

The following is a transcription of a document by William Roy Bandy. The original, a typewritten draft (carbon-copy on onion skin), was found in the materials sent to Glenn Borkenhagen by Bandy's grandson Dirk Reith during August 2019. The pagination has been maintained.

The Wiley Tunnels

GHOST TUNNELS! The State of Wyoming has numerous Ghost Towns, many of them well known. But few people know much about the abandoned, caved-in irrigation tunnels in the Big Horn Basin which could very well be the residing place for a whole flock of ghosts. The tunnels are strung along an old dry, circuitous, weed-grown ditch along the north sage-covered slope of Carter Mountain's foothills. The old abandoned, drab colored ditch may be seen on a clear day from the Cody valley.

Doubtless, few of the good people of the Basin have ever even heard of those diggings which were once the scene of beehive activity. However, a few of the surviving, more hardy, senior citizens who formerly roamed the famous Basin at the turn of the century still have vivid recollections of groups of overall-clad workmen, armed with picks and shovels, up there darting in and out of those holes in the hillside, like ants.

Back of that activity was a scheme devised by Mr. S.L. Wiley, a public spirited resident of the Basin, to irrigate and develop large tracts of desert lands in the Dry Creek valley with water from the South Fork of the Shoshone River. The general plan was to bring water from the South Fork by means of a 60-foot canal for a distance of more than thirty miles, to the Oregon Basin, whence it would be spread upon the land. Along this long canal were to be four tunnels cutting through high boulder-strewn spurs and ridges. Work on that canal and the four tunnels was just getting underway when I arrived on the scene in the fall of 1907.

Now, on my occasional visits to the town of Cody the old familiar scars on the foothills to the south remind me of days long ago when as a young surveyor I had the good fortune of playing a small part in the construction of those tunnels. In those days I had dreams of some day becoming a full fledged civil engineer, so working on that job would be valuable training and experience, because of the wide variety of engineering problems involved. Having spent the past two summers on the Brunt's public land survey crews, and a few months locating and cross-sectioning ditches for the U.S. Bureau of Reclamation on the Garland Flat, this was to be my first job on tunnel work, and where I was on my own, with major responsibilities. That was in the fall of 1907, after being laid off the survey work for the winter, and I was out seeking wider fields of employment. I stumbled onto this job through Mr. George W. Zorn, then Chief Engineer for the Wiley outfit. The company was officially known as the Big Horn Basin Development Company, with headquarters at the Wiley Ranch on Sage Creek, south of Cody. My duties including doing the survey work on the tunnels during construction, with my headquarters at the main camp at the east end of No. 2 Tunnel. To reach the camp from Cody I caught a ride on the freight wagon. The road was long and dusty as it lead southwest across the Irma Flat, and wound up over the hills to camp. The trip of about 15 miles took most of the afternoon. The camp, which was reached by going down a rather steep grade on the east side of a ridge to the head of a gulch. I still remember the grade because we often had to push Mr. Wiley's automobile up the grade a few chugs at a time to get him started off for Cody.

My first view of camp, which was to be my home for two years, was from that ridge. It was a thrilling sight to see the new buildings spread out on the sage brush slopes below. The fact that they were constructed of rough, undressed lumber covered with tar paper failed to dampen my enthusiasm at all. They were such an improvement over the flapping, dusty tents that had been my shelter the past summers in the desert, that I was highly pleased. The camp buildings were grouped around the two main buildings, the combined cookshack and dining room, and the office and commissary. The stables and powerhouse were situated down the coulee aways. I was especially gratified to learn that I would have a 12 x 16 foot shack all to myself for an office and living quarters. In it were a homemade table, two stools, a flat topped coal stove, with a bench and waterbucket close by. After putting up my cot and rolling out my bedroll I had all the comforts of home, luxurious in comparison with the dirt floored tent and sagebrush stove I had been sharing with two other boys on the survey. Electric lights replacing the tallow candles, which were standard equipment on the survey, were added blessings.

Mr. A.L. Phillips, the Superintendent, was a dynamic person with a forceful personality, well liked by the men. He understood all phases of the work, and ran a very efficient camp. William B. Edwards, a likeable young fellow from Chicago was chief clerk, and was in charge of the Commissary store. Billy, as he was affectionately called, has remained a close friend over the years. He later became superintendent of the Germania Bench Irrigation District.

The tunnel excavation was carried out twenty-four hours a day at each of six headings, working three eight-hour shifts. At the height of activities an average of two hundred and fifty men were employed at the various camps. In addition to the tunnel camps other camps were [maintained at] the coal mine on Sage Creek; the sawmill on Carter Mountain; the [camp near a ditch crew on Sage] Creek, and the Steam Shovel on South Fork.

All during the winter months the camps buzzed with activity. Carpenters busy with ax and saw lining the tunnel excavation with timbers to hold back the slacking shale and rock. The clank-clank of blacksmiths could be heard as they sharpened the drillers' steel. A steady stream of muck – shale and rock poured from the tunnel mouths in horse drawn dump cars. Arriving daily were freight teams drawing wagons laden with supplies from Cody; lumber from the saw mills on Carter Mountain; or coal from the Company's mines on Sage Creek. Electric wire must be continuously extended as the tunnel headings advanced with the two hundred sweating miners working around the clock blasting their way through the mountains. In addition to the above craftsmen each camp had its quota of cooks, flunkies, stable boss, camp-tender, time-keeper, and 'Crumb Boss' who looked after the muckers' bunk houses!

Compressed-air drills and dynamite were used in the tunnel excavation. Mucking and loading the dump cars were by hand. The tunnels were horse-shoe shaped in cross section, the finished inside diameter being 12 by 13 feet, making it necessary to excavate a hole about 16 x 17 feet. The grade was a drop of three inches per hundred feet. The attached photographs show the method of timbering before concreting. Two of the tunnels were approximately one-half mile in length, while the other two were a little over 400 feet long. The two long tunnels had curves at each end and so one could not see out after the first 400 or 500 feet under the ground. By mid-winter three of the tunnel crews were working beyond the sharp curves where one could not see out because of the bend in the line, thus placing the entire dependence of the alignment upon the proper calculations by trigonometric formulas. This being my first experience with underground work caused me some sleepless nights, with much turning and tossing in bed as I reviewed my procedures. With that responsibility I was well aware that a misplaced decimal point might prove disastrous, not only to my reputation but also to my employer.

To make matters worse, when the two opposite headings began to approach each other within two hundred feet or so, the sound of blasting on the opposite side seemed to come from the side of the tunnel instead of directly ahead. This was the cause of some good natured ribbing by the crews, and the suggestion that the other crew might be by-passing us. At such time I would put up a brave front, but when the break-through did occur I revealed my true feelings or lack of complete faith by being the first one to look through the hole, although it required staying up all night on the graveyard shift.

Before the break-through occurred at No. 2 tunnel preparations were begun for lining the tunnel with concrete. Suitable concrete aggregates were found in deposits of gravel on top of the benches above the west end on the tunnel. A mixing plant was built where the material could be screened and placed in bins on the edge of the bench, whence it could be moved as needed by gravity down chutes to the mixer at the mouth of the tunnel below. Concrete forms were made by bending dump-car rails to the desired shape. Placing the freshly mixed concrete behind the forms in the top segment of the tunnel roof was accomplished by hand shoveling, a rather crude arrangement in comparison with modern methods.

The break-through on No. 2 Tunnel finally came the morning of April 12, 1908. For a month the drilling crews had been hearing the shooting on the opposite side. They thus knew they were getting closer and closer together. But the tension did not get high until I told them on April 11th that the crews were only 12 feet apart. From then on they raced to see who could be the first to break through. The night of the 11th I stayed up with the crew on the east side thinking they would break through when they shot at 11 o'clock p.m.

However, they failed to break through so I decided to stay on with the graveyard shift until they shot at 7 a.m. Mike Flannery, a big Irishman was shift boss on the graveyard shift. About 25 to 30 holes were drilled in the heading and bench of the face during each shift. Those were loaded with heavy charges of dynamite which was set off by an exploding cap placed on the end of the old fashioned fuse and stuck into the charge of dynamite. The fuses were then lit by hand, and were cut long enough to allow time to light all of the 25 or 30 fuses and run to safety before the charges would start to explode. In this case I helped Mike 'spit' (ignite) the 28 fuses for the shot at 7 a.m. just before going off shift. Hand lighting so many fuses takes considerable time, even with two working at it. The first ones continue to spew sparks, and smoke around one's feet, while he is lighting the remainder. It was therefore hard for me to keep my mind on my business with a dozen or more fuses spewing around my feet. I was sure ready to run for it by the time Mike says 'That's all' and started to yell Fire! Fire! Running down the tunnel out of range of flying rocks we crouched behind some posts and counted the shots as they exploded. Finally Mike said that was all and we rushed back into the smoke and gas to see if we had broken through. We had missed count! Just as we approached the heading another charge exploded in front of us. Fortunately, it was a lifter down deep in the muck, and did not throw rocks on us. Waiting a few moments, we clambered over the loose rock and could hear voices ahead. By that we knew the break-through had occurred as planned. By that time we were suffocating by the smoke and gas, and were saved by sticking our noses down into the fresh air pouring through a small opening in the face of the tunnel. A few questions put to the opposite crew assured me that we had struck head on, and that my worries were over.

Throughout the winter and spring months of 1907-08 all phases of the work progressed satisfactorily. Accidents were few and minor, with the exception of one fatality among the ditch crew working on Sage Creek. When they were cutting through a 20-foot ledge of sandstone, using hand steel and black powder, an accident occurred. While loading a 20-foot drill hole by pouring powder into it the powder clogged in the hole part way down. A workman picked up a steel drill instead of a wooden stick to clear the hole. A spark touched off the powder sending a piece of sandstone weighing several tons rolling over the man.

Occasionally, personal altercations between workmen enlivened the camp, like the morning when the fat chinese cook and the big white flunky got into a fight over who should fill the hot-water tank on the back of the range. One using a cleaver, and the other a heavy iron dipper, they made quite a mess. The fight broke up when the chinaman bit a chunk out of the flunkey's leg. The chinaman came running toward the office with his bloody apron wrapped around his head and neck. At first glance the top of his head looked like his head had been cut off. To top it off, the pet coyote, sensing something was wrong, set up an awful howl.

Another time a chainman flipped a steel tape against the wet trouser leg of the electrician while the electrician was standing on a wooden box as insulation, while holding two hot wires. Fortunately, the electrician's wild leap when the shock hit him broke the contact, without serious results.

Cody was booming during the winter of 1907-8 and the spring as a result of the many men employed on the different public works projects in the area. In addition to the Wiley Project were the Shoshone Dam above Cody; the Corbett Tunnel and the Shoshone Project irrigation canals. In Cody the principal store was the Cody Trading Company, managed by Senator Jake Schwoob, which then as well as now 'Sold Everything', and Dave Jones who was also 'Outfitter for Men and Boys.' Seven saloons on Main Street supplied refreshments for thirsty men; while Etta Feeley's night club provided entertainment for the tired, lonely construction workers. The Burlington Railroad depot seemed even farther away then, because several times I walked and carried my 'grip' the two miles to it via the well-worn dusty trail that wound its circuitous way across the river.

Things were flying high during the summer of 1908 until, alas! Hard times struck. Money for public works became tight and the management of the Wiley Project decided to try to raise more money to continue the work by advertising a big land opening to sell, to prospective farmers of the mid-west, the desert land in the Dry Creek valley to come under the irrigation ditches they were constructing. Special trains brought hundreds of visitors to view the lands. To carry the visitors over the lands, and also to make a showing of prosperity, the Company imported six big red touring cars from Chicago. They were about the first cars of that size to hit the Basin. The young drivers of the cars, also imported from Chicago, had a lot of fun before the crowds arrived, by racing the big cars over the dusty roads, scaring teams and killing farmers' chickens that wandered across the roads.

The prospective settlers from the east came and looked over the sage brush and saltsage flats which were as dry as a bone, with the promised water ditches far from complete. They shook their heads and returned home with their money in their pockets, and the big land sale was a complete flop. Shortly after that all work on the irrigation project stopped. Creditors swarmed in and by means of mechanic's liens salvaged what they could from the equipment.

The workmen scattered to the four winds to seek their fortune elsewhere. Being footloose and free I departed for my old home in Missouri for an extended vacation, and incidentally to look over the new crop of corn-fed girls. It was not until over fifty years later that I again visited the old abandoned construction sites. That time, in 1959 with one of those Missouri girls as my wife. Picking up Billy Edwards and his lovely wife Alice at their Emblem, Wyoming home, we drove up to the old Wiley Project and tramped around the old campsites and tunnel mouths. It was with a feeling of mixed emotions we viewed the old caved-in tunnels of which we had at one time been so proud. Thoughts of bygone days haunted us as we viewed the familiar landscapes. What changes had taken place! The most impressive factor to indicate the great lapse of time between visits were the presence of six inch pine trees growing in the bottom of the old canal! Nature had done its best to heal the awful scars by grassing over most of the slopes. But the ragged banks of the tunnel portals could not be healed so easily. Broken and rotten timbers hung from tunnel tops, piles of slacked shale all but blocked the tunnels, once so spick and span.

Bats and wild animals now shared the dark caverns with illusive ‘tunnel ghosts’! From the ridge above the camp distant familiar land marks were pointed out to our wives; South on the north face of Carter Mountain I could spot where I had felled my first buck as he bounded across open sliderock between two fingers of dark streaks of timber pointing up the steep slope; northeasterly were the reddish, pink badlands of McCulloch Peaks bringing memories of thirst, sweat, and toil as I surveyed that waste land; northward to the dark grove of timber on the tip-top of Hart Mountain, the Guide Post of the Big Horn Basin, which pin-pointed the spot where in 1911 I established an iron post section corner for the U.S. General Land Office.

Leaving the tunnels and their ghostly inhabitants to their accustomed peace we drove down to Cody where the hustle and bustle of that busy town was a welcome change. Visited there were some well remembered land marks, including the Cody Trading Company, Irma Hotel, and Shoshone National Bank which was filled with memories of its late president, the genial S.C. Parks Jr. Gone from the streets, however, were the ten-horse-team freight outfits with their jerk-line driver, heading for such faraway places as Meeteetse, Thermopolis, or perhaps the Kirwin mines up on the shoulder of Frank’s Peak. Gone were Tex Holm’s four-horse Yellowstone Park stages. Missing also were the prancing buggy team sometimes seen in front of the Irma impatiently waiting to take the famous Colonel to his plush T E Ranch at the close of the show season. But a whiff of the west wind confirmed the continued presence of DeMaris’ Hot Springs along the river bank.

Something new had been added – the famous Buffalo Bill Museum and the statute of the popular scout, something once seen never to be forgotten.

At the close of our visit, Bill and I both agreed that our experiences on the Wiley Project had not only been a valuable part of our education, but, it had also added to our stock of tall stories to tell our children and grandchildren.