

Lighting Up Minnesota

When it was dark, you could see without electric lights, but it required more work. In the 1930s, our family had three kinds of illumination; gasoline lanterns, kerosene lanterns, and candles.

The candles were the easiest, if you had dry matches. That was usually the case inside, but outside in Minnesota, candles would be easily extinguished by snow, rain, or the wind.

The gasoline lanterns produced the brightest light by far – almost as much as a modern light bulb. But, there were several inconveniences to their use.



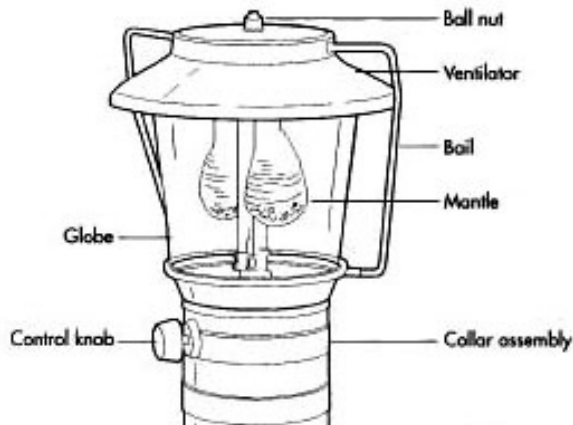
The gasoline lantern had to be



pressurized by pumping air into the tank so the gasoline would make it up to where it was burned. Some lanterns, like the one on the left, had built in pumps. Others had only a place where an external pump could be connected. A good pumping would keep the lantern going for most of an evening, so the pumping was not much of a bother.

A bigger problem was the mantles. When brand new, these mantles were not much more than silk or linen bags that were tied around the spouts where the pressurized gas came out. The gas would hit the hot mantles and burn very brightly. Most gasoline lanterns had two mantles.

When the mantles were new, they had to be tied to the lantern and set on fire to create a skeleton of ash fragments which would not burn up when the gasoline was burning to



create the light. When the knob was opened to release the gas, a match was placed under the mantle to start the gas on fire. Then, a very bright light would fill the room, along with some noticeable fumes.

The mantles worked fine as long as the lantern was sitting stationary on a table or some other immovable surface. But the ash components were very fragile. If anyone bumped or abruptly moved the gasoline lantern, the mantles were likely to break apart rendering the whole lantern useless until it was shut off, cooled down, and the whole process of pumping and installing the mantles was begun again.

For reasons of convenience and practicality, the kerosene lantern was the most common form of illumination. It was easily carried, not very fragile, did not require pumping, and the flame was enclosed in glass and therefore protected from rain, snow, and wind. The only two problems with the kerosene lantern was that it smelled and was not very bright.

A kerosene lamp had a large cloth wick that hung down into the kerosene in the tank below. No pressure was required. The wick just soaked up the kerosene all the way up to the top of the wick which was raised and lowered by a knob on the side of the lamp.

The setting of the wick was very touchy. If the wick was too long, the lamp would smoke and use too much



kerosene. Then, the inside of the glass bowl would get caked with soot and very little light would shine through the glass. If the wick was set too short, the lamp would either be very dim or go out completely. As a young boy, I became very good at adjusting the wick so it was just right. It was one of my major lifelong achievements.

All-in-all, though, the kerosene lamp worked pretty well. My parents had some candles, two gasoline lamps for the kitchen and living room, and five or six kerosene lamps for use both inside and outside.

One of our heating stoves burned kerosene, too, and one was a wood stove. Most of the time, we heated the house

with the kerosene stove because it was much easier than keeping the wood stove properly filled with wood and free of burnt ashes.

One of my jobs was to carry in a five gallon can of kerosene each day and fill the tank on the back of the oil burner. The can was an old can originally used for engine oil. It had been beaten about quite a bit and it leaked near the top, so when I carried it, the smelly kerosene frequently spilled on my clothes.

Later on, my father, Frederick Otto Zimmerman, bought three 55 gallon drums which he piped together with copper tubing. Then he ran the copper tubing into the house and hooked it up to the oil burner. Then we did not have to carry in the oil every day.

About once a month, the Phillips 66 oil dealer would deliver kerosene (or fuel oil) to us in a big red truck and fill up our three 55 gallon drums.

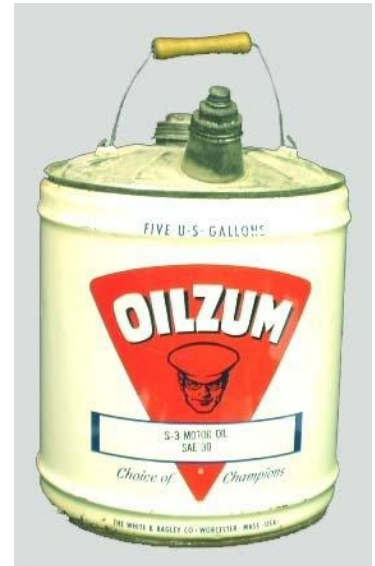
Besides the oil burner, we had an old fashioned wood stove that looked very much like the one at the right. It worked very well



and it was cheap to use because the wood was free. On 30 acres of land, we had plenty of wood. A city block is about five acres in size. But, the wood had to be cut and split and that was quite a bit of work.

Wood stove had two disadvantages. They required lots of wood that had to be cut and the ashes from the burned wood had to be removed. My mother and father used the ashes to fertilize the plants in their garden.

There was plenty of wood, but it was not so easy to cut it. Before we had the John Deere tractor, cutting wood was very



slow, hard, and frustrating. We had a chain saw, a Lemco, but it almost never worked very well. It was very difficult to start and it vibrated so much that the bolts that held it together would come loose and the chain saw would almost shake itself apart. Every few minutes, we had to shut off the chain saw and tighten up all of the bolts so we could use it for a few more minutes.

Most of the time, we cut the wood with a crosscut saw or a buck saw. The buck saw was quicker because it had a very thin tight blade. It worked very well for small pieces of wood – up to about five inches in diameter. If the wood was bigger than that, the blade of the buck saw would twist and stick. So then we used the crosscut saw.



The crosscut saw had a handle that could be moved from one end of the saw or another so it could be used by either one or two people. Even with two people, it would perhaps take fifteen minutes to cut through a good sized log. Since we used about five of these each day, it took quite a bit of time to cut enough wood to keep warm.

After the wood was cut, it had to be split with an axe or a splitting maul. It was easier to split the wood on very cold days because the wood was frozen, so it split easily.

After a while, I got to be a pretty good wood splitter, but probably not as good as my dad. Either of us could split up a log segment about 12 inches in diameter and 18 inches in length in about six swings of the splitting maul on a cold day. If the temperature was above freezing, it took more swings.

My friend Gary Turner had to split wood, too, but he wasn't very good at it. Later, he became a minister and we were glad he did not try to become a lumberjack.



The John Deere tractor took most of the work out of cutting the wood. There was a large 36 inch saw blade mounted on the front of the tractor. The saw blade was turned by a big flat belt that was propelled by the big pulley on the right side of the tractor. You can see on the picture below where the flat belt had worn most of the paint off of the pulley.



Cutting wood with the John Deere was very fast. A log that would take fifteen minutes to cut with a crosscut saw could be cut in about fifteen seconds with the John Deere. We could cut a whole week's worth of wood in less than an hour. But then, it still had to be split.



The John Deere also made it much easier to haul the logs out of the woods to where they could be cut. We would hook a large cable or chain around a large log, then hook it to the John Deere, and then just drag it out of the woods.



The lighting changed some when our home first received electricity when I was about five. Electricity had arrived earlier in the cities, but it did not arrive until later in the country because it cost so much to string the wires in areas where not much electricity was sold.

Although we had electricity, we never got rid of our lanterns, candles, and lamps because the electric lines were not always reliable. We were frequently without electricity during storms or times with high winds. We could not call about it, either, until we got our first phone in 1946 when I had just turned eleven. The number was 28F12 and our ring was one long and two short rings.

The next year, we got our first well and we had indoor plumbing. Before that, we had to carry water from the neighbors.

So, that is pretty much how it was with the lighting and heat in Minnesota when I was a boy.



Some funny things happened. One day the Mayor stopped by to help us splitting the wood. As usual, he was not very helpful but he wanted to APPEAR helpful. So, we let him try to split the wood with an axe. However, his wig fell off when he was doing it and he chopped his wig in two. What a shame.



Later on, Mrs. McGillicuddy's grandmother stopped by to help us. First, she started to split the wood with her umbrella and she almost did it. So the I offered to hold her umbrella and I handed her an axe. It turned out the she was able to split a whole

cord of wood (4 feet by 4 feet by 8 feet) in 43 minutes.



One time, Ponderosa Pete and Slippery Sam tried to steal our wood. But my father rigged up a wire around the wood and connected it to a high voltage coil from a Model T Ford. When he touched it, it gave Ponderosa Pete a gigantic electric shock that turned him into a soprano. They never bothered the wood again.

And, that's the end of the story.

