

Great Gunnison Tunnel Project

By JOHN A. CURTIS

If the Uncompahgre Project is a first-class example of subsequent plans and "unforeseen contingencies" in a great work, it is also a fine illustration that most anything can be done with the backing of a hundred million people. Its future success and the prosperity of the Uncompahgre valley depends and hinges upon the character of its people, whether Republican or Cossack. It was as far back as 1887-8 that the early settlers discovered the real meaning of "appropriation," as well as becoming more or less color blind about the ownership of water. Ditches taken out higher up the river, though later in point of time and use, got the first "whack" at the water at the expense of the earlier ditches on Garnet, Ash and California mesas.

The lower end of California dried up in 1888 and Garnet Mesa, notwithstanding the activity along the river of W. O. Stephens, Standish and Bill Obert, suffered for waters due in August and September. That the Gunnison river was just over the hill, and was a source of supply, was not unobserved by the farmers between Olathe and Delta. In 1889 a large crop of grasshoppers and a short water supply was the determining factor in making the first real attempt at turning the Gunnison water into the Uncompahgre valley. Nuck Brown of Olathe was sure that the low gap in the ridge northeast of Olathe was the very place. Levels were run over the ridge, starting on the valley side with elevation 5,800, but the inlet to tunnel

discovered at this time and the results were negative, in that the hope of finding a tunnel site through the narrow part of the ridge was not realized. A few years later Flemming of Montrose and Whinnerah of Ouray ran a line not essentially different from the present tunnel line, but a six-mile tunnel failed to appeal to the millionaire farmers of the Uncompahgre valley, and save for some talk and good resolutions, nothing further was done until the summer of 1900. That season was Bolshevik, and E. B. Anderson, one of the enterprising farmers under the Garnet ditch, finished work in July because there was no more water; he bought a pair of top boots and started a propoganda about a never ending supply of real water from the Gunnison. Conditions favored the impossible and Anderson soon raised a grub stake and a little money. With a party of five, investigations were made of the canon north and east of Bostwick park; the way into the canon bottom was found and the proper elevation discovered to turn the waters of the Gunnison into the Uncompahgre valley. Endeavors were made to examine the canon to determine the feasibility of a ditch and short tunnels to conduct the water to Red Rock divide, where the ridge is comparatively narrow. As the camp was at Dawson spring, it required half of the day to reach the canon and the balance to get back, so it was decided to get a skiff or two, put them in the river at Cimarron and float down to the determined elevation and then survey down the canon to Red Rock gulch.

It was on the 3d of September, 1890, that the boat party left Delta for Montrose, where it was reinforced by Torrence and Pelton, from whom two boats were purchased—flat bottomed skiffs—and then a few supplies were

blankets, grub and calking the boat. From this camp, down stream, it was proposed to examine carefully, as here, if anywhere, would be the opportunity to cut the length of Fleming and Whinnerah's tunnel. The object of the first voyage was simply to reach this point. The instruments used—an aneroid barometer, pocket compass, hand level and clinometer with an engineer's 100-foot chain—were sufficient for such preliminary investigation. The first day's journey was fifteen thousand feet and talus on the left bank seemed to indicate that the chances were good for the shorter tunnel, but the next day brought a sharp turn in the canon and vertical walls almost from the water's edge changed conditions; the river was filled with gigantic boulders so that the boat became almost a nuisance except for crossing from side to side to find space for travelling. Not over two thousand feet were made on any succeeding day and on the last day of the month, having reached the head of a rapid of unknown length with both walls of the canon vertical and worse, and a boat that would scarcely carry three and five to go, it was decided to crawl out. The only possible way appeared on the Maher side and from 8 o'clock in the morning to 6 o'clock in the evening was required to reach the crest. As a result it was evident that there was no "Royal Road" for the waters of the Gunnison to reach the Uncompahgre valley; that the WAY would be a line from the nearest proper contour in the Uncompahgre valley to its corresponding contour in the Gunnison. The problem was destined to be solved, for Mead Hammond was elected to the Legislature on a Gunnison water platform, though little of it was used in the canvass, and John C. Bell was in Congress while A. Lincoln Fellows was getting into the valley with the Geological Survey.

Hammond, with Rawalt from Gunnison, where a Normal School was the desired end, hypnotized the Legislature with their persuasive language and other things; Rawalt got the Normal and Hammond "State Canal No. 3" and a \$50,000 appropriation, enough with a reasonable discretion, to make necessary surveys and investigations to ascertain the where and the how; Bell was convincing Congress that it was the best project for the Reclamation Service to do a service, and obtain the required aid. During all this time Fellows, urged on by the Tunnel Board of Strategy, Hammond, Tobin and Dodge, was contouring the west slope of the ridge so a site could be selected and the tunnel begun at once.

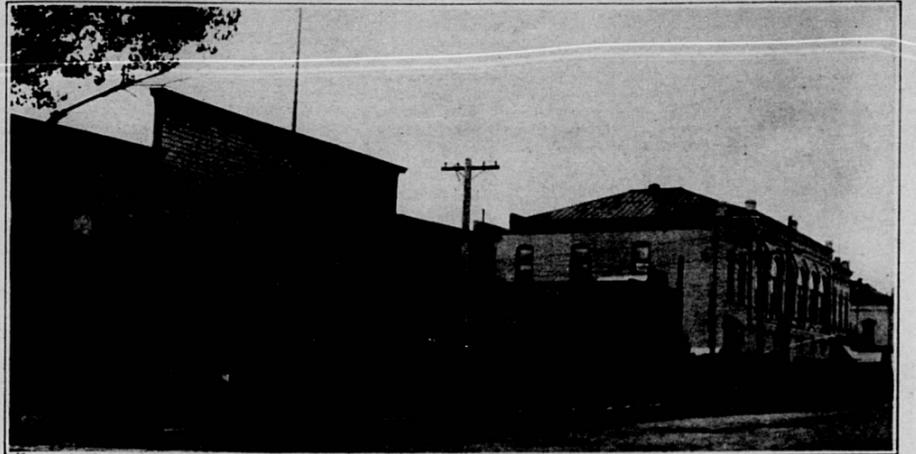
During the next two or three years, notwithstanding frenzied work in the wrong place, oil field exploiting, useless stunts and high sounding speeches on "Crystal water," "Blossoming as the Rose," "Fountain of Everlasting Youth," etc., much really valuable work was done. The Tunnel Board mapped the valley, made the necessary filings on Gunnison water, set out some preliminary ditch lines, began a tunnel, designed from Fellows' first contour sheet, and Tom Henahan made several hundred feet of fine tunnel in the adobes—(It has often been regretted that the tunnel was not made in a spud region for it had the makings of several cellars)—Dodge started a "Board Library" with two of Hayden's Reports, and with due diligence the \$50,000 was used up in about a year. This quick work clarified the atmosphere; the Reclamation Service assumed charge of the work, completed a topographic map of the Uncompahgre Valley and the Project; set out a tunnel site with outlet on the railroad and began predicting the cost of the project. At first the estimated cost of a few surveys, the tunnel and a canal to the Uncompahgre river were added together and divided by the estimated number of available acres which gave a quotient of twenty-five, which notation was dollars or estimate No. 1, for cost per acre. Time and very little of it, brought more wisdom and it seemed necessary for the R. S. to acquire the water rights and existing ditches in the valley, build more canals to take in more land, rebuild old ditches, make new surveys to segregate lands and classify them. All these things and others too numerous to mention kept up the continual addi-

tion to the work as well as the cost. The geologist did not guess quite right and unforeseen difficulties were encountered in the tunnel; it was also discovered that concrete work on an adobe foundation was not a house on the rock, and that the available acre-

age changed every year and with no definite ratio, so now the cost is about \$70 per acre. Conjectures on what might have been are not fruitful of results. A backsight, brush and rubbish cleaned away is better than a front-sight, but in no wise so useful.

In every work of such magnitude many things are done that would not be repeated in a similar case, at least by the same party. As a whole, it is a gigantic work, well done, and all participants, from Fellows to Foster, are entitled to share the honors.

Continuous Building Marks Progress of Delta County



The time since there was nothing in particular to mark the various towns in Delta County is still well within the memory of some of the older residents of this community.

The Grand Mesa Lumber Company was early in appreciating the possibilities of this land and has for many years been a prominent factor in the building program that has gone on continuously.

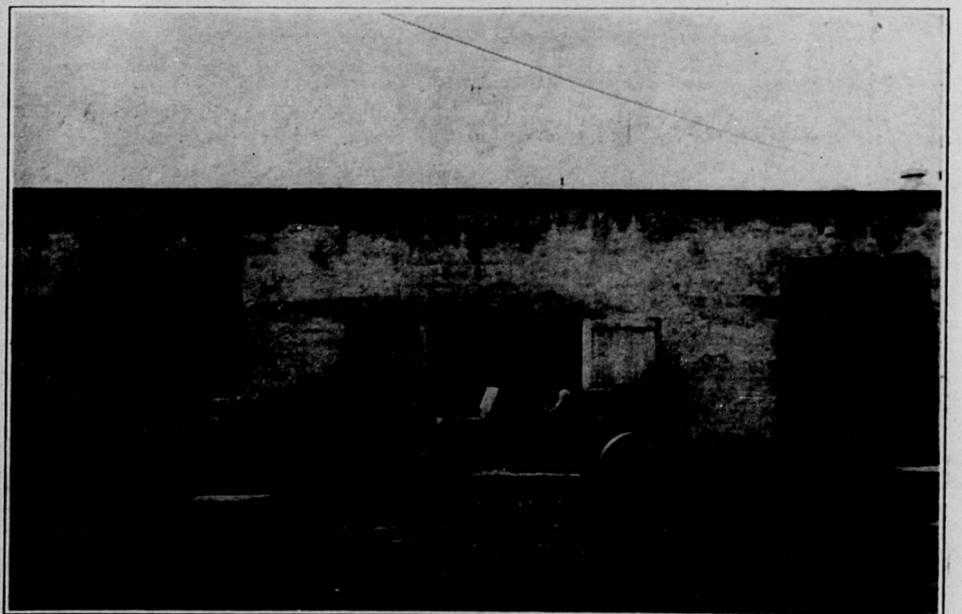
Newer, larger and more permanent buildings continue to be added to those

we have, and still others are needed to more adequately house our people, their businesses and institutions.

In order to cope with growing demands good building material must always be available and must be ready for quick delivery. In order to help Delta vicinity grow we believe we must stand in readiness to fill these growing requirements. Investigate our ability to assist in your building needs. We are always at your service.

The Grand Mesa Lumber Company

I. C. HALL, President and Manager.
DELTA, COLORADO



Home of the Delta Ice and Bottling Works

The Delta Ice and Bottling Works has been owned and operated by the present owner, Ernest Engelhardt, since 1910. All the products of this establishment are pure and cooling, and the more appreciated because of the long mild season enjoyed by this section.

Nearly all the ice used in Delta county comes from this plant. It is made from pure mountain water, distilled and re-

duced to the solid state. It is retailed to the residents of Delta and vicinity and sold at wholesale throughout the county. Delta ice is a distinctly superior staple commodity and the service is unlimited.

During the past few months the plant has been greatly enlarged until now the Delta plant can supply the entire county.

True Fruit Flavors For Soda Water

Beginning April 1st we shall have Soda Water in all flavors—true fruit—that satisfying taste that just 'hits the spot.' Get the habit of having a case of soda

water on hand with which to refresh yourselves and your friends during warm afternoons and evenings.

ERNEST ENGELHARDT, Manufacturer Both Phones
Delta, Colorado



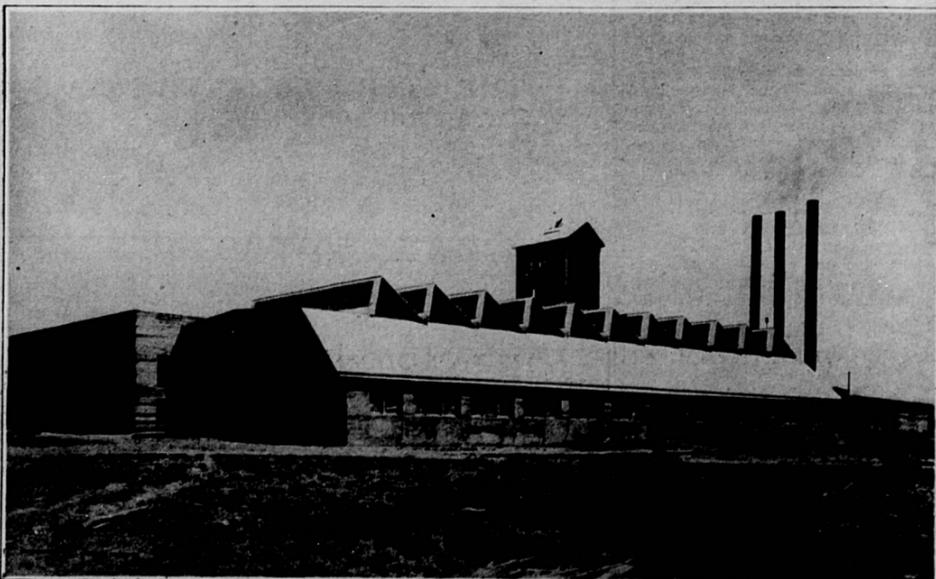
Fred Willits Home Peach Valley—Under Gunnison Tunnel Project.

was discovered to be 400 feet above the Gunnison river at that point, so that it was decided to continue investigations while the grub lasted. The Gunnison at the mouth of Red Rock canon was next tried and was found to be 100 feet higher, but still several hundred feet too low. An attempt was then made to follow up the canon along the river bed, but after six hours travel, crawling and climbing, to make about half a mile, it was deemed impossible and the gang climbed out into Bostwick Park, having been nearly wrecked by a band of mountain sheep starting a rock slide. The next and last day an examination was made by going up Dawson's gulch and over to the canon. It is along this part of the canon for about five or six miles that the Black canon is narrowest and deepest and but few places where it is possible to reach the river. From the crest of the ridge above Bostwick park you gaze to the eastward and see no sign of canon, just a slightly descending plateau; but go down this slope for about a mile and suddenly you are at the brink of a cleft fifteen hundred feet deep, with the river, a white ribbon at the bottom.

Sufficient measurements were made to ascertain that the water surface of the Gunnison was about 6,200 feet. The gulch leading down to near the intake of the present tunnel was not

obtained and the next day went to Cimarron by train, attended prayer meeting in the evening and got launched on the Gunnison river next morning at 10 o'clock.

For about 140 feet the navigation was good, after that it was a case of poling through rapids full of boulders, pulling the boats over corduroy roads made of drift, sometimes two thousand feet at a time, then packing the baggage and grub up for another try in the water. It was expected that about one day would be required to make the first run from Cimarron to Coffee Pot gulch, but four of the longest kind of days were used and the landing was reached with no grub, one boat and some wet blankets. The party climbed out and reached the railroad at Cedar Creek, thence to Montrose, agreeing to go back and finish the trip in about a week. It was, however, the 24th of September when the party left Montrose for Coffee Pot by wagon. The summit of ridge was reached about noon in a fierce snow storm; the wagon returned and each one of the party took his share of supplies in a gunny sack and began the slide into the canon. The snow changed to rain after a descent of a thousand-feet, but the brush and aspen fortunately prevented any disasters and camp was reached at dusk. Most of the night was used in drying



Immense Packing Plant of Colorado Packing Corporation at Delta.