

Making butter

Grandma had a churn that made butter out of cream. Making butter was another of those magic tricks. My childhood was filled with magic. Such an extraordinary world to awake in. How could whitish thick liquid turn into hard yellow butter?

Her churn was a square glass bottle like these and held about a gallon of cream. The metal lid was about 6 inches across and was constructed with a superstructure that looked like the handle with the gears of an egg-beater. Basically the same design. There was a grip to secure the thing on the table with one hand, while the other hand turned the handle.

This rotated a pair of shafts like in an egg beater. With the difference that in the churn, there was a flat paddle on the end of each shaft instead of a whisk. These small wooden paddles were canted slightly. When the shafts rotated counter to each other, the paddles set up powerful current stirring the cream. Beating it.

So why does this magic work? There is a prosaic explanation. That I didn't know. Cream is sort of an emulsion, i.e. a mixture of a fat and a thinner liquid, where the two are mixed together such that they never really separate out into distinct layers. That's not exactly accurate so don't be too critical here. The cream particles, i.e. little globs of fat, remain separate from each other even though they aggregate in a uniform layer on top of the milk because the microscopic-sized fat globules are lighter than milk. They rise like pieces of wood in water. Overnight a layer of cream forms. But while they aggregate, these tiny particles never join hands. They remain separate from each other.

However -and here's the key to making butter from cream- if the fat

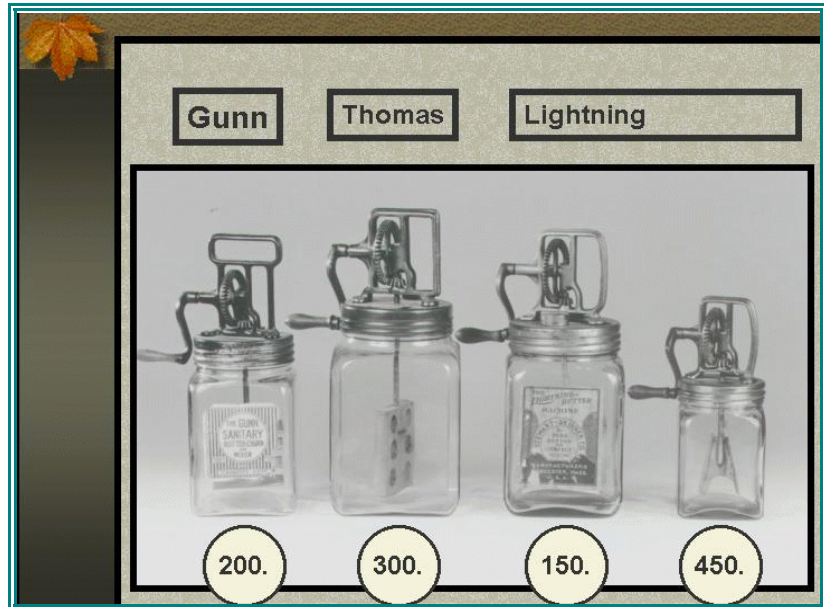


Figure 1 Butter Churns

<http://www.ponyexpress.net/~butchnd/page18.html>

globules are spanked and smacked into each other, they start clumping into larger and larger masses. Two globules become one and pick up another globule and so on. This process requires physical spanking of the globules. Shaking will not really do the job. With enough spanking -which can be a long time I can testify- eventually all of the fat molecules are squashed together into a mass of butter sitting in a puddle of true butter milk, a watery, thin, whitish, not-very-good-tasting liquid. The stuff you know in the supermarket as "butter milk" is a counterfeit. It doesn't even resemble real buttermilk, this thin, watery, tasteless stuff. Actually, what you call buttermilk is markedly superior. It is the metabolic byproduct of a jillion bacteria that have had a grand time in a tub of milk. This thickish sticky residue of their housekeeping endeavors is packaged and sold in the supermarket as "butter milk". Ha. But it is wonderful stuff.

The process of spanking the fat globules is hard work, so churning was a contribution kids could make to the household. It saved the grand/mother time so they could do other things. The funny thing is each of us kids always wanted to be the one to turn the crank on grandma's churn. Like we had forgotten what happened last time. We'd argue about who got to turn the crank while she was getting ready, pouring the cream she had collected over several days into the churn. It didn't take too much churning before we got tired and wanted to go play so we gave up to the next kid. Grandma would coax us to stay and suggested we take turns so our arms didn't get so tired. Eventually, one of us would sort of sneak out the backdoor when she wasn't watching -we thought. It was fun to start but was tiring.

After the butter was made, the butter milk -whey- was poured out and the butter was scraped out. Grandma usually poured the buttermilk into the slop bucket outside the backdoor for the hogs who loved the stuff. We could drink it if we wanted but most of us didn't. The butter was sprinkled with salt and paddled into the shape of a ball with wooden paddles made for the purpose. Then it was put in the ice box or the refrigerator, or just set outside in the winter. That was how butter came into being, a prized substance that farmers insisted is the only stuff to put on bread and cook with.

Which put them on a collision course with whoever was the driving force behind newfangled margarine. Oleomargarine. Napoleon Bonaparte encouraged the development of a butter substitute for his army. Farmers knew that this counterfeit not only didn't taste right, but that it was hazardous to our health. Butter built stronger bodies. 32 states enacted laws banning the stuff, and

Wisconsin didn't lift that ban until 1967. Grandpa sold it in his store though he probably took some heat from the farmers who frequented the place. Naples was nothing but farms so he doubtless has some resistance from his neighbors, but he made a few cents so sold it.

The packages were designed to reinforce you the buyer's mind the fact that the stuff was artificial, hence not to be relied on. The package consisted of a pound-size plastic bag that was filled with a white substance that looked like lard or shortening, which is probably about what it was. An inch long capsule of dark orange colored dye was inside the package. The capsule, probably hard plastic, had to be broken open at which point the dye leaked out into the margarine. The fun was kneading and squeezing the package to spread and mix the dye into the white stuff. Once the dye was mixed, the plastic package was cut open and the margarine was squeezed out on a plate.



Figure 2

<http://www.jsonline.com/news/state/wis150/stories/0226sesq.stm>

Chickens and Glass Nest Eggs

These things were all over in the country. Chickens. Most chickens were confined to chicken coops but others just roamed. You weren't surprised to see them in any road or yard. Roosters were vividly present, strutting around like soldiers, shimmering in the sunlight, trumpeting their incessant chatter. Stupidly looking you in the eye. With their twitching head. Morning always opened with roosters crowing. They do wake everything up because they are so loud and persistent so early. We were told to never chase hens because that would make their eggs have bloody streaks in them.

The sole objective of chickens was to eat. That's it. They looked for food

incessantly, insects, grain and seeds or other bits of stuff that they would ingest. Their heads bobbing in time to the walking looked sort of stupid -because they were stupid. Never nice, always indifferent. Grandpa bought crushed oyster shells to provide calcium for the eggshells. The crushed shell came in 25 or 50 pound burlap bags that grandpa would carefully open. Then he would broadcast the shimmering fragments by hand around the yard or the corral.

In the spring grandma would order chicks for the next crop of chickens. They came through the US Mail in wide flat boxes, peeping and scratching. I obviously didn't pay much attention to how long they were in transit or how they were fed and watered and kept warm during transit, but these peeping boxes arrived with dozens of chicks. They were transferred into specially designed incubators, smallish enclosures that were covered with a metal umbrella, food and water. It was warmed by electrical light bulbs. The feed was mash, a coarse powder made of crushed corn and grains and was served in long metal troughs that the dumb birds would walk in and soil. Water was dispensed in a water bottle inverted into a shallow tin pan that they could drink from.

Chicken yards -for bigger chickens- looked like this:



Figure 3 Chicken yard with feeders and waterers
<http://www.usda.gov/oc/photo/01di1447.jpg>

Note again that the woman is in a dress. To feed the chickens, to garden, to do most things. Slacks and levis weren't generally worn by the genteel country woman or housewife. Only on hunting or fishing trips were they "permitted" to wear slacks, but even then they didn't always.

There were two reasons to have chickens and both of them involved the kitchen table. One was so that we would have meat now and then, and the other was so that there would be eggs. Otherwise they are messy dirty animals that you wouldn't want to put up with. Except they make it worth your while to deal with them because they fed you.

Hens lived in a hen house with nest boxes. These were rows of "cubbies" outfitted with a mass of straw to make the chickens think they were in a nest so they would start to lay eggs. This image shows one row. In a hen house, this row was repeated in 5 or 6 layers so 2 dozen hens could be sitting and laying at the same time. That was the strategy and it worked well for most hens. When you were sent out to get the eggs, you went to this hen house and had to check each one of those boxes for eggs. If you left them a few days, they would spoil so all boxes had to be checked every day. In some cases, a hen would be pretty nasty so we'd scare her away. If she was really mean, we'd tell grandma who would go out and shoo the hen away to check for old eggs.



Figure 4 <http://www.easy-garden.com/images/Chick11.jpg>

When there was a problem getting a hen to lay, grandma had several 'nest eggs' that she would use. These are the source of the term "nest egg" you hear used in reference to saving a bit of money as a starter for an account for something. Most of these nest eggs were made out of wood, shaped like chicken eggs. These were put into the brood box for the particular chicken in need of encouragement. The pressure of the eggs would stimulate the chicken to start laying eggs. That made sense to me because I could see the nest eggs, the chicken could see the nest eggs, and they looked like chicken eggs, ergo



Figure 5 **Wooden Nest Eggs**
http://www.asthewoodturns.com/ex_eggs.jpg

the chicken would try to make more - though I didn't have a clue why that would be so.

The problem for me was when grandma put clear glass nest eggs into the brood box. To me, the fact that they weren't visible and they didn't look like chicken eggs, i.e. they were not white rather were clear, seemed to me reasons that the chicken should ignore them. But they didn't. They weren't that smart. The clear glass eggs worked as well as the white wooden ones. Chickens are really stupid I decided. It was obviously the pressure and shape of the device that affected them.

The Culvert and the Pond

The irrigation ditch ran across the road from Watkins' place to ours, through a culvert buried under the road. It sits at the bottom right of the diagram of the lot. On our side of the road there was a small pond where the water came out of the culvert. The pond was round, about 10 feet across. In the center it was 2 to 3 feet deep which is fearfully deep to a 6 year old kid.

The culvert was a simple tube of corrugated galvanized steel about 18 inches in diameter. It was a source of delight and fear. The fear stemmed from the odd notion that I might get stuck in it, and that as a result I would drown. Why I would have that fear is a mystery. The only way I would ever have gotten into the culvert, particularly since the flow was out and toward me -we were forbidden to cross the road- would have been if I intentionally climbed into it. That was not likely. But I still had shivers of that fear when I leaned down on purpose on the road on my belly, my head near the cool water, and looked back into and through the culvert. I could see the small distant half-circle of light at Watkins' end where the water flowed in. The inside was dark compared to the outside, yet there was plenty of light to see what was there. Mossy accumulations waving in the current at the margin of the water, odd pieces of grass dried onto the upper culvert surface.

The water flowed rapidly inside the culvert because it was so narrow. This fact, plus the corrugation of the culvert, rippled the surface of the water as it flowed. In the late afternoon the sun shown almost directly into the culvert because it was lined up east-west. At that point, when the sunlight entered directly, the culvert became a shimmering tube. Dappled shadows and highlights reflected onto the top of the inside of the culvert when the light reflected off the ripples. Lighting up my own face with flecks of light.

In those days there were only true sounds, sounds made by real objects in

real time. No synthesizers, no vocoders, no artificial, processed sounds. Les Paul wouldn't appear for 5 or 6 years. But this tube was magical. As the shape of the tube and the ripples on the surface of the moving water interacted, the small shout of the little kid into this tube over the flowing water was mysteriously transformed. The sound inside of the culvert wavered and echoed and multiplied into a large fuzzy warbling voice out the other end. "Hello!" "Hi there!" "Hey you!" Again and again for the pure joy of hearing the magic of the tube. "Hey there!"

Through the center of this pond the water flowed rapidly, creating small eddies and back-currents in the shallower water on either side of the pond. Water plants and short rushes grew at the edges of the pond, providing habitats for an assortment of insects, some that lived on the surface and others in the water. Water snakes and frogs hung out in the pond, feeding on the insects. The snakes weren't large but something about their slithery movement and their staring countenance made me nervous about them. I would pick them up gingerly, but I was nervous about them. We were told that if they bit, we could get sick but that was the extent of the injury they could do. I never experienced it.



Figure 6 Water snake

<http://web.utk.edu/~bcampbel/herpfieldpage.html>

Spiders abounded and hung their curtains of lace on the rushes, collecting flies and other critturs not paying attention. The maple-leafy, funny smelling box elder tree hanging above the pond provided the spiders a steady if boring supply of fodder. We'd see the dried carcasses of dramatic black and orange box elder bugs suspended mid-air, swathed in spider webbing.



Figure 7 www.bug-guy.com/

The aquatic insects slipped smoothly through the water in short bursts. Some of the small ones rose quickly from the bottom to the surface, immersed in bubbles of glistening, refracting air that was exchanged at the surface. Then the

bug swam frantically back to the bottom to avoid predators in the form of fish or frogs.

In the spring, with the seriousness and dedication of earnest scientists, we'd hunt for frog eggs that were abundant in the area. This cluster is on a branch but most of the ones we found were on rushes or reeds or underwater parts of plants, always in shallow water near the shore so that the fast current wouldn't wash them away. They reminded me of the large tapioca that dad would cook on rare occasions with the difference that these gelatinous masses each had a black spot. This black spot evolved over a few weeks into tiny curls and finally into tadpoles with transparent engine rooms.

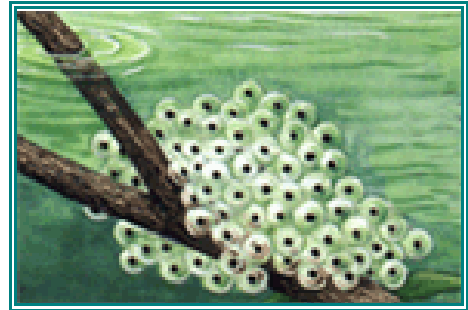


Figure 8 Frog Eggs
<http://www.nwf.org/rangerrick/1999/mar99/eggsunt.html>

Tadpoles are as astonishing as caterpillars: they both undergo the most astonishing transformation I could imagine, turning into adults that look completely different than the juvenile form. But in contrast to the caterpillar, we would actually watch the changes a day at a time. Tail dissolving, turning into a stump and finally disappearing. Most wonderful was the development of legs on these little tissue balloons, the forelegs appearing first. We discovered through experimentation that the hidden hind legs of a polliwog can sometimes be forcibly popped out by squeezing the abdomen.

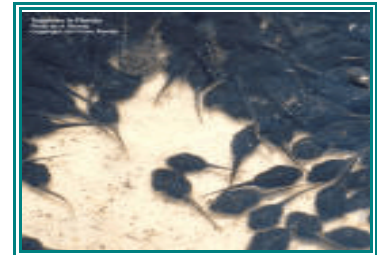


Figure 9 aquat1.ifas.ufl.edu/tadpoles2.jpg

The frogs that inhabited this small irrigation pond were the snazzy sleek competition models, the leopard frogs [*Rana pipiens*]. Long and skinny and shiny and as fast as anything in the pond. They



Figure 10 Leopard Frog [*Rana pipiens*]
<http://museum.gov.ns.ca/mnh/nature/frogs/north.htm>

folded up tightly and unleashed startling jumps with their black eyes shining straight at you when they went. In the water they'd shield those eyes with clear water hoods to protect them from dirt and injury. Their speckles were a marvel to behold, sort of an oriental pattern they adopted to show off I suppose. When you crept along the edge of a pond hoping not to disturb the frogs, you concentrated. So much so that when one of them unleashed a noisy jump into the water like they always did, you were startled. You swore you wouldn't be, but you usually were. They were difficult to catch.

A large football-shaped brown beetle called a "water boatman" scoured the bottom for small creatures to eat. They were an inch or more long, and swam quickly to the surface to take a breath and then paddled down again. They swam leisurely, unless disturbed, with rhythmic rowing of large paddle-shaped hind legs. They had long beaks that inflicted a painful bite so we left them alone but we longed to capture one. To show dad.



Figure 11
<http://www.szgdocent.org/ff1/wb-rbg2.htm>

We always hunted for bull frogs in the pond, because children really don't comprehend the uniqueness of habitats outfitted for each creature. Bull frogs were not even found in the purple-black odoriferous marsh on the other side of the Chevron tanks. These magnificent gigantic creatures were only available for review up at the "crik" several hundred yards north of us and that was absolutely off-limits for our explorations. Faster moving, large stream. So when we saw one of these large creatures anywhere, we nearly wet our pants. Such amazing creatures compared to the *rana pipiens* that were so common in our yard. These huge guys had long toes



Figure 12 American Bullfrog [*Rana catesbeiana*]
<http://museum.gov.ns.ca/mnh/nature/frogs/bull.htm>

and a sort of warty hide in contrast to the smooth leopard frogs and their eyes were enormous. Different than the leopard frog's eyes. Their voices were like drums in the night.

Small brown snails foraged for slime algae on the stems of reeds and water plants. Their shells were nearly translucent so their inner parts were partially visible. Small empty shells were scattered on the dry bank of the pond, a testament to their inability to live out of the water. They could live outside of the water so could be found on rocks as well as under water on weeds.



Figure 13
<http://net.unl.edu/newsFeat/kelthcountyJournals.html>

Whirligigs shined in the sunshine like bits of tinfoil. Darting quickly around the pond, up and down. They seemed to never tire. And never seemed to have any direction. Just movement. Frantic and sparkling. The front end looked like the back end except that the head end did have a flatness. The relentless energy was dizzying. They never stopped.



Figure 14
<http://www.szdocent.org/fff/f-wtrbg3.htm>

The loveliest insect was the water skipper. They avoided the currents, skating lazily around the margins of the pond on its surface in squadrons of 2 or 3. Four long legs extended like outriggers, final flat joint resting on tiny mounds of surface tension. Like hydrofoils. They never swam very far though they could accelerate rapidly to avoid danger. And could jump straight up into the air. We herded them like cattle by the wave of our hand. And



Figure 15 Water Skipper
<http://www.muohio.edu/dragonfly/water/suter.html>

occasionally trapped them in quart jars. Picking them up was an education. The legs unexpectedly folded up along the body so they looked like short gray sticks. The hardness was surprising, like wood. The miracle of a bug that size floating on the surface still amazes me. I didn't understand about surface tension.

Living out in the country like we did was like living in an enormous laboratory. We spent much time alone so watched everything around us that was interesting. We became familiar with all bugs and amphibians in the area and collected many of them. Our two acre farm with the irrigation ditch and small pond was an excellent place to become a naturalist, although we have never heard the term. We were just "playing".

Gene Autry

Gene Autry was in the background of my life and my play. With Dickie, with Tommy. We played cowboys and Indians and this man is one of the famous movie star cowboys that inspired us. He was one of the good guys and wore a white hat. The sign of the good guys.

The mountains here look like the Uintahs. I think that the background and the fact of horses made cowboys familiar and friendly and appealing. These guys could be my uncles out there taking care of things. We had cap guns and pretended to be tough, catching cattle rustlers and bad guys.

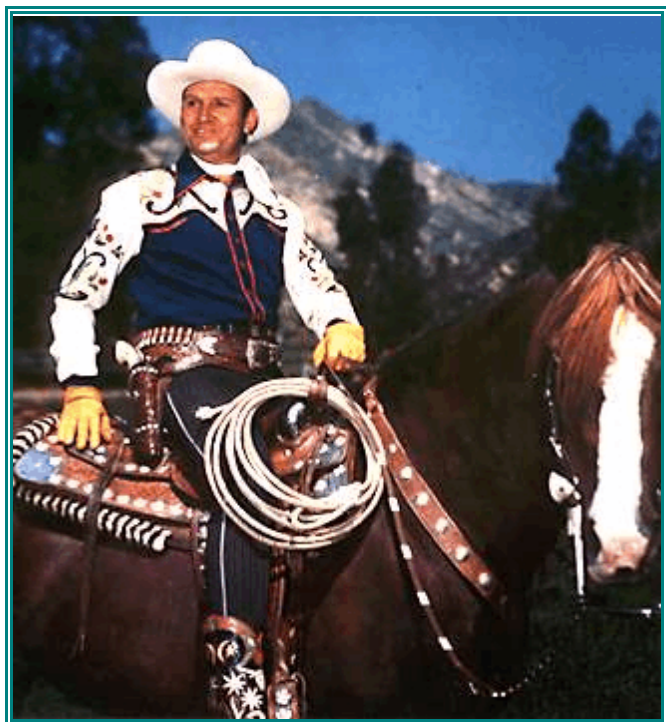


Figure 16 Gene Autry
<http://www.fiftiesweb.com/western.htm>

The Ditchrider

Our two acres were bounded on the south side from end to end by a small irrigation ditch that flowed toward the east, though there were only

pastures -not crops- as far as I could see in that direction. Water in the desert is a very big deal and if you haven't lived that way, it's difficult to imagine the tension that goes with the management of water.

Irrigation systems cost money to build so water associations were formed to generate the necessary capital. Farmers would buy "shares" of water based on their needs, paying whatever the standard rate was for a share of water. Someone in the association would laboriously set up a calendar that displayed all the farmers with their shares of water. On paper, a share of water was probably a certain volume of water expressed in acre-feet or some arcane measure. But that figure had to be converted into reality. It was converted into the number of hours it would take for a share of water to flow into a farmer's property. The association didn't care what he did with it once he had the flow of water. Just so he didn't keep the flow beyond the allotted time. The calendar showed the day of the week and the time of day -morning, day, or night- and how many hours that each farmer got the water. Water flowed during the night, too, so shifts were assigned around the clock, midnight for 4 hours, it might be 2 p.m. for 8 hours, depending on the number of shares you owned. In the spring the farmers got the schedule and memorized when they'd get the water. When the hour of the day of the week that was assigned to them to get water, they were at the ditch with a shovel to be sure to let it in immediately.

Livelihoods and lives depended on this water, so when it's your turn "to get the water" at midnight on Wednesday, you darn sure are going to see that you do. If the guy upstream is tardy in pulling his dam or opening his gate, there will be words and if this happens often, then there was an appeal. To the Water Master who I knew as "Ditchrider". This man seemed to have the power of life and death. His rulings about who got the water actually could affect the success of someone's



Figure 17 <http://www.srpn.net/community/heritage/facts.asp>

crops which could have profound implications for their well-being and that of their family. He needed courage, the wisdom of Solomon and the calmness of Solon during some of his discussions with highly exercised people who claimed that they were massively wronged. He might as well have worn a black mask with a pirate's hat and patch over his eye as far as I was concerned. He was "Authority Incarnate", a powerful awesome creature whose pronouncements sort of echoed with thunder and mild lightening in the background while us mere mortals quivered and said "Yes sir."

When he was referred to by my family, it seemed to be with a hushed respectful voice. It probably wasn't, and there were probably more than a few derogatory things said about him. I see that as an adult, but as a kid, the things I grasped from the conversations I eaves-dropped on made him out to be a supernatural creature who would hear disputes and mete out justice impartially on all, the ultimate source of authority and wisdom. Man alive, he scared me on those rare occasions when I actually saw him ride along the ditch bank on his horse, in his large hat, black boots, carrying his shovel, looking for breaks or imperfections -and I suppose miscreants- that needed attention that he would magically call down from heaven. Satan himself with cloven hooves, forked tail and flames from his mouth could scarcely have cowed and impressed me more. "The Ditchrider" was spoken of in awe and respect, regardless of the personal feelings of resentment one might harbor in his breast. You did not want to make him mad at you.

Piper Cub Candy Drop and Plane Crash

Next to Grant, Leo was my favorite uncle. He was less direct in his affection for us nephews but he always had something going on, something that occasionally was fun for us kids. Ultimately, he committed suicide with his wooden leg, attempting to make it look like an accident to collect the limit on a \$200,000 life insurance policy that was 6 weeks old. The claim was denied and the circumstances were bogus. Laree was given a nuisance settlement of \$30,000, was told that she was lucky, and advised that she would be smart to let the matter rest there.

What he did was not wise. He took out a large policy and a few months later died. He didn't realize how skeptical insurance companies are about deaths that follow the purchase of large policies within a year. In peculiar circumstances. He apparently thought he had figured out how he would commit suicide but make it look like an accident, thereby resulting in an enormous windfall to his beloved wife

and their kids. The fly in the ointment was the skepticism of the insurance investigator. He concluded after examining the facts that Leo had simply ginned up a suicide in hopes that it would be interpreted as an accident.

The "accident" happened out on Grant's ranch on the Greenriver. What was found was Leo dead, lying on the ground behind his own pickup. With his wooden leg trapped beneath one of the rear wheels. In an obvious -he hoped- but failed attempt to remove the wooden leg. His face near the exhaust pipe, the ignition key turned on, the gas tank empty.

Those are the facts. When they are analyzed one sees that this was a phony accident. Leo would not have been trapped because he couldn't remove the wooden leg. Especially not Leo. Nimble, clever and slippery. Everywhere he moved, the telephone was put in Laree's name, not his own. He died of carbon monoxide poisoning which was highly unlikely out there in the open air. All he had to do if he really couldn't get out of the wooden leg harness was to simply turn his head away from the exhaust pipe.

What he must have done was leave the truck in neutral without the brake set, lie down behind the truck, pull it over the end of his wooden leg, then half-remove it to make it appear that he had been trapped and was unsuccessful in his attempt to get out of the situation. Then he put his face to the exhaust pipe and breathed the fumes until he passed out. At that time his hemoglobin would have had more than 14% CO on board, a lethal dose unless he could have been placed immediately in a hyperbaric chamber at several atmospheres of 100% oxygen.

But I liked him and even worked for him. See the section below about working on his beaver farm in 1964 after I came home from Finland. I worked for Leo then, another scam, but I didn't know it at the time. Great job while it lasted.

Around the time I was six or seven, Leo took it in his head to learn to fly airplanes. An appropriate thing for a daredevil like him to do. He went to the tiny Vernal airport, paid his money, took his lessons and got his license to fly. He never had enough money to buy a plane so rented them by the hour. Dad tells a story below of a crash



into a mountain while he and Leo were scouting for deer.

On this occasion, he told mom that he was going to rent a piper cub at 10:00 am next Saturday. He told her that he was going to fly around the valley and that he would come and buzz our place so we could see him. He would rock the wings to wave to us and then drop a couple of handkerchiefs of candy over our place. When mom told us, it was about like having Christmas in the summer. Candy dropped to us from an airplane, an airplane driven by our very own Uncle Leo, on Saturday. Man alive, it doesn't get any better than this. We hardly slept Friday night.

When Saturday came around, we were probably out of bed at 5:00 a.m. anxiously scanning the sky watching for daredevil Leo. It was many hours before he would make it to our farm but little kids don't have a conception of time. They only know that something momentous is going to happen that morning in which case they were primed and ready to roll about 4 hours too soon. That's OK. Little kids' lives are filled with experiments because they don't have a clue about how things really work so they make up theories and test them constantly. Fortunately, little kids' enthusiasm isn't permanently dampened by failures of their theories. They chalk them up to experience, learn something sometimes, and make a different theory next time. Just keep experimenting and learning and trying to figure out what this life is about. I'm still trying to do that.

The time finally came and we stood out on the front lawn. The drone of a small airplane -they were all small in those days- appeared from the east. As the drone came nearer, we ran around the yard trying to see him. He was going to come right over our house and drop the bandanas of candy in the middle of the yard in front of the house. We could hardly stand the excitement. We had never seen an airplane up close in the air. We finally spotted it between the garage and the grainery. But something seemed wrong with the direction he was flying. No worry. Leo liked us and was going to drop the candy for us. We knew that. So we watched. As he drew near, the sound getting louder, we could see the propellor spinning as the plane banked and started to come down low.

As he approached, we waved madly so that he could see us, so that he would know we were there waiting for the surprise. True to his word, he released the two blue bandanas at what he thought was the right time. Unfortunately for us, he needed a Norden bomb sight to do the job right. His angle of flight, speed and wind vector messed up his drop. He really didn't know how to do it after all. The bandanas came down, we could see them as they fell, landing somewhere west of the Watkin's home.

We were sick. First, we were sick with excitement about the prospect of Leo flying an airplane right over our house, Second, we were sick the he missed our yard. We went over to Norie's place with mom to see if we could find the bandanas of candy. Norie said that she hadn't seen them fall but it was fine to hunt for them. We hunted and wandered and wondered, but could never find them. The bandanas were simply lost. Whether they fell into the large irrigation canal or simply were lost, we never figured out. We only knew that the excitement was stillborn, that we did not get the stuff he tried to give us. We understood that he really did try to do the job because we saw the two packages fall, but we would not be consoled in our hearts in spite of his effort because in the end, we did not get the glorious packets from the sky.

Hammocks and leg casts

The Cooper's dairy herd would periodically break out of its pasture down the road and roam the area, following the road in either direction. The cows would go into any yard and eat grass, flowers and vegetables. Dad and mom were exasperated with this predation so dad built a cattle guard across the dirt driveway. A cattle guard is basically a 2-foot deep pit that extended from one side to the other of the road to be protected. A wooden structure is build in this squared-up hole to hold 2 inch pipes. The piped stretched from one side of the driveway to the other and were spaced about 3 inches apart. Cows are stupid and will not walk on this contraption -the point of the device- because they fear that their hooves will slip between the pipes. They know there is danger when they see the pit so they won't cross it. They can even be stopped by painting stripes on pavement. Stupid critturs. Guess I was too.

We were allowed to cross the cattle guard without any limitations. It was our only access to the pond and Watkins, so we used it often. One day while I hurried, my right foot slipped and I fell into the pit. My fall was stopped when my knee jammed into the pipes, all of my weight on it. It hurt but didn't incapacitate me. I probably cried a while and then went on chasing frogs or Dick.

Here's a wonderful image of a cattleguard, about my vintage. It's wonderful not so much because it shows you the grid of pipes lying across a pit which spooks cows, rather because this photo could almost be taken from our property. If you took the Watkins place away from across the road, and looked to the west beyond their property to the mountains on the west side of the valley, you would see this image during one of the rare summer thunderstorms. Virtually identical. This is what it looked like to a little kid in the desert with sage brush surrounding the settled areas. The storms were spectacular. That's where I learned to love heavy weather. So dramatic isn't it.



Figure 19 Cattleguard in the Desert

<http://photography.cicada.com/gallery/prescott/graphics/cattleguard.jpg>

About this time I was doing the usual trick little boys did in hammocks in the giddy hot sunshine out there in the country with nothing else to do but fight with brothers and find ways to get into trouble. Dad stretched a hammock between the two cottonwoods in the front yard for us to swing in. We used it more like a swing than a hammock. Sitting up on the edge, pumping to swing higher and higher. At the top of the front-ward swing, we would bail out onto the lawn, yelling "geronimo" like we knew real pilots did. That second in a free fall made my stomach woozy and exciting so we did this often. One day I landed wrong on my right knee again.

The result was some sort of disruption of the knee joint such that a granulation developed. When I sat on a chair swinging my leg, the knee joint produced a quiet noise you could hear across the room. It sounded like someone walking on granulated sugar on the floor. It didn't really hurt but mom was concerned enough that we went to visit Dr. Spendlove again. He used his hammer to check reflexes and asked the usual questions about history of injuries. He decided that the knee should be immobilized for a while to let the knee heal itself. There was no such thing in those days as corrective orthopedic surgery or lasers for arthroscopic exams. He applied a plaster cast that extended from mid thigh

down to mid-calf and left it on for a month. Whatever it did, it worked. When he removed the cast the granulation was gone, as were my hammock-jumping days.

Mom and the .38 Pistol

Don't mess with mom. The impact of the depression showed up in odd ways. Mom tells of being a kid on a hard scrabble farm in eastern Utah that didn't produce too well. Grandpa worked in the gilsonite mines and then in Naples but needed to supplement their diet. He'd grab one of the kids and hand them two .22 cartridges and a single-shot gun. And say "Don't come home without something for each cartridge." Grandpa meant it and a tongue lashing was not unlikely for whoever failed. Cartridges were expensive and the family needed the meat. Not a small amount of pressure. Her dad is the meanest family member I ever knew. I sort of don't like him even today because he was so mean to me and my brother, physically mean, pinching our legs in 'horse bites' until we cried. He only stopped when we started pinching him back that hard.

The net result was that my mother is a superior marksman. It was perhaps 25 years ago that dad became concerned about my mom's security during the long summers when he was out in the desert on a dig. So he bought her a .38 caliber pistol, not a small one if you know anything about side arms, to defend herself with if someone entered the house. A .45 had a larger slug but the difference was trivial from 10 away inside a house. Both made a lot of noise and big holes. She stored the gun in the top drawer of her bedside stand and believe me, she would have defended herself. **D**o not deceive yourself about that. Whoever entered her house would pay for the deed with something more serious than a scolding. Like going out of the house in a box, a hole plugged squarely between his eyes from 6 feet by a woman with the coolest detachment.

Dad foolishly though he'd "teach" her how to shoot this new pistol because



Figure 20

<http://www.estate-services.com/images/TAG/July/pistol.jpg>

she hadn't shot a side arm before. He had so was an expert compared to her. This was one more instance where his ego got in the way of his intelligence. She was a more accomplished marksman than he ever would be with any kind of fire arm. Dead Eye Dick. That's Marie Merrell. You'd risk all if you gambled against her.

Digression: This actually is diagnostic of their entire relationship so far as I understand it. Probably don't, but I have opinions and conjectures. Mom admitted to me in the last year that she prevented herself from engaging in things she enjoyed because she knew she could them better than dad, and she did not want to discourage him by surpassing him. Witness the only painting she ever did, the chalk and charcoal painting of an Eskimo in a parka. It hangs on dad's side of the studio. Superb, simple and true. It was the first thing she ever did. She hung it in the Business Women of Seward's art show in the Odd Fellow's Hall and garnered enormous praise. He also had paintings hanging in the same show. Right then she knew. She would have outclassed him in 6 months if she had practiced. Such clarity and purity and accuracy. Poor James A. Mom knew. If she competed with him she would have surpassed him in short order which would have devastated him. The public outpouring of appreciation would have discouraged him. I have no doubt about that. Somehow Marie was superior to James A in various ways. I marvel at the truth. She knew she had talents but she sublimated her need for self-expression in her dedication to him.

Back to the .38: He went up someplace like Hobblecreek canyon around Provo and found cottontail rabbits off the side of the road. These rabbits are excellent for target practice, excuse the harshness, because they are too stupid to move when something disturbs them. Dad explained to mom how to hold the pistol and how to aim it. He demonstrated, taking shot after shot, rabbits sitting still, carefully explaining how to squeeze the trigger and how to sight to make sure the target is in the gun sights. After firing all but one of the cartridges, he decided to give mom a chance to try it. She took the pistol, she reached out the window, aimed. And blew the rabbit's off. Dad rolled up the window disgustedly and went home.

So mom was a marksman of the highest caliber -because of the Great Depression. Here we get the nub of the issue: she and dad were significantly affected by it in a wide variety of ways. This colored how they viewed the universe -and here's the point for me personally in this story- and of my particular place in it.

First and foremost, their view was that I was not here in this world to have

fun, I was not to enjoy myself, I was supposed to simply learn to work and to take care of myself and that's how they started training me from the first. And guess what. That's how I would have raised you. I tried, didn't I. I didn't succeed too well, though, did I. I was incapable at the time of understanding that I needed to completely overhaul my strategies in dealing with your mom and that isn't as much a criticism of her as it is an admission of my own inadequacy. My world view crashed into hers and when I thought you kids should be required to work 15 hours a week at a grocery store or McDonald's, etc. I lost. She thought you should not have to work, that you should be allowed to "have fun". Perhaps that's better for you all? I don't know. Silly question, isn't it. If it isn't, only you know the answer.

I have resented all of my life my parent's view of what I should have done. I would have given my eye teeth to have been taken on any of the Harvard expeditions Dad went on every summer. But would he take us? Not on your life. To be with him, to share with him, to escape. But, no, we had to learn how to work, staying home working on miserable truck gardens -- while he went to Florida, to Pennsylvania, to Nova Scotia, to Texas, to Montana. He came back with these wonderful stories and my heart ached to be there with him. It was very difficult to understand why it was so important for us "to learn to work" when he himself escaped each summer for months. He did not know what he did to us either by his rejection of our plaintive requests which finally ceased - or by his absence from our home, leaving a fully capable, but feminine, captain to wield the sword and give directions and judgment. Little love there was expressed at least. Mayhap there was much, but the evidence was scant - nonexistent in my estimation

Gravity-Fed Glass Cylinder Gas Pumps

In those days the electric gas pump had just started to replace the older gravity-fed pumps in town at the bigger "service stations". Most service stations outside of town still used the older manually operated gas pumps that relied on the operator for fairness. These pumps were constructed with a pump to move gas from the underground tank up into a tall glass cylinder that had a long flexible hose fastened to the bottom, with a valve on the end of the hose to control the flow of gas. That simple.

The pump handle is the long lever on the left bottom side of the pump. The owner pumped that handle to fill the glass cylinder above. The cylinder was marked along the side with lines that indicated fractions of and whole gallons. When a customer needed gas, he'd pull in, ask for 5 gallons and wait while the owner took off the gas cap and inserted the nozzle into the gas tank spout.

But since these were manual pumps, without any mechanism of any kind, the owner controlled the distribution of gas.

It is not an easy matter to see from the ground precisely how much gasoline has been delivered or how much remains in the cylinder. Indeed, the whole process begins on a soft number, i.e. the number of gallons pumped up into the cylinder. This meant that the operator and customer stood there staring with squinted eyes at the glass to watch the level of the gas as it slowly ran out of the glass cylinder into the car. Dad told how one place he stopped to get gas in the country, the wife of the owner stood out with the owner while this process was taking place. The shrewish wife stood behind her man, all the time saying things to him while he was trying to fill dad's tank, "Ok Ok, that's about enough. Slow down! You're going to



Figure 21 Gas pump

http://www.ukans.edu/carrie/kancoll/graphics/boltz/hp_gas.jpg

let too much out. Slow down! I can't keep good track of where it is!" and so on.

There is a law of physics involved here that either side would try to take advantage of. Any liquid in a cylinder will develop a surface that depends entirely on the nature of the liquid. Some liquids tend to actually crawl up on the surface of the glass where the liquid and glass meet, in which case the top edge of this curved surface is higher than the center of the surface. Other liquids will act just the opposite: they will curve the edge of the surface down in which case the edge of the surface that is bent down this way will be lower than the center of the surface. So if the good wife is looking at the center of the surface, she will see it getting to the target amount sooner than her husband will who's watching the edge of the surface coming down the glass. You can see why states' Department of Weights and Measure found a major problem when they started to look at how accurately gasoline was delivered. Today you pull up to a gas pump, order your gas, pay for it and leave. You don't even think about whether the delivery system is accurate. You rely on the Bureau of Weights and Measures to take care of that for you, and if you are interested, you can even tell whether or not any pump you get gas from has been inspected recently. There is a paper sticker somewhere on the pump with a date of the last inspection or the date of the next inspection with someone's signature attesting to that fact.

Dustbowl and Okies and Arkies

As noted in Volume 1, there was a constant flow of down-on-their-luck people through

Vernal. It was a lovely farming setting that promised to yield to those who were able to buy the land and irrigate it. That was the problem. But people from the midwest, Arkansas, Kansas and Oklahoma, had to leave their places after they were destroyed by drought and nasty weather. So they went west, the less settled half of the country in search of a place to set up.

I don't know whether you have a comprehension of the disaster that befell these people. They are spoken of critically every where it seems and not without reason because they did steal anything they could and became a nuisance for the communities they passed through. Yet they were good people at bottom who simply lost everything they had. This loss occurred over several years on their farms as rain stopped, and reservoirs and lakes dried up, they mortgaged their farms for seed, planted the seed, it failed, they got another mortgage the next year, planted new seed, it failed and finally they were destitute. No one would lend them a

nickel. So they became bitter and they moved. Who can blame them.

It was weather that caused this massive failure of farms. Extraordinarily terrible weather. Look at this image to get a sense of the dust storms that were



Figure 22 <http://www.ukans.edu/carrie/kancoll/graphics/pauldale/prair1.htm>

spawned after years of drought. This is terrible in itself. Dust got into every thing. But look at it as an indicator of the terrible quality of the land. It was so dry that wind just blew it away in tons of dust like this. Under those conditions no one could survive. That photo was taken in 1935, showing the specific conditions that ultimately drove Arkies and Oakies through our town.

Training to Work

So when did we get training to work? You guessed it. Early, early. I don't remember

much of this sort of stringent training before I left Vernal at the age of 9 because we were so young, but I can tell you many stories about it in Seward during the next 5 years. And during the rest of the years I lived at home. Though even in Vernal it started. Mom and dad bought me and Dick small but real rakes for the small but real task of raking the dang front lawn when it was covered with leaves

and cottonwood debris. Got any idea how messy those trees are? Terrible. Bits and fragments of brittle branches fell all the time especially when there was a stiff wind. Their sole beauty was in the cross section of small branches. When you broke one more or less cleanly across, you saw a lovely pentagonal brown star with a dot of lightness squarely in the center. Mysterious really, like discovering hidden treasure to kneel there on the lawn when we should have been raking, breaking the branch to see the star concealed inside. Like a Cracker Jack prize. We really didn't have to rake the entire lawn I see, but that was how it felt and it was a burden. So the play rakes were serious tools given as just that, to teach us to work. I left Vernal when I was 9. Were you forced to rake your lawn at age 9? Such different upbringings, huh. Neither better than the other, I suppose, just different. But they affected my view the universe and your places in it.

Walking home from elementary school seemed natural and actually was a cousin of the idea of 'work'. It never occurred to a little kid to ask why there was a bus to take him to the school, but not one to take him home from school. If it was good on one end, why not on the other. I had a sort of sense that the purpose of the bus to school was for teachers' convenience, so that they were sure to get their victims on time every day. The school was a mile from our house. So the idea of walking home might be overpowering to kids today. But it wasn't to us. There were kids who lived even further from school. The walk home was as natural a part of life as the seasons of the year. Which did affect us in various ways.

The sunny days in fall and spring were nice. The walk was even a peaceful sort thing, the smell of alfalfa and cows and horses and the asphalt made it pleasant. There were always things to investigate and to think about, like why do they cut the tips of the cow's horns off. Insects and leaves and asparagus. In the spring we would pick asparagus on our way home. It grew along ditches and along fence lines. But there was a strict rule about it.

Mom was emphatic. She said, "You can't pick it if it is inside of the fence line." even though there was no one around for a mile. Well, we became mosaic scholars in our ability to look at a stem and ponder the application of the rule to it. Was it completely inside the fence, or was it sort of half and half, was it OK to pick if any part of it was outside, even if only the tip was leaning outside, or if its base was half outside while the top half of the stalk was inside, etc. More than once we sort of looked up and down the deserted country road to see if anyone was coming -even looking at the other who was studiously looking the other way to facilitate what was about to happen- before we guiltily picked the stem and

hurried along the fence. We didn't talk together about these things but we each knew the other was wrestling with his conscience and the cosmic question of stems being inside or outside fences. We wouldn't eat the stuff ourselves. It was gross. But mom love it, so she loved us when we gave it to her. Afer we gave it to her after we wiped our sticky wet smelly hands on our levis and tore out the door to play in the yard. In those years there was no home work for elementary school kids.

Some of the year wasn't so pleasant. Vernal winters can be rough. So that walk home wasn't much fun. Mom tells stories of how hard it was for us. Oddly enough, it didn't occur to her to do anything about it because it was as natural to her as it was to us. She grew up in worse conditions. There was a gulch about a quarter of a mile from our house and on more than one occasion we apparently stopped at a lady's house on the other side of the gulch. For a bit of warmth and some hot chocolate to help get us home. She would use that miracle device, the telephone, to call mom and assure that us kids were OK and would be home soon. I remember the cold and the tingly cheeks and frozen hands and stiffness. But it was just how things were. And I saw no difference in the obligation to walk home and the obligation to do other chores where were a short step from "work".

Thorne's Studio

Leo Thorne was a little man to me, wizened and wrinkled. He was probably about 35 but to me he was an antique. He treated me well so I liked him. He took pictures for whoever wandered into his shop there on mainstreet in Vernal a door down to the west from JC Pennys, on the same block. Apparently he had an earlier shop



Figure 23 Thorne's old studio

that was located on another street as shown in this photo. I don't know where that was, just the one by Pennys. Mr. Thorne is the one who took the photo of Dick and me that is on the Dedication page of Volume 3.

The neatest thing about Mr. Thorne's studio wasn't Mr. Thorne, although he was a colorful character. When he was working behind a view camera, he'd hide under a black cloth while he composed the photo, waving his hand and giving instructions. Garters held his sleeves up and he wore a green visor like a bookkeeper. The thing I liked about his studio was his collection of Indian artifacts and curios. I don't know what "curios" are.

The most fascinating thing in his collection was the mummified Indian. I know it's bad taste these days to own someone's dead grandfather and I honor that concern. In these days, however, that sensitivity was not present, so remains were handled without regard for the feelings of the descendants. So Mr. Thorne had a mummy with dried tight skin, eye sockets drawn tightly together, hair looking like hair that just needed to be brushed. The mummy was clothed in appropriate clothes and was lying on a sandy surface to reproduce the burial site. In addition to the mummy, Mr. Thorne had all sorts of pottery, bead and leather work, papoose boards, and bows and arrows.

Blacksmithing and Muzzle Brakes

On the end of the enormous barrel of a military tank is an odd structure, ^a fenestrated [Port. "Fenestra" = 'window'] collar the outer circumference of which is wider than that of the main barrel. It imparts a sense of design to what otherwise would be an unadorned tube. But it also serves a function. The fenestrations allow enormous amounts of energy created by the explosives in the shell to bleed off behind the projectile just before it exits the barrel. It is hard to believe that this short distance is enough to make a difference but it does. This lateral release of energy from the interior of the barrel decreases the kick or recoil felt at the firing chamber and posterior of the



Figure 24 I lost the URL

barrel. The fenestrated collar is termed a "choke" or "muzzle brake".

A machinist easily switches to being a gunsmith, sort of a sub-specialty of the trade. Dad did that. In Vernal. The shop was on one of the main streets near the center of town, on the south side of the street.

The most difficult part of the process was drilling a uniform hole through the barrel from one end to the other and then "rifling" it. "Rifles" -which hand guns don't have because the barrels are too short- are spiral grooves inside the full length of the barrel that impart a spin to the slug, thereby extending its range of accuracy.

After a barrel was finished, it was "Blued". Blueing required that the surface of the barrel be highly polished not a trivial exercise, particularly when the barrel had a hip or a flat surfaces that blended into the rounded barrel. After polishing is finished, the barrel was pickled.

The acids used to pickle metal are harsh, some of the most caustic used in industry. A peculiar pungent metallic odor rises from the pickling vats. These chemicals are in the same group as electroplating chemicals which are difficult to dispose of today. Back then, they were flushed down the drain. Today they classified with the most toxic industrial products in the US - almost as bad as nuclear waste.

Pickling accomplished two things. First, it removed grease and mineral deposits to ensure that only pure metal was exposed. Second, pickling prepared the surface in some manner so that it would blue uniformly.

The actual blueing process is a purely esthetic process that has no effect on the firing of ammunition, though it does prevent rust to some degree. The process requires heat and some type of solution that imparts the dark bluish color to the surface of the gun barrel.

Back to the muzzle brakes: Any weapon that fires projectiles with explosive charges through a barrel produces this recoil that only varies by degree. Side arms and rifles produce kicks but a hand gun's kick doesn't bruise the shooter. Rifles do as they kick back against the shoulder. One way to minimize the bruising



Figure 25 Lost several URL's that night

caused by the kick is to wear a shooting jacket that has substantial padding over the shoulder where the rifle is held. Another is to affix a muzzle brake on the end of the barrel.

They come in various styles, some of them even being adjustable, but my dad's were the best. His were not just functional fenestrated collars although they served their purpose. They were works of art. He experimented and made various styles of muzzle brakes, trying some out on the rifles of relatives. He modified the design to increase the amount of energy that was bled off. But effectiveness wasn't his only end point. His work had to have beauty.

The beauty of his designs arose from the details. To accomplish its purpose the fat collar stuck on the end of a barrel simply needed holes to be let into it. The function of bleeding off energy behind the projectile before it exited would be accomplished. But dad was not content with simple round holes. The fenestrations that he let into a collar were elongated, like rectangles. Then he rounded the corners of each of the three equidistant rectangles he cut into the collar. The elongation increased the amount of energy that would be bled off, and also added a sense of refinement and beauty. The rectangles looked like a cartouches waiting for the insertion of hieroglyphics.

That wasn't enough beauty. The triangles between the rounded corners begged for treatment. So in that space he let in smaller holes that further increased the amount of bleed off, and simultaneously imparted another level of complexity and beauty to the design. Again, a simple functional round hole wasn't satisfactory. He modified these small holes, converting them from simple circles into sinuous triangles that filled the space between the rounded corners. The corners of the triangles were cut to points so fine that one marveled that metal could be worked that way. Finally, he rounded off the outer surface of the fenestrations so that there was no flatness. The final product was a gorgeous, blued muzzle brake that looked like it was carved out of porcelain, not metal, and I was touched by their beauty. They looked like images from a Tlinket totempole.

Stoking the stove

Coal stoves are something you have to experience to appreciate. The funnest thing

about them was the isinglass window on the door on the front of the firebox. Isinglass is actually a mica sheet which allows you to see into the brightly burning coal without being burned and without getting smoke in the room. As it aged, the

isinglass started to get smoky between the layers of mica and you could see less and less but it was a fun thing to The stoves were sources of comfort as well as heat. To sit between the back of the stove and wall was to be in a sort of warm neverneverland with the cats, out of the way, comforted by the large looming warm thing, sort of like being in a narrow cave. Or womb I suppose. When you felt sick, it was a safe comforting place to sit.

Bringing in coal was a regular chore in the winter, i.e. 'work'. And a tough one. Remember, I was 9 when we moved from Vernal to Alaska. A coal hod with its characteristic shape was used for small pieces of coal, i.e. egg sized. We filled it part-full with coal in the coal shed in the back yard. Most of the coal dumped by the coal truck was in the form of large chunks a foot or two long. So we had to break up the big chunks by using the blunt 'heel' of a single-bit axe like a sledge hammer. After busting up coal this way, there would be small chunks that we would carry in the hod. The larger pieces we would carry one at a time in our arms across the yard to the house, up the steps, through two doors, and shove them into the kitchen stove or the big pot bellied stove, banging and clanging as they hit the swinging metal plate that hung down halfway over the door to keep smoke inside while the stove door was open. Feeling mighty proud of ourselves.

The thing that would get us in trouble with these stoves was crayons. Plain ol' Crayola coloring crayons. How, you ask? One of us would get a wild hare in the winter and would go to the back of a hot stove, usually the pot bellied stove in the dining room if it was lit up. We would hide behind it with a couple of crayons. Squatting between the pot belly stove and the wall so we couldn't be seen, we'd draw on the hot metal. The crayon would melt, leaving a neat track of watery-looking wax -which was the point of this exercise- that sort of lost its color against the black metal.



Figure 26 Pot Belly Stove
<http://memory.loc.gov/>

We knew we shouldn't do that -it was wasteful of crayons- but it was such a temptation. The crayon magically grew shorter leaving its glistening track like a

slug slime trail. We'd get too nervous about it so would stop before we were caught - most of the time. But we'd still get in trouble some how. Today I look back and I guess that the evidence of our experiments lay on the floor under the stove, and that it was the mess on the floor -not the wax on the stove- that was the real issue. But we never saw the wax drip on the floor. That wasn't what was interesting.

The other end of the coal business was taking it back out. Transformed into ashes and clinkers. Know what clinkers are? I don't either. But they grew in the bottom of the stove from the coal and were brown-tan colored misshapen glass-like masses that had to be taken out with the ashes. The coal shovel used to scoop crushed coal into the stove was now used to scoop and scrape out the ashes. The "heater" in the bedrooms even had a square shaft out the right side of the stove that was part of the grate. You put a crank that shaft and could jiggle the two halves of the grate back and forth to make the ashes and clinkers fall to the bottom of the stove for easier cleaning access. You made sure the stove was not hot when you did this little number. We put the ashes in the coal hod and lugged it outside to dump on a dust heap behind to coal shed where ashes were usually put. However, when there was snow and ice on the ground the ashes were sprinkled on the walkways to make them less slippery.

Lightening, Pot Belly Stove, and Prayer

One evening mom and dad decided the y needed a night out and they left us alone. Whether this was because they couldn't find a baby sitter, couldn't afford a baby sitter, or thought we were old enough to be left alone, I don't know. But it was while dad was still in Vernal so Dick and I were somewhere between 6 and 8 years old. That's pretty young to be left alone and I was nervous about it. Mom told me I was in charge and to take care of Dick.

The night was dark so it was not summer time. A thunderstorm developed after a while, sending bolts of lightening and loud peals of thunder into the house, heavy rain pelting the windows. There were no adults around to turn to for comfort and we knew better than to leave the house. If they found out we did that, we would get in trouble for disobeying, regardless of the reason for seeking comfort from Norie and John.

So we were there alone, not knowing when mom and dad would return, getting more frightened as time passed as the darkness and storm filled our imaginations with fearful thoughts. The telephone wasn't a consideration. It wasn't used to

just talk to people. It was only used when there was a specific task to accomplish and asking for comfort wasn't a task that needed to be accomplished.

The pot belly stove was lighted which indicates that it was cold outside, which added to our sense of discomfort. I went into the dining room and huddled by the old stove, seeking comfort from its warmth. As I squatted there by it, my fears filled me. I remembered a Sunday School lesson. The teacher said that if you are ever afraid that all you needed to do to get Jesus' help was to pray to him. That fit the situation so I folded my arms, bowed my head and said a prayer out loud, asking to be comforted in my time of need, being alone, needing to get myself and my brother into bed asleep before mom and dad came home. The simply uncomplicated faith of a child.

It worked. I felt a lightness develop when I opened my eyes. My anxiety slipped away and a confidence appeared. I took Dickie and myself to the bedroom, we got into our beds and were asleep by the time mom and dad got home.

Bleu Cheese behind Pot Belly Stove

My introduction into the fine art of savoring bleu cheese happened on the floor. Of the dining room. In the winter. Behind the pot belly stove. I don't know what the occasion was that resulted in this stove being fired up because we normally didn't heat that part of the house in the winter that was outside, so something important was going on. The fact that something usual was happening probably contributed to the circumstances, even made this evening into a festive celebration. I don't remember. Nor do I care. It was what it was, a signal event in my life, one of the rare unexpected gifts of the gods who allowed me to lie on the hot floor between the stove and the wall by my own huge gnarly rough sweet-smelling dad, in a dark room, lit only with the light shining through the door from the kitchen, fire roaring, dad lying there, contentedly, munching on saltine crackers, cutting off fragments of foul smelling cheese from a small block in his hand with a paring knife, putting them into his mouth -and mine- exclaiming about the excellence of the flavor.

The flavor didn't exactly excite me, but in the manner of an insecure teenager with a group of friends he is trying to impress, I pretended to love the stuff. It actually smelled like the stuff we rubbed from between our toes in the evening. Gross. Only Limburger smells worse, it really does. But we had bleu cheese and in my naive mind, the bleu was "blue" and I assumed that name came from the fact that there were bluish streaks in the cheese. Dad explained

something about the fact that this color came from bacteria but that was a foreign word. I didn't understand, but I did understand that this cheese didn't sort of "just happen" like the orange longhorn cheese did. This cheese was special. And it was Danish. That was important.

Dad told mom a wonderful story about how he got it. He said that he went to the Ashley Valley Market which was located at the north end of our road where it connected with Vernal. Our neighborhood went there to shop. There were no supermarkets, although a huge Safeway store opened while we still lived there and I swear it was at least 10 acres in size. The Ashley Valley Market was tiny, the model of a neighborhood 'corner store' where you could find most of the sundries that you needed. Well, dad was in there to buy something, he said, and the shop owner whom he knew well, commented that he had this block of stuff called "bleu cheese", but he had tasted it and it was pretty strange. He didn't really like it, but he ventured to offer it to dad for an unusually good price. Dad's impression was that the store owner thought that the cheese had spoiled and he was trying to unload it on a country bumpkin to recover part of his cost. Well, dad played his part equally well. He allowed after tasting the cheese -and loving it from experience- that it probably wasn't too far gone to be passable so he supposed he'd take a pound or two of the stuff. So a deal was consummated, the owner hacked off a chunk of the stuff, weighed and wrapped it and separated dad from the requisite amount of currency. Dad went his way pretty smug.

The reality probably was the both dad and the store owner did OK, but both of them were too narrow-minded, too cupiditous, to see what the other was thinking. But that worked out well. In the end they each got what they wanted, and I got a chance to taste this funny cheese. The beginning of a lifetime of affection for bleu cheese.

Note how cheeses were sold in those days. They were sold in wheels, 2 foot wide wheels, perhaps 10 inches thick that lay on the counter under a circular glass or plastic cover like a cake cover. When a customer wondered about how good the cheese was or what it tasted like, the clerk would lift the cover, cut off a sliver with a long cheese knife, impale the fragment on the end of the pointed knife and then extend the knife to the customer, offering the fragment for tasting.

Also note that dad had learned how to "taste" things. He didn't learn this on the farm. He knew how to take a small bite or sip and allow it to roll over his tongue while making small rapid tasting sound with his tongue, actually sucking in a small amount of air that flowed over the stuff in his mouth and then flowing

upward past his soft palate into his nose. He knew how wine was tasted, obviously. Hmmmm....

Dad at Calder's Creamery

One of the jobs that I remember dad having was out at the Calder's Creamery. It was north of Vernal a ways and he worked there in the winter. He told me a story I could scarcely believe - except he said it was true in his truth-telling voice, the voice of a scientist. One of the things he did at the creamery/dairy was harvest ice in the winter for sale in the summer. The ice blocks were cut from a frozen lake with a saw like this, and stored



Figure 27 Lost URL

in an ice house with saw dust piled over it to keep it from melting. That is where the ice came from for our ice box. Dad said that when a man left a steel crowbar or ice saw on the ice in the afternoon when quitting for the day, it would sink into the ice and that it would finally sink all the way through and fall to the bottom of the lake. I knew better than that. Ice is like rock and things can't sink through rock, so how were they going to sink through ice.

I didn't understand, but I could tell he was telling truth so I remembered it. What happens is that the pressure of the crowbar on the ice is sufficient to melt a few molecules of ice and turn it into a layer of water. This is a discrete measurable distance. The crowbar always sinks down through the water staying in touch with the ice which keeps melting a tiny bit. As this process continues, the metal bar will eventually sink right into the ice and will migrate all the way through until it comes out the others side, in which case it will fall through the water to the bottom of the lake. Just like dad said it would.

One of the things he did for Calder's was drive truck to deliver dairy products to local stores. The truck he drove looked just like this one, taken from the Thorne Photo library on the University of Utah Library website. The overhead wires, the dirt road, the age of the truck all remind me of Vernal when I was a kid. [This photo is from the Thorne collection.]

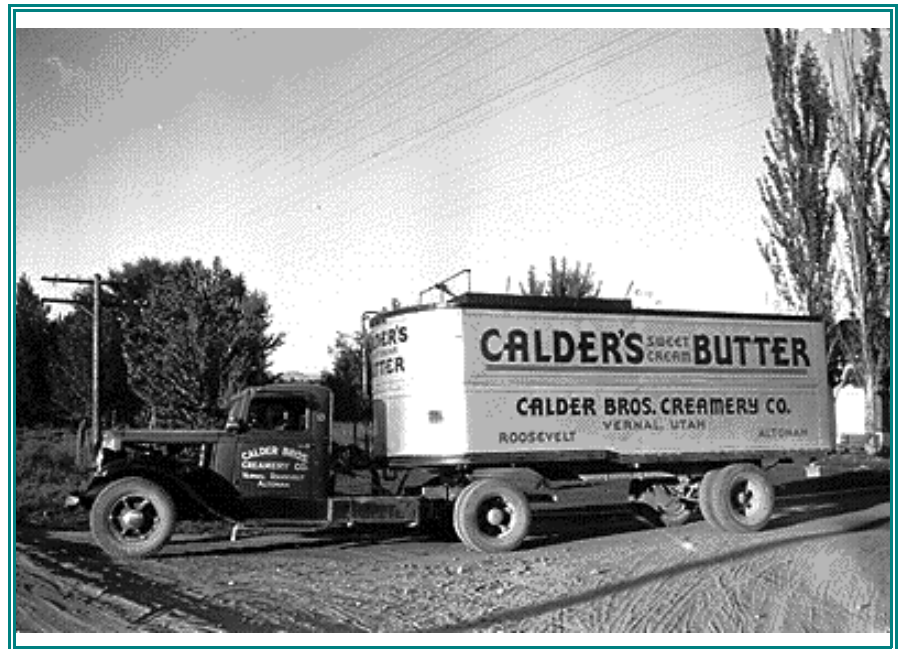


Figure 28 Calder Brother's Creamery Truck

<http://www.lib.utah.edu/spc/photo/p272/p272.html>

Little Country Bands

Dad played accordion and sang and Art Schafermeyer played guitar, a sort of back-up rhythm guitar. They played together with a group of guys who'd get together at one house in the evening to practice. And would perform at church dances, or just for the sheer joy of it. Their music was "Down in the Valley" and "Red River Valley" style music and lyrics, played with the simplicity and earnestness of simple folk who loved their music and let it show. I loved to go to the practices on the rare occasions I was allowed to do that or to watch them perform at a dance. That was MY dad up there singing and playing. My dad could play anything. He played fiddle as a young



Figure 29 Dad playing accordion

man, played Eddie Peabody-style four-string banjo and guitar.

He played guitar most of his life. When I worked with him in Dry Mesa that summer, I took the old blonde Kay Guitar -that you could drive nails with- he had given me in 1960 after having carted it around the country for 30 years. He had his own guitar there and we played and sang together some evenings, something no one would ever expect. He loved the old songs I had learned while I was in Finland to keep from going crazy. "Roll on Columbia" singing his heart out, harmonizing with the plain harmonies of real country music.

Fall into a pit of fire

Around 1948, my grandparents built a tiny store in Naples that also dispensed gas. They lived in the back of the store in a small attached home. When they had the grand opening, the gasoline storage tanks had not yet been installed in the deep hole excavated in front of the store. Construction debris was thrown into the hole for a bonfire in celebration of the opening.

I was sitting on the high mound of dirt with another kid, boy or girl I can't remember. The dirt was a loose mound, waiting to be pushed back in to re-fill the hole after the gas tanks had been installed later. After the bonfire was started, this kid and I shielding our faces from the heat with one hand held balloons out as far as we dared in the air because the heat coming up caused them to float. Pretty neat thing for a country kid. Somehow things turned bad fast. I felt myself slipping downward and screamed as I fell into the pit filled with burning timbers. The sensation of slipping into fire is recoverable today if I want to feel panic. Falling, terrified, in slow motion, knowing I had been stupid, that I was going to be severely chastised for being so foolish, fearing the pain of the fall, not having a clue about what burns are really like. As I screamed, the people standing around in front of the store saw what happened. A man whose name I bless didn't hesitate. He quickly laid on the ground at the edge of the pit against the tremendous heat and flames and reached down for my hands. I could hardly touch them. Another man laid across his legs to hold him from falling as he stretched down to get hold of me. He jerked me out of the fire like I was a bit of dandelion fluff. I was burned badly. I hurt worse then than I've ever hurt in my entire life which is saying something. My left leg was the worst injured and today there are patches of disrupted blood vessels where I landed on a burning board.

Mom came running out to pick me up and hurried me inside the store to get ready to go to the doctor. Naples is 4 miles east of Vernal so it was a long drive in

an old car. There was no ambulance. Farm injuries were taken into town by the family or neighbors. But before we could leave mom or the driver had to go into one of the bedrooms to get cleaned up to go. Why?! I don't know. It makes me angry even today. I stood in the hallway outside the bedroom, waiting for them to complete their toilet, screaming and hurting so badly. Twisting myself up in the cloth curtain that hung across the doorway to Grant's bedroom in place of a door. Finally we got ready after mom had primped her hair and put on a clean dress. We got into the car and were on our way. Sitting there crying, hurting so badly, no one able to do anything about it. We drove straight to Dr. Spendlove who cared for me all of my years in Vernal. I vividly remember being carried straight through the office lobby past the receptionist who usually was the stern gatekeeper. The man who carried me didn't hesitate. He knew where to go and what to do. Straight back to an examination room where he laid me on an exam table. Dr. Spendlove just looked at me. While he talked to mom he opened his medicine chest. The last thing I remember was a needle in my arm. Morphine. Blessed drug. You have no idea how badly a burn like this hurts. Morpheus, the Greek god of sleep. I don't remember much about it after the needle. No one does after major trauma I've discovered and that is merciful.

Ultimately, as a result of the burns I developed a "fibroid tumor" on the top of my right ear, a euphemism for scar tissue. It required surgery and resulted in a defect that I am aware of but which has not caused any problem for me generally, though hair cutters might comment about the fact that there is actually hair like the hair on my head growing on the top of my ear, not surprising since a skin graft was taken from my scalp just above the defect to cover the hole left by the excision of the large tumor. The reason it has to be excised was the embarrassment I felt when kids commented on and made fun of this tumor on my ear. Kids are mean.

The Saturday Evening Post

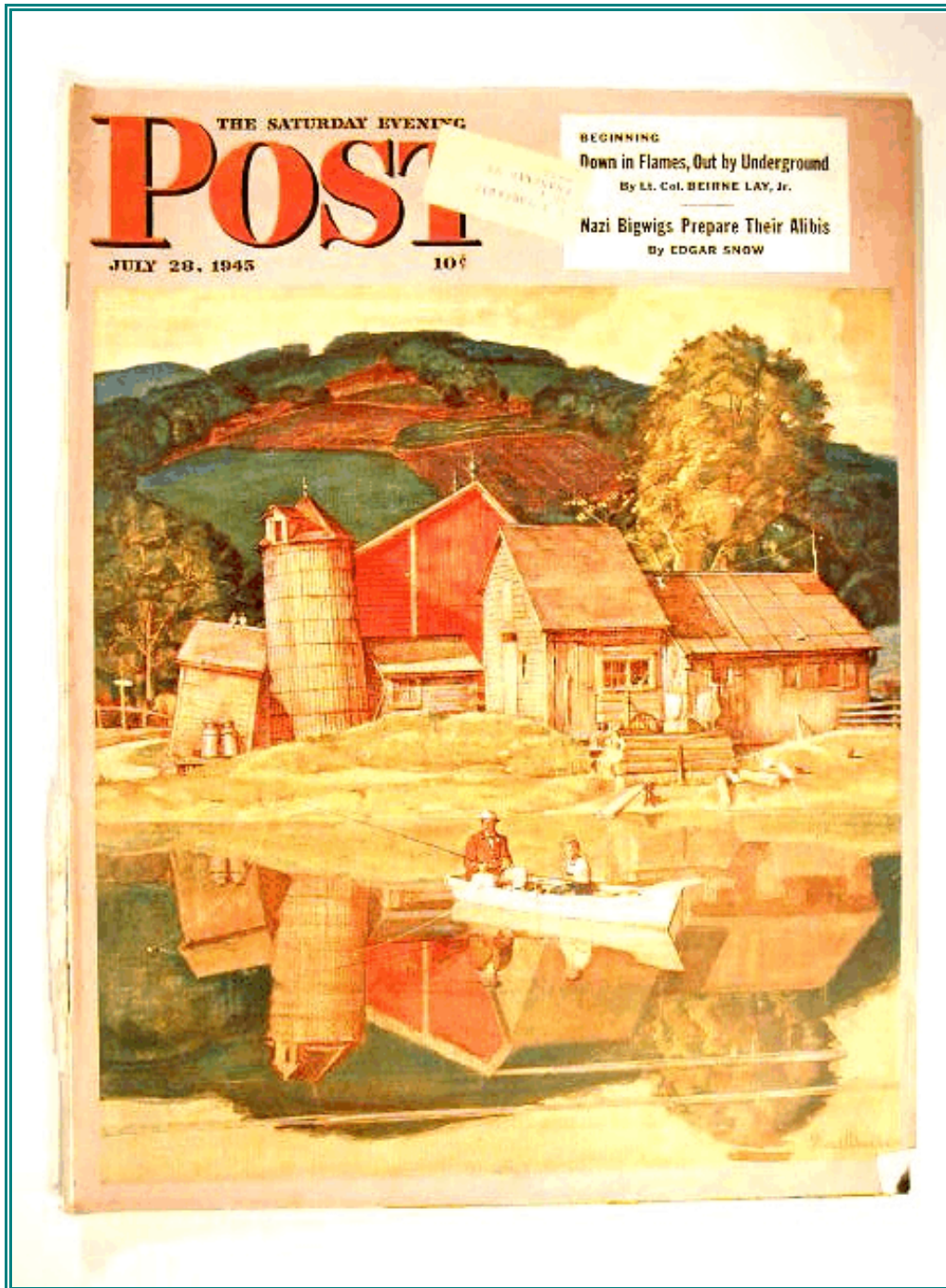


Figure 30 The Saturday Evening Post
www.spartacus.schoolnet.co.uk/ARTleyen2.jpg

The Saturday Evening Post was the only magazine, other than the National

Geographic, that was a regular part of our household. It was there in Vernal, vaguely, but most prominently in Seward. No TV to rely on for stories, entertainment and news, so we relied on the Post. The Post was almost a cultured magazine in that little cowtown, though lovers of the New Yorker magazine would laugh to hear that. We didn't take the daily newspaper, either. The raspy tinny radio was the only daily source of news which in that little cow town wasn't much, though I obviously wouldn't have understood it if I had listened to it. I just say this for your adult minds to make sure you understand the scarcity of news for my folks. The Post was our connection with the outer world, the world outside of Uintah Valley. I loved to sit and look through it. I didn't read it from cover to cover because much of it was in language too difficult to understand, but the pictures and the advertisements captivated me. Nothing else to get interested in, so these new images fascinated me.

The Post was many things actually. It was a source of news both national and international and contained a wide variety of non-news items.

Chiefly, entertainment of several types. For example, there were always short stories in each issue. Some of them being long enough to be divided across two or three issues.

Some of the stories were written by the

same author and appeared a few times a year. "Tug Boat Annie" was an example of the latter that I remember well from Seward days when I lived on the ocean. She was a powerful crochety tug boat captain who was the heroine of an infrequent series of lengthy articles published in the Post. There was mystery and some violence and atmosphere in these stories.

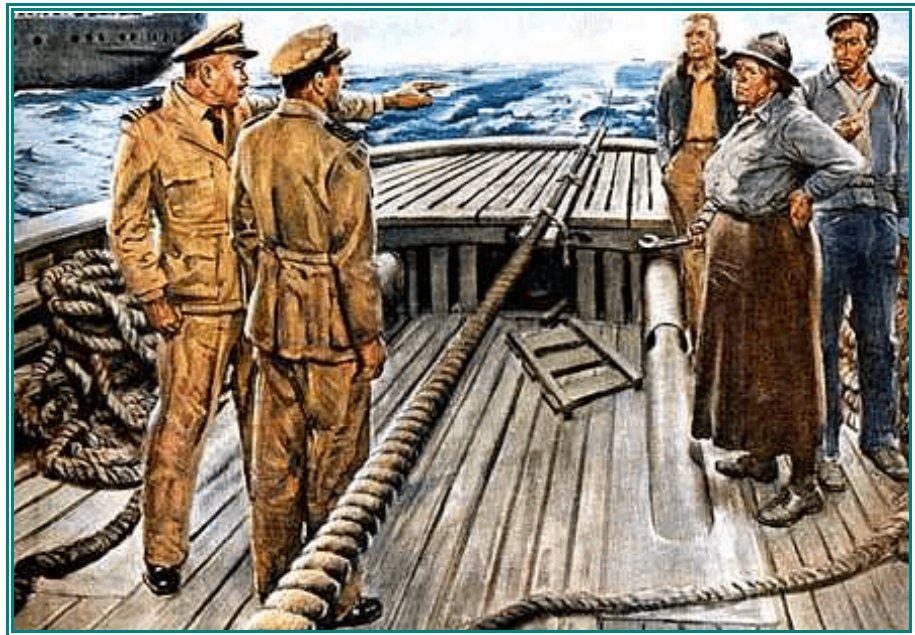


Figure 31 <http://www.bpib.com/illustra2/hvs.htm>

Cartoons were the most accessible type of entertainment for me in the Post. Some of the cartoonists appeared regularly, others rarely. Ted Keys was one of the regulars. His "Hazel" series showed up in the same place for years, at the bottom of the last page in every issue.



Figure 32 <http://www.adh.brighton.ac.uk/schoolofdesign/ma.course/aeb/50.gif>