Persistence of Memory, Fragments of a Life: Gettin' a Start in a Career in Mining

By Peter Maciulaitis,
Past President
of the Mining History Association

Growing up in Newark, New Jersey, I probably got hooked on the West and mining from what was in the media: TV shows and movies, magazines and books. I am much more visual than scientific and have always had an interest in art. Maybe that's why I became a prospecting geologist. Prospecting is highly dependent on observation, deciphering patterns, and trying to read meaning into what is physically before you and sometimes why something isn't there.

As a boy, I used to go over to New York City to visit the Guggenheim Museum. I will always remember Salvador Dali's, "Persistence of Memory," the weird, surrealistic scenery with distorted clocks dripping off of trees. I think this is what memory becomes. One's memory doesn't preserve a clear and accurate image of what was seen or experienced, but something abraded by life's other experiences and the passage of time. What follows are fragments from my life in mining, starting with my introduction to working underground.

The Ogdensburg Mine

At nineteen, on summer break from the Colorado School of Mines, I got a job at the New Jersey Zinc Company's mine in Ogdensburg, New Jersey. A day's pay miner or miner's helper started at $1.82 an hour for day shift. Management raised that by five cents for working swing shift. You alternated once a week, or maybe it was every two weeks, going from working days to swings.

I had these mental images of what miners were like, but most of the miners I met at Ogdensburg didn't fit those images. There were day's-

pay hands and contract miners. Day's-pay miners got set wages no matter how much or how little work they did. They kept the mine running doing routine jobs like hauling supplies, ore, or waste rock. Quite a few of them supplemented their pay by filling their lunch buckets with mineral specimens, which they could later sell. Management tried its best to buy tools too big to be fit into lunch buckets, even if a larger tool wouldn't suit a job as well as a smaller one. Contract miners got paid on "cubes" or "breakage," cubic feet of rock broken or the amount of advance of a working such as a raise, drift, or stope, but they were guaranteed at least day's pay. Perhaps they also used their lunch buckets as did the day's-pay miners. I don't recall. I do remember a lot of men coming off the skip with their lunch pail arms extended straight down.

The Ogdensburg mine was developed from an inclined shaft, or decline, with levels developed off of it. The lowest level was at about 2,500 feet below the surface. My first day, after going down the shaft a day's-pay miner took me on the motor, the electrical battery-run underground "train," to my first work assignment. I was to board up and seal off the entrance to a raise that led to the work area where a contract miner had been killed the day before. The departing words of the motorman were that one day he was going to get a nice clean job on the surface, like maintenance man.

Motorman

I soon was operating a motor hauling timber, tools, and dynamite from the shaft to working places. It seemed easy enough. The motors ran on steel track. You didn't need to steer, only to control the speed and which direction you wanted to go. But one rule was that you pulled ore or timber cars; you didn't push them.

In a hurry one day, I broke that rule while delivering a steel slusher (scraper) plate on a flat timber car. I might have been going a bit too fast, as well. Going around a slight curve, the corner of the plate caught the rib (the side of the drift), driving the steel slusher plate right into the thick metal back of the motor, which protected the motorman's legs. That left quite a divot in that motor's housing, and I was glad that I wasn't asked to explain how it got there. This was my first lesson that small mistakes underground could kill or seriously injure you.

As a motorman, one of my jobs was to fill the ore cars with "muck" from chutes that brought down waste rock and ore from stopes above the haulage levels. The irregularly shaped broken rocks would sometimes hang up in the chutes. It then became my job to tie a stick of dynamite onto the end of a pole that looked like a long broom handle, guide the charge up the chute to the hang up, spit (light) the fuse, and get down the drift away from the chute. There was an element of risk involved because you had to look up the inside of the chute mouth to see where best to locate the charge. After the blast there were nitrate fumes, smoke, dust, and the crash of muck breaking loose and cascading down to rest against the boards across the chute's mouth. I kind of liked this job.

One day, a mining engineer came to talk to me about things that might be of interest to someone planning a professional career in mining. On our work-through we came to a place where a miner was getting ready to clear a hung-up chute. I was told that this miner once had a good job in the mill, but had turned to drinking too much. Gradually he was demoted to being a day's-pay miner. With age the man had developed a physical deformity that, along with his drinking problem, led him to become the butt of rough humor by some of his fellow miners.

As the miner spit the fuse the engineer and I quickly started down the drift. When we were far enough away we chatted for a moment or two, and then we turned around and looked back toward the chute. The miner had his head in the mouth of the chute, from which smoke from the lighted fuse was pouring out. We ran back up the

drift, grabbed the suicidal miner, and hauled him and ourselves down the drift. Shortly after that, the blast went off. Walking away with our distraught miner, the engineer told me that once a mining engineer had hanged himself in the shaft. I don't know if that was true or not, but I believed it. This mining work had more aspects to it than I could have ever even imagined from what I had seen on media.

"The dry" at the Ogdensburg Mine, where we put on our diggers (clothing worn underground). When we came out at the end of shift we showered, put on our street clothes, and hung our diggers up in the dry to dry. The Odgensburg museum is now located in what was the dry, and this display shows how that room was used when the mine was active.

Pulling Pillars

I also routinely delivered timber and explosive supplies to raises. In one case, the raise was steeply inclined. Two brothers, both contract miners, were working perhaps fifty feet below the level, "pulling" or "robbing" a pillar. In the first stage of mining, the bulk of the ore body is mined, forming a chamber (stope). Pillars of un-mined ore are left at intervals to provide roof support. Horizontally placed timbers, called cribbing, are attached to posts set around the pillar and mill tailings are pumped into the mined-out areas behind this fencing, filling them as mining advances upward in the stope. Years later, after the tailings have long settled, mining of the pillars commences.

Pulling pillars is hard, and one of the most dangerous types of work in a mine. At Ogdensburg, pillars were mined from the top downward. As the pillar was removed (robbed) a stout box-work frame called a square set was built and wedged tightly against the fence on all sides, thus bracing and adding strength to the fence. One doesn't want the fence to break because it is holding back an enormous amount of fine mill waste behind it.

It was while pulling a pillar that the miner was killed the day before I started working at Ogdensburg. I don't know for certain how it happened—perhaps the cribbing was damaged from a blast set in the process of robbing the pillar—but the cribbing burst and the fill poured in, burying one

of the two miners. His partner got out safely and drifted around the level in shock. By the time this miner was found and he related what had happened, it was too late to save the life of the buried miner. The dead miner was only buried under a foot or two of fill. His partner was fired.

Back to where I started; I was delivering timber posts to the two pillar-pulling miners. The posts were about six or seven feet long and twelve to fourteen inches wide and used to make the square sets. There wasn't a great deal of open space down where the men were working pulling the pillar. I had latched a post to the tugger cable and was lowering the timber down the raise's supply chute. I might have been lowering it a little too fast and had made a simple mistake, but one that could have been fatal—this time for someone else.

I had placed the cable hook in such a way that it could be dislodged if it came in contact with a protruding piece of chute timbering, and that is what happened. The post went sailing, uncontrolled, down toward the two miners. There wasn't much they could do other than to play the cards they were being dealt, but they survived the bouncing, crashing post somehow. I heard the thundering sound when the timber hit the wooden planking of the square set's floor, and then the angry voices. I probably picked up a few new miners' terms right then. I believe that's when I got moved to another line of work away from those two miners.

Deep Enough

It was next my fate to be sent to work in the lowest working level of the mine. My new job was to pull a pillar as the partner of a contract miner. The mine's main crusher was located below this level. A grizzly was positioned above the crusher. This is a screening device designed to keep oversized pieces of rock from entering and jamming the crusher. The grizzly, constructed of rails set perpendicular to each other and separated by about twelve inches, was located not far from the bottom of the shaft. Ore came down through chutes to a draw working (a chamber) from which a tugger engine was used to slush the muck to the grizzly.

The scene at the grizzly was my image of what hell must be like. A man in his fifties or early sixties, clad in a sleeveless undershirt and dirty pants, stood with legs spread apart on the rails swinging a ten-pound sledge hammer at a large rock. Above him was a single bare light bulb hanging from an electrical cord. The miner was bald and wore round, metal-rimmed glasses. Sweat was running down his face, shoulders, and arms. Fumes, smoke, and dust from recently blasted and crushed rock came up from below the grizzly, while the man kept up the rhythm, lifting and hammering down with the sledge. The boulder just sat there seemly stoically and unbroken. Finally, the boulder broke. Then the man started to hammer on the smaller pieces that still couldn't fit through the grizzly. There were breaks between when loads of muck were slushed to the grizzly during which this miner could rest, but this did seem like what an eternity in hell could be like or a Salvador Daliesque "Prometheus Underground."

One day, I came down the shaft with a new hire, a young man about my age. He had been assigned to work with the older man on the grizzly. The contract miner and I headed off to our workplace to continue starting to pull the pillar. Later in the morning, as we were going to have lunch out on the level, a miner approached us and asked if we had seen the new hire. We said that we hadn't seen him since morning, when he came off the skip with us. Was something amiss? It seems that the older miner on the grizzly had walked away down the level to get his lunch bucket and upon his return the new hire was missing.

By then work had been stopped on the lower levels of the mine while people looked for the new hire. He could not have fallen through the grizzly. He hadn't gone up on the skip, as the hoist man said he hadn't had any requests for the skip from

our level. Where had the new hire gone?

This was an old mine, with miles of old passageways into which he could had wondered off. He might have gotten curious and gone exploring or gone to relieve himself, gotten lost, and couldn't find his way back to the grizzly. Work was down for quite some time while miners searched.

In the end, the answer to the whereabouts of the missing miner was simple. When the old miner briefly left him, the new hire decided that an eternity in hell was not to his liking. He slowly began climbing the ladders adjacent to the shaft. Hours later he made it to the surface 2,500 feet above. I suppose he hadn't learned the bell signals for calling the hoist, leaving the ladders as his only quiet and tiring means of escape. Work resumed once the new hire was spotted, presumably as he climbed, exhausted, out of the ladderway at the top of the shaft. My partner and I went back to work once we were told this.

Contract Miners

My partner was a very experienced contract miner who had come to Ogdensburg from the copper mines at Ducktown, Tennessee. In mining everything has a name and almost everyone back then had a nickname. "Gypo" was the term often used by engineers and day's-pay miners to refer to a contract miner. I believe the term derived from gypsy, and in western-European folklore, gypsies were tied to thievery. Therefore, in mining lingo, a contract miner might somehow try to cheat management on the measurement of the amount of curbs he had broken. He would "gyp" the mine owners.

The contract miner that I worked with was good-natured and hardworking. I don't remember his name, only that we got along well. In a short period of time I went from day's pay to receiving contract bonus pay.

A really good contract miner needs a reliable partner more as a devoted helper than as an equal hand. You can only break a certain amount of rock or make so much advance, depending on the dimensions of the working, need for support, and mining method. If one good contract miner can break all the rock that is possible within the limits of his situation, a second miner with equal skills isn't really needed.

In some mines management paired the best contract miner with a younger up-and-coming miner in order to help the younger miner develop superior mining skills. In my case, I think I was partnered with the miner from Ducktown so that I could learn what went into the job and what contract workers were like. New Jersey Zinc did a good job of moving me around within the mine, exposing me to different work routines and situations. We were doing well robbing our pillar and making contract. Then my first experience working underground came to an abrupt end. The miners went on strike. That was it for my life at New Jersey Zinc in Ogdensburg.

I learned a lot at Ogdensburg. You can hammer and hammer on something seemingly unbreakable. Chips come off, sometimes giving you small cuts, but you develop this rhythm, both with you movements and determination in your mind. Finally the unbreakable breaks. I developed an understanding of the differences in attitudes between day's-pay miners, contract miners, engineers, and the mine geologist. I now understood something about a mine's life, what keeps it alive as a living thing, not a dark foreboding place as many people imagine it. I saw contract miners much as well tuned athletes, often quick and resourceful thinkers who viewed a new heading face as a new world seen by no one before. I added the slang of the miner to my already adequate urban North Ward Newark slang vocabulary. I found this an advantage that proved useful later on when I became a mine geologist in the Coeur d'Alene mining district. The mine geologist can be the butt of engineers and miners' humor if they are given the chance. A good, "colorful" vocabulary helps cut that in the bud. But that's a story for another time.

Epilogue

The foregoing events took place in the summer of 1964. I went on the 2006 Mining History Association field trip to Ogdensburg. It was a little strange to see the mine still, the old machinery sounds now silent, the smells of a living mine absent, and "the dry" where I changed and hung my clothes before and after shift now a museum. I am glad that the Franklin and Ogden mine sites have been lovingly preserved, offering people a peek at what the mining world was like and exposure to the beauty of the minerals that can exist underground.