people going east. We climbed on top of a freight car which headed eastward. Very cold at night, but we found one car carrying vegetables. We opened the ice compartment. No ice! So we climbed down in. 'Twas cold but no wind. Got to Fort Worth the next evening. Word was passed along, get off the

train before it stops. You might be jailed if caught. We jumped off as the train slowed down and got to the highway. Caught a bus heading northward and got off at the west edge of Fort Worth. Began hitchhiking northward from there on U.S. Highway 35.

We got to Oklahoma City about 7:00pm We were without funds, so thought we would have to walk to the north edge of the city. We only had a dime between us. Came to a small store. Nelson went in, told the storekeeper that we only had a 10 cent piece and that we hadn't eaten. He asked for a couple of bananas. The storekeeper gave him 13 bananas. When he came out we sat down to eat them. Soon a police car pulled up. They wanted to know where we were going, etc. Then they said we can give you a place to sleep, probably in the court houses, breakfast in the morning and a lift out to the edge of town. In addition, we will give you information of where to stay in St. Louis, Missouri. They will give you food, lodging and out of town direction. We will give you breakfast and a ride out to the edge of the city.

Everything went as they told us, but then we split up. It was easier to get a ride as one person, rather than two.

We split up after Springfield. Floyd got a ride immediately with a driver going to northern Iowa. He was home the next day!

We had been furnished an address of where to stay in Omaha. I spent the night there. The next day I went to Des Moines, Iowa; then to New Providence, Iowa where my lady friend lived. I spent two days at her parents house there, then hitch hiked to Blue Earth, Minnesota and home.



Loyal, left, graduating from the University of Minnesota in 1941, with a Bachelor's Degree in Geophysics.

RETURN TO THE UNIVERSITY OF MINNESOTA

I had to postpone my Black Hills Geology summer trip at the end of my junior spring term because I had to earn money for my senior year. The canning factory in Fairmont was the best place to work. The salary was minimum wage, 35 cents per hour, but I could work straight time. If the canning factory ran full time, I worked full time. In the peak of the sweet corn season I averaged about 130 hours per week, or about \$30 per week. I could take about one hour per day off for a meal at a nearby private family home.

My job was to cook the cream style corn. I had a helper to deliver the sugar and salt required for a batch of about 200 gallons. I managed to train myself to sit behind the tanks and sleep about 10 minutes, awoken to test the batch, run it to the canning location via the pipeline, and load the next batch. With two cooking tanks I could get about 10 minutes sleep per hour. My assistant, who only worked an 8 hour shift, would wake me if I overslept. Usually I would awaken after about 10 minutes.

After the sweet corn season was over I picked potatoes in the potato farmer's field. A well organized digging crew would dig two rows at a time,

leaving the potatoes on top of the ground. Then haulers would drop boxes between the two adjacent rows. We could pick about 600 bushels of potatoes into the boxes per day. At 2 cents per bushel, that amounted to about \$6 per person, working 8 hour days. Certainly better than 30 cents per hour. Well, if it rained, no work - no pay.

After my Black Hills field trip I turned in my report and stopped to say goodbye to some of my professors. I had worked for two of them in the Geology Department, plus one year part time for two chemists analyzing rocks. My job was to break the rocks into small pieces, take 1/4 of that, break it finer, take another 1/4, etc., etc. until I had about 100 grams left for the chemists' analysis. Some of the original samples were close to 200 pounds in weight. Lots of work; nice guys to work for.

I worked one year for Dr. Gruner. Then he asked me to work with him during the summer after my surveying field trip. He spent a week leading the class on a geology field trip after my surveying. Then he wanted to take his family to Rainy Lake for two weeks. He invited me to go with them to the lake before doing some geophysical magnetic work to try to determine if there was a connection between the Mesabi Iron Range and the Cuyuna Range.

I worked in the School of Mines the next year, making blueprints. Two of the mining professors did not have text books. So they used blueprints of their lecture notes. I took over the job of two other students who had worked the previous year printing those notes. They were always behind.

To get the job done I would go to the Mines School at night (I had a set of keys). I modified the procedure to run it continuously, printing, developing and putting sheets in order. I worked fast, 20 hours a week,

and was always way ahead. In fact, made enough for the next year too.

During my senior year I worked for the head of the metallurgy department. Anyhow, after I took my “junior year” Black Hills trip, the six weeks during the first part of the summer, I stopped in to see the metallurgy prof. I mentioned that few jobs were available. He replied that he had just had a call from a friend in U.S. Steel in Chicago. They needed another engineer. Would I be interested? I sure would, so he called the Chicago office. They said sure, send him down.

I went down in early July and was hired. The job was in a steel rolling mill. The work was 8 hours per day, 5 days per week, for 4 men; someone on duty all the time. A four week schedule allowed getting off at 7:00 a.m. one Saturday and going back to work on Tuesday at 11:00 p.m. A nice one month weekend.

The work consisted of checking on the heating of iron ingots up to about 2000 degrees until hot enough to roll into beams. We mainly checked temperatures with a temperature “gun.” O.K. then if hot enough to roll. The only problem was that if the ingots had been in the “heat soaking” pit a long time, there would be an outside coating of iron oxide and the heat guns would give a reading that was lower than the actual steel temperature. The fellows who worked in that section would know how long the ingots had been in the oven and from experience they would know whether the ingot would roll into beams without cracks on them. We had no way of being sure. If they sent any such beams to the rolling mill, we would have to walk into the rolling mill to visually note whether they rolled well. If not, they would show cracks. Such cracked beams couldn’t be sold and would have to go into a “heat treatment” again; be recast into ingots, reheated in the heating pits and again sent to the rolling mill.

If the ingots were left in “heating pits” too long, production would drop. A very bad “No-No.” So the steel workers would try to maximize the amount of well rolled steel. One of our group of four had been there long enough that he knew which of the steel ingot heaters would visually know which ingots were O.K. to roll. That fellow just sat in the office. The “heating” workers would tell him to just sit still. No trouble unless they knew the heating time of ingots was insufficient. He then reported it and mill rolling speed was reduced so that ingots in the heating pit could be heated longer. That way they got the maximum number of ingots rolled into beams, with the minimum of bad beams.

WORKING FOR THE NAVY DEPARTMENT

In September, after three months of work at the steel mill, I received a letter from the Navy Department stating that one of my college professors had recommended me for a job with the Navy Department. If I were interested would I fill out the government job application included in the letter. Payment would be a daily wage. How much was I earning in my present job? How much would I need in Washington D.C. or where ever I was assigned? I was getting \$7 per day. I would need \$8 per day in Washington or where ever assigned.

The second important question was: If my application was approved, how soon could I report for work?

Of course, I filled out the form and sent it in about the middle of October. Then came December 7, 1941, Pearl Harbor day. I received a telegram that evening. Report as soon as possible. My schedule was at the stage where my long weekend would begin on Saturday, December 24. Oh, they could only pay \$7 per day. I sent a telegram to the effect that I would leave my present job on the 27th and report in Washington on the

29th of December. I just had time for the two week notice of leaving before my long weekend. That gave them 2 1/2 weeks to find a replacement. Reported to my supervisor, received his condolences. Got off work Saturday, December 24 at 7:00 a.m.. Stopped at my apartment, showered, dressed, grabbed my bags. Caught the special downtown train, got to the train station a half hour before it left for the Twin Cities. I was going to get married.

MARRIAGE

When I had dropped out of the University of Minnesota for lack of money, my roommate, Floyd Nelson and I wandered around the southwest in the early part of 1938 looking for work. It was Floyd, Elaine's cousin, who introduced us in early 1939.

When Elaine was one year old, her parents moved to a farm a few miles west of Litchfield, Minnesota. Her mother died when Elaine was six years old, but her father managed to keep the family together until he lost the farm in 1929, when Elaine was 10 years old. She stayed with her father in Litchfield, where he worked as a house caretaker, until she finished high school in 1939. She then went to Minneapolis to live with her sister, Dede Crandall, and husband, Bill Crandall.

Elaine attended Minneapolis Business College for three months. In 1939, with no experience, she could not find a job. So she worked, for streetcar fare, at Schilling's Travel Bureau. After almost a year there she got a job at Investor's Syndicate where she worked until April, 1942. She married me on Christmas Day, a week before I left to go to work for the U.S. Navy Department in Washington, D.C.

Elaine met me at the station. She had arranged our wedding for the 25th. The minister was her brother, Art. Everything went on schedule. My

oldest brother, Wilbur, and his wife were there and they brought my younger brother, Carroll, and his wife. They headed homeward immediately after the wedding, since there was a winter storm warning. It reached southern Minnesota about a half hour before they got home. The roads were bad, but they made it.

By that time of the evening, 8:00 p.m., Elaine and I had checked into our hotel. 'Twas very stormy in Minneapolis that night. We were back to normal. I would leave for Washington on Thursday, December 29.

I got to Washington, D.C. the morning of December 30. Checked my bags, bought a local paper, went to a restaurant for lunch, read ads for room rental, found one, called the phone number, got directions to 203 P Street. Went out after lunch via taxi. It was a suitable row house. I would be the only roomer. Took it for 3 months so I could find an apartment and have Elaine join me, providing I were not shipped out. Again I got an early morning paper and found another apartment, which was the upstairs of a row house with kitchen, sitting room, bath, and enclosed porch which held a bed, at \$20 per month. It was suitable for the present, I wrote to my wife. She arranged to come in a month.



Elaine and Lloyal were married December 25, 1942 in Minneapolis, by Elaine's brother, a pastor. This picture was taken the summer of 1942.

I had been put to work in one of the government wooden office buildings, built for the 1st World War. Work was to check out equipment added to ships to protect them from being blown up by submarine laid mines that could only be detonated by the magnetic field of the ship. Ships had cables around the outer edge of the upper deck. Direct current flowing in the cables provided an opposing magnetic field.

The flow of current, using a single main coil, is usually used on merchant ships. Multiple coils would be used on most naval ships. It used a main coil around the ship, but also a fore and aft coil. For submarines or destroyers this pattern would be used. More coils get better protection. The more coils, the more D.C. current required in them, the greater the cost to install them and the greater the cost for the D.C. electric generator to produce the magnetic field.

Ships would have to be calibrated, sailed over a north-south route, and the direct current adjusted in the coils to minimize the field. Trial and error adjustment would be done until the best, that is the least, magnetic intensity was achieved.

I forgot to mention that in the northern hemisphere the main coil would have the positive field as in No. 1. Compensation with positive current field would change from drawing 1 to 1/2 of positive, 1/2 of negative. Special ships might have more coils yet. Usually transport ships would only have a main coil.

The number of people in this type of study increased with the number of ships being protected and the number of times they might have to travel in the depth of water that might be mined. At first magnetic mines were anchored so the depth of the mine would be close to the bottom of the type of ship being protected. The easiest way to lay a magnetic mine was to just

drop it onto the bottom of a shallow channel. There was always the possibility that a submarine may enter the channel and try to place mines where they could be left on the bottom. I went to work. The office had all non-military personnel except for one officer, a Lt. Ensign (lowest grade). He was the officer in charge of the civilian staff. I checked with him to see when I could expect a pay check. He informed me that my records had not come over yet from the main office. About 5 other people had been told the same thing. This officer wanted to send me down to Cuba.

I asked if my wife would be allowed to join me, and got an immediate reply, "You're working for the Navy. You can't expect your wife to join you." I said I didn't want to go, then. A few days later it was an assignment to the Panama Canal zone. I pointed out that there was no reason why my wife couldn't go there - no enemies in South America. Again I got told that this was war time. Wives were not included. He still told me that my records had not come over yet.

After about 3 weeks I was nearly out of money. I checked again. No, my records hadn't come over yet. Well, I said, "Then I'm leaving to go back to Minneapolis." He said, "You can't do that," then reached into his drawer and pulled out a standard form, wrote my name on it and said that I should be paid very soon. I went back to the office and told this to the other personnel who had always been told that their records hadn't been sent over yet. He had about 5 or 6 people he was telling the same thing. Now he was told by each one that they wanted to sign the same form as I had or they would find a higher officer. All were given a form. Our pay checks to date came over in 2 days. That's the Navy for you.

Most of the work was done in the field locations. The Washington group merely checked to see if field crews were doing a good job. I had been transferred to an office in the Washington Navy Building checking on

the field work. As the ships had their permanent magnetic fields removed, only the induced magnetic fields had to be minimized.

Finally, we had too many people in the Washington office. I asked for a transfer, and received one to the Washington Ship Yard. "Oh, I'd like to have you think it over," the officer said. My reply was, "I just did."

Consequently, I was loaned to the naval research lab, but still remained on the same payroll, in the same office. I reported the next Monday to the Naval Research Lab, much closer to my apartment, and was immediately put in charge of a project pertaining to detonation of electric torpedoes while in the submarine.

Electrically driven torpedoes would not have the water vapor trail that air pressure driven torpedoes have. Thus, the location of the submarine would not be determined. Our project might save a number of submarines. The question was, "Will the torpedo be detonated in the submarine by depth charges near the target?"

We used a section of an electrical torpedo. The torpedo had a two layer battery with a dry charged section on the bottom, and a top section which carried the acid. A blasting cap was in the portion between the top and bottom. The torpedo would be fired from the submarine. Twenty seconds later the blasting caps in the battery would be detonated. Acid would drop into the lower part and electrical energy would be fed to the torpedo's electric motor.

We started by submerging a section of electrical battery 400 feet from another test battery, next to our test station. We would detonate the electrical torpedo. Would that detonate the submerged battery? We started with a separation of 400 feet, and worked down by 50 foot intervals until the distance between the two was only 50 feet. Safe all the way.

Good enough.

While this was going on, the U.S. Congress was deciding whether they should build a new submarine research lab. They finally approved it. Two weeks later they were hiring new personnel for the new lab. It only took 7 years to build it. That's government for you.

So many people were hired that I checked to see if the U.S. Geophysical lab could use my services. Yes, they would like to hire me, for exploration work in the lead mine area in Missouri. I would locate mineral areas by their new(?) electrical method. I interviewed them at their Baltimore office. They liked my experience. Would I like to start exploration in Missouri? The next day I got home to find a letter from my draft board, saying I was 1A because I was changing jobs.

The next morning I went to the Navy Department personnel office. I talked to a WAVE. She said she'd do what she could. I got home at 4:30 p.m. There was a telegram from my draft board, stating that my status was back to what it had been.

CHILDREN

Oh, by the way; our daughter Diane was born May 24, 1943, and Marlys was born August 20, 1944. All I could do was take Elaine to the hospital. Neither one had a good waiting room, only space for 2 people. So I just went home for about 2-3 hours. In both cases I got back by the time they came down from the delivery room. They came home the next day.

We had rented an apartment, which had a living room, 2 bedrooms, bathroom, kitchen, and a small dining area, for \$30 per month. We bought all the furniture and dishes in it for \$500. The couple that had lived in it went back to New York and rented a furnished apartment there. Elaine's

cousin had come to Washington and lived with us. Another cousin came out and moved in. We sold furniture to them and they rented the apartment. It was in a very nice location and only about 10 years old. Lucky us. Then Elaine and the children went back to Minneapolis, to Dede's upstairs apartment, and I headed south to Missouri to work.

The Geophysical Department of the U.S. Geological Survey was headquartered in Baltimore, Maryland. It had 4 personnel. I went to Rolla, MO. The U.S. regional Geophysics office was opened there because the Missouri School of Mines was located there. The center of the lead-zinc mining area of Missouri was located between Pilot Knob and Frederickton in S. E. Missouri, about 90 miles S.W. of St. Louis.



Gramma and Grandpa Bacon holding Diane and Marlys, at Dede's house in Minneapolis.

Our first personal project was to take Elaine and the two daughters to Minneapolis. They moved back into the attic apartment at the Crandals again before I went to Rolla, MO via train. The railroad car I was in was from the 1890's. Lamps in the car burned kerosene. Riding in it was only a little better than a horse drawn wagon of about the same age. Oh yes, I got to Rolla, MO.

I checked in at the office that the Geophysics group occupied. My new boss, George Johnson, was there. We outlined our work area in the Fredericktown area.

We were to do resistivity work over known ore bodies to show that they could be detected. Our first project was to go to the Silver City, New Mexico area. There were deposits of iron ore and manganese on Silver Mt. just a few miles S.W. of Silver City. Since we were driving a truck down with our resistivity gear, I wrote to Elaine to see if she could come down to Rollo, MO and ride down to Silver City with us. She asked her sister "Dede" if she could take care of the little ones for a couple of weeks. "Dede" was very agreeable.

Elaine spent about 2 weeks with me on the trip from Rolo to Silver City and about 10 days in Silver City, then returned via train to Minneapolis.

Getz and I hired 5 Mexicans and one 17 year old American, named Bill, for our field work. The 17 year old could speak some Spanish (I should say Mexican). We spent some of the first few days taking readings over known deposits, and the rest of the time exploring other areas. We did find several small deposits.

Silver City, New Mexico is about 60 miles west of the white sands of New Mexico. The first atomic bomb was detonated in this area while we were in Silver City. It wasn't announced until after the detonation, so we didn't hear it or see the plume. The announcement came after the fact.

We spent nearly a month in the Silver City area. There were some good weekends. Once our employer invited us to his house for Sunday dinner. We had Mexican tacos. Very hot. Then we went horseback riding and watched the neighbor boys try to ride a burro donkey. He wouldn't move. They hit him with a stick. He'd just try to lie down with them. Guess he thought he could get rid of them that way. He almost caught one of the boys legs under him. We had an enjoyable day.

We worked 6 days per week. We were glad to head back to

Missouri. One Sunday, after we got back to Rollo, MO, I borrowed a set of golf clubs. The course we played was in fine shape except that they had sand "greens." We would hit the ball onto the "green," then use a flat rake to make a smoothed track about 20" wide from the ball to the hole. Putting on loose sand is not the best.

From Rollo we went to Fredericktown and spent about 3 months working there over known ore bodies. We could detect them, and did find a few anomalies for which bore hole exploration did not find ore. In general, though, things worked well. In August the head of the mining company, the name of which I've forgotten, invited my boss, Mr. Johnson, myself, and my assistant, Getz, to dinner. After dinner Johnson told the mining engineer that the geophysical group (i.e., us) would explore all the mining property of the company, but he wanted something on the side for exploration on mining company land. There was a very quiet interval. We left soon after that. Our boss, Johnson, said he was resigning from the job and would report it to the U.S. government. Getz and I also said we would resign. We did, and Johnson resigned, but he filed a complaint.

Ultimately, the guy was removed from his job as head of the geophysical division, and was allowed to continue working 2 years until retirement at 65 years of age. Not the best, but it eliminated a trial in court. Guess there are kinds who want more.

I went back to Minneapolis, returned to draft status, and took my army physical. Flunked the hearing test, so that ended that.

I went back to Minneapolis, applied for any job available and was hired by a mining company on the Cuyuna Iron Range. A week after reporting for work the miners went on strike. However, there was plenty of work in surveying.

PENN STATE

About 3 months after the labor strike began I received a letter from Penn State. It pertained to the fact that the Geophysics Department wanted to hire an employee to do regional geophysics work looking for geological structure that might be oil bearing. The old story; look for the structure, find one, drill it for the yes or no answer. One of the geophysicists in the branch where I had previously worked had a brother, a geologist, at Penn State. He told his brother that I had worked for the U.S. Geological Survey, and recommended me. Thus, the Penn State Geophysicist heard that I might be available. They had my last known address. Elaine and daughters were still in her sister's upstairs apartment. They contacted her, then me. I considered it an excellent opportunity to do graduate work. Next job: graduate student, employed by Penn State. I could take 6 semester hours per quarter towards a master's degree.

I quit the mining company to go out to Penn State. Elaine was almost due with our third child. She took medicine that hurried him up. Richard was born March 31, 1946. When I arrived at Penn State in June, the first thing I did was contact a geophysicist I had met who worked for the federal government. We determined that the west central portion of Pennsylvania should be surveyed by air by the U.S. Geological Survey, to outline the variations in the magnetic field of that area. That was approved for the next summer - at no cost to the college.

The fall term I enrolled in a graduate geophysical course, 3 credits, and a research course, 3 credits. I also became familiar with their earthquake detection equipment and took over the operation of that. I changed the recording paper every day (including weekends). It determined the time of the earthquake, and the approximate distance from the recorder to the location of the earthquake. I then sent a report to the

U.S. Geologic Section in Washington, and kept records of all earthquakes recorded.

I continued looking for a house to rent. Houses were very scarce, and I did not have a car. I met a student named Donald Yerg, who had a single room. He thought I could move in with him. The room had two single beds. He was in graduate school studying weather forecasting, working on his PhD. He said if I moved in with him we each could pay half the rent. Sounded good, and that place was only about 6 blocks from our office building. Yerg's parental home was about 25 miles east of State College. I went home with him several weekends, a very short bus trip. He had one married older brother, and we often went walking in the woods with him. Don's father had been dead a number of years, and his mother had a man friend who owned a gun shop and repaired guns. They finally married, and later she died. At the time of this writing, 2002, Don's step-father is still operating his gun shop and is about 93 years old.

In the fall I was busy with the magnetic data obtained by the Geophysical Airborne Magnetometer. I did spend one day flying with them. The weather was quite windy. The flight was bumpy. I got sick and vomited once. Guess it had happened to others in the plane. They had a supply of paper bags.

After the airborne work was completed the U.S. Geological Survey sent me all the records. Mapping and interpretation of the data would be my thesis project. I would have to do some ground work the next summer.

Every day I checked for housing in the local paper and campus papers. In late fall a friend of Pirson's, whose name was Johnson, told him that the car he had ordered a year and a half before finally came in. Johnson said he didn't need a car now, but I certainly did, because I

couldn't find a house in town to live in. Johnson didn't need a new car because he was moving back to New York and he would have to sell the one he had because there was no place to store it, inside or outside, where he would live.

This fellow then said that he had looked at a house a couple of months before that was for rent. It was located about 10 miles southwest of State College, next to the highway. He said he would drive me out there to see it. We looked at the house. It was unlocked. The house was in good shape, but old. We drove a half mile to the farmer's house. He said, I'm sorry. I'm the president of the local school board. We met last night and hired a new principal, if he could find a house to rent. I told him I had one. It was rented last night. However, Peterson, who lives about a mile down the road, has a vacant house. Try that.

We drove down there. Peterson said "It isn't rented yet. Take a look at it." It was a frame house, with a living room, dining room, and kitchen downstairs. In the basement was a furnace, but only a dirt floor. On the second floor there were 3 rooms, of which 2 were fairly small. The other one was not too bad. There were beds there, a stove and refrigerator in the kitchen, and a few chairs in the dining room. The living room had a couch and one chair. I said I'd rent it. Peterson said he had some things in his attic, a small table and some chairs. Rent was \$30 per month.

Johnson then said I could have the new car that he had ordered and that was in. We drove back to the car dealer. He said sorry, but it has to go to the next person on the list. Peterson said, I just changed my mind. I'll take the car. The dealer laughed and said, I know you'd just sell it to him. O.K., that will cost \$635. I said fine, took out my checkbook and paid for it. I had received a check for \$695 from the federal government a week before, a refund from a savings account they had deducted while I was

working for them.

I called Elaine the next night, told her to ship what few things we owned at her sisters, such as crib and mattress, etc., and that I would meet her at the train station in Altoona. Time went slow until word came as to when she would get to Altoona. I said I'd have a car to bring them back to the Peterson house. Never told her that I had bought a car.

Finally she notified me when they would arrive. I was there. She didn't believe it was my car at first. Oh well, we got to the house. She didn't know that I had enough money to pay for the car. But the refund from the government had arrived in time.

After graduating and obtaining my Master's degree, I intended to stay for my PhD. degree. Then Cleveland-Cliffs Iron Co. asked me to come up to Ishpeming to do some gravity work in their search for iron ore. I rented Penn State's gravity meter and drove up there. Was in the Ishpeming area for a month as a consultant. Prof. Longacre from Michigan Tech was also working for Cleveland-Cliffs that summer doing magnetic exploration work. After he went back to Michigan Tech for the academic year, the Department of Physics thought they should offer an M.S. degree in Geophysics. They had offered such a degree 20 years before when several people had wanted such a course. Prof. Longacre had taken his M.S. in Geophysics at that time, but the professor who taught the course had transferred to the U.S. Government Service about 15 years before my time. Anyhow, Prof. Longacre recommended me and I was invited up for an interview.



Loyal is awarded a Master's Degree in Geophysics from the University of Minnesota.



In the meantime, I had returned to Penn State with the idea of staying for my doctor's degree. When I got back from my summer trip to Ishpeming, Dr. Pirson told me that I would have to teach the undergrad courses in Geophysics, since he was leaving the college to go to work in Texas as a Geophysicist. I had no choice. I had to teach the Geophysics courses that year. I also took several math courses that semester.

To make the story short, I had to be at Penn State that year, but I accepted the Michigan Tech offer for the following year, 1949, and we moved to the Copper Country.

MICHIGAN TECH

Our friends in the Geophysics Department at Michigan Tech found us a house in Painesdale. It had 12 rooms, no heat to the third floor, and a coal furnace with a 24 ton coal bin, which was filled once a year. It was a big furnace, and had to be loaded only twice per day. Very comfortable. It was a 10 mile drive to Michigan Tech. My office was in a house across the street from the Physics building. My appointment was half time teaching and half time research. For my second year I moved to an office building in the old Physics building, where I stayed for 3 years. Meanwhile, the Mines research building was constructed and I moved over there. I had 1 room for an office and 2 rooms for research; and by then 3 or 4 graduate students all working on different research projects. They varied from instrument design and construction to geophysical exploration of special areas in the Upper Peninsula.

I also did some consulting work for the Calumet and Hecla Company in Calumet, 10 miles north of Houghton. Developed I.P. (induced polarization) equipment to check underground bore holes for copper. The miners would drill holes for blasting. They were never sure how far the copper extended from the underground drift in ore. They would drill out horizontally about 8 feet on each side of the drift, use the I.P. equipment to find how far out the copper extended, then only place the explosive that far out in the hole. Thus, they wouldn't blast free rock that didn't have copper in it. Really, it was a method of improving the grade of the copper going to the stamp mill and minimized the amount of ore to be run through the mill.

There had been many exploration holes drilled in the copper country to explore for copper. We could check the old holes and, if open yet, run the Induced Polarization pickup device, taking readings as a function of

depth to see if any copper existed beyond the size of the bore hole. This essentially increased the diameter of the core from its actual size, to give information out to approximately a 10 foot radius. Only one or two holes had copper values sufficient to mine, but not enough to make it worthwhile to open a new mine. No new areas were opened.

This type of work was my consulting work. A number of students earned additional money this way.

When the new math-physics building was constructed, I moved from the ores research building to the physics building basement. We now had two nice offices, a large laboratory space and a storage room for keeping our equipment for measuring the magnetic and electrical features of rocks from the Upper Peninsula and other locations.

SOUTH AFRICA

During this period a former geology professor recommended to the United Nations that I go to Swaziland in South Africa, where a considerable amount of airborne magnetic and regional gravity measurements had been taken, and to analyze the work that had been done there. They were looking for mining areas. Previous exploration had found some good iron ore in the southwest part of the country. The purpose of the trip was to see if we could interpret the data they had obtained, and thus find some new ore bodies.



The changing of the guard at Buckingham Palace.



Buckingham Palace, the Queen's castle.



An elderly gentleman turned out to be an expert guide to the city.

I left December 29, 1969 for Swaziland. Stopped in London for 4 days to talk to one of the geologists who had been in Swaziland. Walked from my hotel over to see the King and an elderly fellow came up to me and asked if I would be interested in seeing the guards assemble before marching over for the change of the guards. I was, so he took me over to the buildings where the guard personnel lived. We watched them assemble. Then back to where the guard was changed. Very interesting. Then he wanted to know if I had time the next day for a tour of some of the interesting areas. It would only cost me \$20. I had a free day before I met one of the geologists who had been in Swaziland. I agree. He met me at my hotel the next morning and we toured many buildings in different parts of London. Good thing he knew where he was going. I enjoyed it, but was glad to get back to my hotel.

The next day I visited one of the geologists that had been in Swaziland. He was interested in the geophysical work that had been done and wanted a copy of my report when it was written.

I left the next day for Swaziland via Berlin, and then south more or less along the west coast of Africa. Got to Johnasburg, S.A. the next day. Checked into a hotel for the night. The next day I left via plane for Swaziland. There was a good hotel for which I had a reservation. Oh, by the way, I was picked up at the airport the next morning for the flight to Embabane. I loaded my camera with a new film, and took some pictures that day on the way to Embabane. There was another fellow on the plane, John England. He also was going to look at the geophysical data. We rode into town, took rooms at the hotel, and had dinner together.

We found that the next day was the King's regatta at the cattle corral

on his property. We all went. I took a full roll of film of the goings on. By the way, nobody used movie cameras. King's orders, no "moving" cameras allowed. It was quite a show. Most of the women only wore skirts, many dancing and singing. When I got to 30 exposures I tried to put another film in the camera. The one in the camera had not advanced - so I had no pictures. The party was held in the King's cattle corral, which was never cleaned up. So there was lots of manure on everybody's shoes. Oh well, it was a good show to watch. Lots of singing and dancing, eating and drinking. The next day was the day to work..

We worked on maps of magnetic data and geology the next 5 days. Then John Person and a friend of his decided to go to one of South Africa's nature parks. They said that they would pick up return permits. I said that my card said I had entrance to Swaziland at all times. We were going to one of the national parks. We drove to the pass gate at the north end of Swaziland, and checked out at the gate. I was told that the pass I had was not sufficient to get back into Swaziland. I pointed out it said "For entrance to Swaziland for 2 months." The gate keeper said "That's from New York." I argued. He said you don't have a pass to get back into Swaziland from here. I argued a little more, but put a 10 Rand bill on the counter. Pretty soon the guy wrote out a return pass, picked up the 10 Rand bill, and said thanks.



Cottages near the National Park in a lovely setting at the town of Embabane.

We had quite a ways to drive to the campground. The gates closed at 8:00pm. We knew it would be a close call, so we didn't spend much time looking at an elephant group crossing the road. Had to stop until they all got across. Got almost to the campground and saw cars stopped on the roadside. We got closer. There were 2 lions lying in a stream bed. We stayed in the car, watching them, then finally decided it was close to 8:00pm. Drove to the campground. The gate was closed and locked. The guard said "You should have got here before 8:00 p.m. That will be a 10 Rand fine for late arrival." No choice. We paid, plus 3 Rand for the cabin we had requested.

The cabin was built of vertical poles and a thatched roof. We entered, and found the inside all new and in excellent condition. We spent a pleasant night. The next day we drove through the park, and saw many giraffes, ostriches and other game. See the picture of the herd of elephants we had seen the previous night. The food and campground was excellent. Recommend it highly.



A herd of elephants crossed the road in front of us.

We drove around the park roads until midafternoon, then took a road in South Africa which paralleled the west side of Swaziland until we got to a highway that led to Embabane. Back to go to work the next day.

After two weeks there I took a plane to Johnasburg, where I picked up a plane to London via Munich, Germany. Spent a day in London, including dinner at the home of John Person; then took a flight to New York, Chicago and Houghton.

'Twas good to get home; now to write the report. Made good money and had a very good trip. Good to get home to wife and kids, and back to work at Michigan Tech. Some of my letters home got there after I did. Oh well, people can move faster than the mail. Report finally written and sent to Swaziland.

I continued work as a consultant for C & H Mining Co., and also began a consulting project with Charles Elliot. His office was in Tucson. The project was analysis of cores drilled in South America; i.e., Peru, to see if we could find indications of copper in cores from

near surface drill holes. Lots of work, hundreds of cores. Not much luck. The pay was good, though. We finished up that search. The Peruvian project finally ended. Elaine and I spent a month in Tucson finishing up some reports with Elliot. Then we went to a geophysics conference in Los Angeles, and headed home for the fall term at Michigan Tech.

Consulting work and overseeing graduate theses problems, plus 2 or 3 courses to teach during the academic year, seemed to take up all my time.

I continued consulting work with Elliot in Tucson, AZ. Several problems down there were questionable. One of the C & H engineers had been to a mining convention in Tucson. He met a fellow who had opened an adit into the hillside along a stream bed. He was mining a low grade mine. He thought C & H would be interested. Gave the engineers directions to his copper recovery system and the mine in the hillside above the stream.

The company geologist, James Pollack, and I went down to the Tucson area and drove out to the mine. We followed the written instructions, turned off the highway at the location mentioned, followed the trail to a fence line, and opened the gate according to instructions. Then we drove down a stream bed. Thank the Lord, there was no water in it. We finally came to the fellow's system for removing copper from the broken rock. It was just a low spot in the stream bed. He put the broken rock in there and added water and acid. The copper would dissolve. He would take the broken rock out, add more, etc., etc. Finally he would drain water off into a tank, build

a fire under it, boil the water off, and recover copper. Oh, by the way, the rock came from an adit into the side of the hill above his spot in the creek bed. Nothing else was there. We could see that they had not removed copper ore from the adit. Our conclusion was that he was trying to pass some useless property off to a mining company who wouldn't investigate before buying. No copper came from that area. Don't believe everything you are told. Look before you leap. After the guy learned we had gone and looked, he probably went looking for another sucker.



Left to right in front are Pat, Gramma Bacon holding Sherrill, Rick, Jim; in back are Diane, Grandpa Bacon, Lloyal and Marlys.

FAMILY TRIP WEST

We decided that a family of 6 children was enough. So we began to talk about taking the children on a long trip westward. Tried to figure out how we could finance a two month trip west. We figured we could leave home when Sherrill was about 3 years old. We would need a trailer to haul things in, eat in and sleep in. A trailer for the 8 of us would be more expensive than we could afford. I suggested to Elaine that if we had a relatively small trailer to carry clothes in, and one that we could cook in as well as sleep in, we could get by very easily. We could pull the trailer with the jeep. Elaine and I in the front seat with Sherrill, 4 kids in the back seat and the 6th on a temporary seat in space behind the back seat. The trailer would have four wheels close together, thus would be easily leveled. See sketch, Fig. 1. Two doors near the top, one on each side would contain the tent tops and the front and back ends of each side tent. See A of sketch.

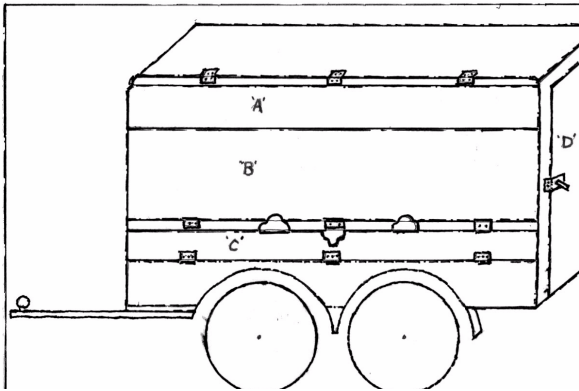


Fig. 1 The camping trailer designed by Lloyal which featured fold-out tents.

I asked Vernon Nichola of Dodgeville, Michigan (about 2 miles south of Houghton) if he could build it for me. He said yes and ordered the trailer system. He built the frame for the trailer at a very reasonable cost. The body was half inch thick plywood bolted to the one inch square metal frame. Tents were to be arranged at each side with the tops, sides and floors attachable by heavy brass zippers, each about 6 feet long. See Fig. 1.

We then checked out our probable route, heading westward via Minneapolis where Elaine's two oldest sisters lived. Then south via Fairmont, Minnesota, where my parents lived and the farm worked by my brother, Carrol. Then on toward Denver on our way to the west coast.

The trailer was completed and packed with our things. We were ready to take off, to Minneapolis, then Fairmont, where we spent one day parked next to dad's house. We then took the shortest highway westward, U.S. 90, to U.S. 81, southward to a night at Grand Island at a nice campground on the Platte River. The next day it was 370 miles westward on U.S. 80 and U.S. 76 to Denver. We camped at the edge of Denver and drove to Carl Schwenk's place after

dinner. He lived high up on the mountain at about a 7000 foot elevation. No way would I try to get up there with the trailer. We didn't stay long. Back to bed in the trailer.

The next morning about 9:00 we went south on U.S. 85 about 100 miles to Pueblo, Colorado; then west on U.S. 50 152 miles to a campground at Black Canyon of the Gunnison. Very nice campground. As we were setting up the tents a car with two kids pulled up just behind us at the next camp site. They sat in their car and watched us set up camp. They slept in their car that night after having a supper. We sleep in the tents. The next morning we walked to the canyon edge and looked down. Very far down. There was no trail. We just looked. Then we packed up and continued westward.

We came to the N-S Highway 550, and stopped for gasoline. Then in drove the people who had been next to our camp the night before. We made a few comments about the campsite and drove off, and headed southward on U.S. 550. After driving about 100 miles we saw a sign that said South Mineral Campground, at a narrow gravel road. We drove southward a little farther. Elaine looked at the Colorado map and said "I don't see anything about a campground between here and Durango. Let's go back to that road where the sign indicated 5 miles to South Mineral Campground." We turned around and on the way back met the same people again and waved to them. We drove into the South Mineral Campground. It had nice shady trees, nice camping spots, and a stream about 8 to 10 feet wide. We picked a very nice spot for our trailer, from which we could hear the stream rushing over the rocks.

We started to open our trailer and in drove the car that had been behind us the night before. They had seen us going back northward and knew we had seen the campground sign, so they thought they would try it too. We exchanged names, where we were from, etc. Enjoyed the campground, the noisy stream and the people They were Abrahamsons, from San Angelo, Texas.

Rick found a worm for his fishing rod and fished in the stream. He caught one nice trout, which we cooked for the kids. Enough for all of us. We stayed there two days. Our friends from Texas invited us to stop by next time we were in Texas, which we said we would do. They were heading home and we were heading for Grand Canyon National Park.

We drove into New Mexico from Colorado via U.S. 40. Enjoyed 2 days at Grand Canyon National Park, then decided to head Northward across the Grand Canyon via Echo Cliffs Highway; i.e. U.S. 89. We drove north on 89 to Page, Arizona, where we crossed the canyon and went west on U.S. 89. Soon after starting that way in southern Utah, we began hearing engine problems on uphill grades. Continued until St. George, Utah. Found a garage. They said the noise was a connecting rod. "You're lucky you got this far." We found a nearby campground, and set up our trailer tent. Then we took the car back to the garage. They said it should be repaired in a couple of days, so we rented a car from the garage and the next day drove the 30 miles to Zion National Park, where we spent the day. We got our car back the next day. It cost only \$75 for the repair job including a new piston rod. We left the next morning via U.W.

Highway 15. It was only 75 miles to Las Vegas. We pulled into one of the city parks.

The kids wanted to see the gambling joints, so we stopped at the first one we came to. Of course, no kids allowed. There were 3 or 4 slot machines just inside the big entrance doors. I gave each of the kids a quarter and then in turn I put the quarters in the slot machines. They stood outside the door. I operated the slot machines. Results: two blanks, two fifty cents (i.e., 4 quarters each). Of course I had to pull the handles while they watched from outside. They wanted to continue that game, but Elaine and I said NO. We found a campground (free) for the night, then started southward on U.S. 93 the next morning. The kids enjoyed crossing the Colorado river at the Hoover Dam site.

It took two and a half days via Phoenix to get to Tucson. Charles Elliot, his wife and 3 children lived there. I had had an exploration project with "Chuck" Elliot for a couple of years and usually flew down there once or twice a year.

The kids enjoyed the nearby parking areas in east Tucson. I visited Elliot's office and discussed some of the analysis of rock samples from Peru. We were looking for chemical variation in rock samples the might be related to oxidation of copper sulfide minerals. A lot of work had been done, but no mineralization had been found. The method was good but no ore was found.

I spent a couple of days in Elliot's office. But then we and the kids wanted to continue into California. We left Tucson via State Highway 86 to go via the Organ Pipe Cactus National Monument. On

the way over there we got beyond the little town of Covered Wells and had a flat tire on the trailer. Turned around and went back to the little town of Sells. Had the tire repaired and continued the 60 or so miles to the Organ Pipe National Park.

Near the entrance there was a small parkway through lots of Organ Pipes. We drove through there, then decided to head north on AZ 85 to Gila Bend at the junction with U.S. 8. No campground so we pulled into the first tourist park with cabins. We thought it was time for a shower. Elaine took the girls into the women's shower and I took the boys into the men's shower. When we got out there was a couple waiting for showers. Their car license was from Michigan. We introduced ourselves. They were from L'Anse, really 8 miles north of L'Anse. Only 32 miles from Hancock, Michigan. We enjoyed the evening and made plans to get together in the fall back-up-there.

The next day we headed west on U.S. 8 to Yuma, Arizona and Bada, California, then to San Diego where my old college room mate Floyd Nelson lived. We spent a day with them and then looked up Elaine's cousin's daughter, who lived on the north side of San Diego. She had been married to a man who had emigrated from Germany. He never went back during the war. It turned out that his brother was a very strong Nazi and he didn't want to be associated with Germans. So he had a job in San Diego five days a week. It turned out that he told his wife that he was working on weekends. Actually he was gambling. She found it out when someone took over their San Diego property. She divorced him and was trying to make a living for their two children. We never met her ex-husband but left after a couple of

days and headed northward along the Pacific ocean shore line. Took our time northward camping alongside the highway. Lots of turn-out places. Each one different.

We made one trip eastward from San Francisco and San Jose to Yosemite National Park. It was a very busy place in the summer time. Headed up through Sacramento towards Redding, California. Turned northwest on Highway 299 and got back to the coast just north of Eureka, CA. Followed the coast northward until we reached Tillamook near Oceanside, about 50 miles west of Portland. Tillamook, Oregon was famous for cheese. We went through the cheese factory, bought a couple pounds for lunches and a five pound package we had sent home, to arrive there after we got home. Wonderful cheese.

We then drove eastward through Portland on what is now Interstate 84. Got to the Dallas where we found a quiet stream leading from a roadside park to a very nice lake. Hurray! We finally got to put our canoe into the water. Stayed an extra day there before heading eastward towards Idaho and Missoula, Anaconda and Butte, Montana on Highway U.S. 90. We continued southward to enter Yellowstone National Park via U.S. Highway 89.

Before we got to Missoula, Montana there was an earthquake near Mammoth Hot Springs with severe damage to one camp ground in the N.W. Corner of Yellowstone. Many trailers were wrecked and two people killed. Obviously, we were thankful to be a day late getting to Yellowstone. We took Highway U.S. 297 east of Butte,

Montana down to the West Yellowstone entrance. We thanked the Lord that we spent that one day canoeing out there in Oregon.

We pulled into the campground at West Yellowstone, had a leisurely supper and then watched one of the bears snooping around the campground. Toilet facilities were of the wooden, two-holer kind. We watched a woman enter one, shut and lock the door. A bear came up and pushed on the door. She had it locked and yelled to her husband to chase the bear away. He was laughing so hard he couldn't do anything. The bear finally walked off and the woman came out berating her husband for not chasing the bear away. Nobody got hurt except the husband got bawled out.

We spent a couple of days before heading out the east entrance from the park via U.S. 16 eastward. Continued eastward to the Black Hills near Spearfish.

This part of the trip west was very interesting. Last spring (March 29, 2002), I had asked Diane if she had any recollections of the western trip in the jeep, with the home made trailer coming behind. The following paragraphs were her reply: " I still have the carved ivory earrings that I bought in Chinatown. The dinner we had there was awesome to me because we were such a large bunch, and the Shippeys and Aunt Jenny and our whole crew. The table was big enough for all of us and just loaded with delicious food."

"I remember camping in South Mineral campground near Silverton, Colorado (the most beautiful campground in the world—I have been back there several times and I still think so." Oh, by the

way, she remembered that Richard went fishing in the stream there with cheese for bait, and caught that nice trout for supper.

We camped one night near Central City, Colorado. The play in the opera house that night was Die Fledermaus. Elaine took Diane and Marlys to that. I stayed in the campground with the four young ones. Diane thought this was “the biggest highlight of the whole trip...and still remember scenes from it and contrast it to every other production I see.”

Of course we had to see the National Monument No. 1 near Spearfish, South Dakota. It is an extrusive volcanic rock pile near the highway, or there the highway is near the rock extrusion. About 700 feet high and the rock cooled with rhombohedral (eight-sided) columns around it extending about 400 feet. Very worthwhile National Monument.

We spent the night in a U.S. campground near the monument. There was a Shakespeare play given that night. Elaine took Diane, Marlys and Patricia to that. I put the young ones to bed and waited up for the play-goers to come back for the night.

The next day we drove eastward to near Mitchel, South Dakota and spent the night in a campground. Very heavy rain that night. Our tents on the trailer got soaked, but we just rolled them up and drove to my father's house in Fairmont, Minnesota. We spent two days there, then went on to Minneapolis. We had a day at Dede's house, then drove home to Hancock. The house was still there.

End of a holiday. Good to be home.

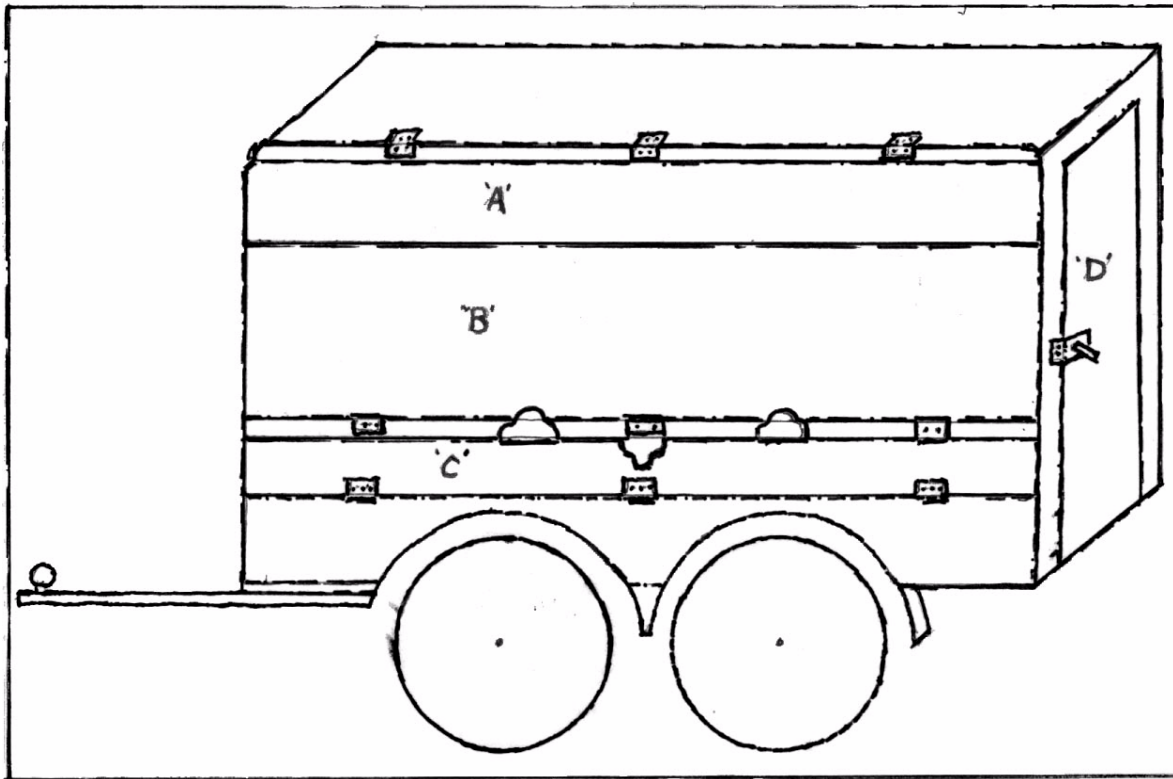


Fig. 1 Home made trailer system

A Enclosure for left hand tent top.

B Enclosure for cooking equipment.

C Enclosure for bottom tent on left side, with attached front and back tent sides for the left hand side tent. All tent portions are held together by heavy zippers. Elaine sewed all zippers onto the canvas. Similar arrangement on other side of trailer.



Orrin Bacon building a garden terrace behind the house on Vivian Street.



Loyal took his dad bass fishing near Iron River, MI. He didn't think he would catch any. Once he began to watch the bobber, he did. He caught 14, his most memorable fishing trip.

At home in Hancock, with a growing family.



Elaine and Loyal



Marlys, Diane, Patricia, Elaine, Loyal, Richard, Sherrill and James.