

MONSTER ENTERPRISE NEARING COMPLETION

Work on the Newcastle Irrigation Project Is Progressing as Rapidly as Men and Money Can Push It. When Completed Will Be One of the Largest in the State.

INVOLVES EXPENDITURE IN EXCESS OF \$200,000

Waters of Reservoir Will Cover Greater Portion of Grass Valley and Tunnel a Mile Long Will Convey Waters Through Mountain.
Great Engineering Feat.

Few persons in the state realize the magnitude of the great irrigation system being constructed in Iron county and known as the Newcastle project. The undertaking is so great and the possibilities so probable that the enthusiasm of every citizen of Iron county would know no bounds if they could but fully appreciate what it means for this section of the state.

Last Saturday a representative of The Record left Cedar City in company with Lehi W. Jones, one of the early promoters of the project, for the purpose of going over the enterprise to see just the extent of it and the benefits that would result.

At 2:30 Saturday afternoon we arrived at the company's ranch in Newcastle valley where we left our team over night. We were entertained for a few hours in the home of Superintendent and Mrs. T. W. Jones, and after enjoying some refreshments entered one of the company's auto's and were driven some nine miles to the new hotel located on the new townsite. Here we found a modern hotel, with electric lights, and all modern conveniences. The hotel is in charge of a Mr. Worsley and his charming daughter, Miss Ethel, recently of Bountiful, Utah. In addition to the hotel, the company has erected several cottages for the use of settlers. Sidewalks have been laid and shade trees planted and several hundred additional trees were on hand ready to be put out as soon as weather conditions will permit.

Some three carloads of household goods arrived during the week previous and six more were expected within the next ten days, the property of new settlers who have purchased land from the company and intend opening up new homes.

We remained at the hotel all night, returning to the ranch the following morning. From the ranch we drove to the old town of Newcastle. While it is called by many the "old" town it is in reality the new town. The postoffice is located here. During the last year a number of new residences have been built, of the most modern type. Hundreds of acres of fine land

have been broken and planted to crops and prosperity was everywhere present. Among those we met was M. D. Jamison, proprietor of the Newcastle Mercantile Co. who located in the town some two years since and opened a general merchandise store. We found him to be a most pleasant gentleman and enthusiastic over the future of that section. From Newcastle we started for the site of the reservoir and tunnel. The route was up Pinto canyon and led us past the town of Pinto, in Washington county. We reached the north end of the tunnel at 3 o'clock in the afternoon, after a more than six hours' ride. The tunnel workmen were changing shift and the shift that was coming off had just fired their blast and the great engine was blowing out the smoke by means of compressed air. We proceeded up the steep mountain side to the summit, a distance of nearly half a mile from the north end of the tunnel, where the camping quarters are located, and after disposing of a substantial meal which the cooks prepared for us, we returned to the tunnel.

By this time the smoke had been cleared from the tunnel sufficiently to permit the workmen to enter. Going from the engine room down a shaft a distance of twenty-six feet we reached the tunnel. In size it is 7 by 7 feet and the entire distance passes through a formation of decomposed granite. We entered the mountain along the tunnel a distance of 1950 feet, until we reached the point where the drillmen were preparing to proceed with the work of drilling holes into the solid rock for the purpose of placing another giant powder blast.

There are at present 43 men employed in the tunnels, one force working from the north side of the mountain south, another coming from the south side of the mountain to connect with this one, and still another working from the point at which the second force began. The men work in shifts of eight hours each, continuously, day and night. The "muck," or stone dislodged by the blasts, is removed by ore cars, horses and

mules. Up to the present time the tunnel has been completed a distance of more than 2650 feet, and there is yet 1650 feet to be completed, which will make the total length of the tunnel 4300 feet, or but little less than a mile.

We spent the night with chief engineer J. X. Gardner and his assistant, Robert Gardner, and the following morning drove to the site of the reservoir dam, some three miles from the camp quarters. The dam is located in a narrow gorge at the lower end of Grass Valley. It is completed to a height of 75 feet but will be raised another 25 feet, work to be continued as soon as the tunnel is completed. It is made of dirt, the largest dam of its kind in the state. When the reservoir is filled it will contain 300,000 acre feet of water and will cover more than half of Grass Valley, standing at a depth of 55 feet over the mouth of the tunnel. The house and barn on the Bunker farm, located a mile and a half from the dam, will be submerged to the gables, and the farm will be completely covered. Engineer Gardner stated that the water pressure against the center of the dam would be approximately 120 tons per square foot.

The cost of the dam so far approximates \$50,000, while the cost of the tunnel is a little less than \$10 per lineal foot. Including the improvements to the land, canals, buildings, fences, and the like, the company has already expended more than \$200,000 on the project. They have 20,000 acres of the finest land in the country for which they guarantee an abundance of water for irrigation, making provision for one and one half acre feet of water for each acre of land. When we were at the dam last Sunday there was a volume of water pouring through the spillway of the dam, estimated by Engineer J. X. Gardner to exceed 25 second feet.

The enterprise is one of the greatest ever undertaken in the state and may be placed alongside the big irrigation projects of the west, and its completion means a new era for Iron county.