

UTAH IN THE LEAD.

Mr. Thomas Tonge just returned from Salt Lake City, where he has been attending the International Mining Congress as one of the Colorado delegates, has the following to say of Utah, in an interview published by the Denver Republican of July 11:

"No man can visit another state or country without observing numerous things which could be adopted by his own community with great advantage. Among the first things noticeable in Utah is the utilization of mountain streams for the very economical generation of electricity for power and lighting purposes. The Pioneer Electric Power company, with a capital of two million dollars, mostly from Providence, R. I., has erected a plant on a stream above Ogden, with the generating plant in Ogden. The stream itself has a minimum flow of 100 cubic feet of water per second. The plant in the canyon with a capacity of 10,000 hydraulic horse power, consists in taking the water out of the stream by means of a pipe line, $6\frac{1}{2}$ miles of which, with a total fall of 516 feet, conducts the water to the plant in Ogden, which consists of five water wheels, each of 1,000 horse power, each wheel being connected with an electric generator of 1,000 horse power capacity.

"This power is mostly transmitted to Salt Lake City, thirty-seven miles distant, where it is supplied to smaller consumers at \$40 per horse power per annum, or about one-half the cost of coal and steam, lower rates being made to larger consumers. The leading consumer in Salt Lake City is the electric light plant, which uses 1,000 horse power. The Pioneer Electric Power Plant has now been in most successful operation for nine months, not having lost one minute of time or cost one cent for repairs. The power can be further increased by building dams and storing surplus water. The inevitable tendency of this vast supply of cheap power is to increase local manufacturing.

"On the Big Cottonwood, in a canyon near Salt Lake City, there are two other plants utilizing a mountain stream for the generation of electricity for power and lighting. From these two plants and the one at Ogden the entire street car system of Salt Lake City is operated, and the whole city lighted.

"What occurs to a Denver man on seeing these Utah plants, is that the Platte river, between the point where it issues from the South Park and the point where it issues on the plain at Platte Canyon, a distance of fifty-six miles, has a fall of nearly 5,000 feet, and that it is, therefore, possible to use the Platte almost indefinitely for the generation of electrical power, by means of dams, pipe lines and water-wheels, at a large number of consecutive points, the water being thereby used over and over again, if necessary.

In view of the successful utilization of the streams of Utah, it is only a matter of time and capital when not merely the entire street car and electric lighting systems of Denver will be operated from electric generating plants located in Platte canyon, but surplus power will be furnished to the manufacturing establishments of the city, at much less than the present cost of coal and steam.

"Another subject on which Colorado can well follow the lead of Utah, is the beet sugar industry. I had a very pleasant interview with T. R. Cutler, the managing director of the Lehi beet sugar factory, and was informed by him that the world's supply of sugar is eight million tons per annum of which nearly three-fourth is produced from sugar beet, and the remainder from sugar cane. Of the beet sugar Germany produced last year a

fraction under two million tons. The consumption of sugar in the United States last year was more than two million tons. Of that amount, in dollars and cents, we imported nearly 110 million dollars worth. We made between 40,000 and 50,000 tons of beet sugar in the United States last year. It would take a capital of at least a billion and a half of dollars to erect factories in the United States sufficient to supply the sugar consumption of this country.

"The Utah Sugar company of Lehi has been in operation seven years. The factory has a capacity of 330 tons each 24 hours during the season, but has been run as high as 400 tons. In the seven years it produced 34 million pounds of sugar, the first year turning out one million pounds, and in 1896 no less than 9,250,000 pounds, and 1896 peck this year to make ten million pounds. In the seven years the factory has paid the farmers for beets \$787,000 and to labor employed in the factory about \$400,000. The sugar has been sold mostly in Utah alone. Last year 62 pounds of sugar per capita was consumed in the entire United States. The Lehi sugar factory has paid the stockholders from 10 to 12 per cent per annum in dividends, besides materially reducing the indebtedness of the company and the stock is steadily rising in market value. All the farm land within range of the factory has doubled in market value. Within a limited radius from Lehi there are 3,300 acres planted to beets this year, and the factory is expecting to receive between 40,000 and 50,000 tons of beets. Four months is a very long season to operate the factory, out in 1896 they ran 140 days. The pulp remaining after the sugar is extracted, is a most excellent feed for live stock, fattening as quickly as corn, but resulting in tenderer and juicier meat. One cattle company has taken the pulp from the factory for the last four years. Governor Wells showed me in his office a sample of alcohol which it has been discovered can be very profitably made from the hitherto waste product of the sugar factory, and will therefore henceforth prove a material additional source of revenue.

"Encouraged by the marked success of the Lehi enterprise, a beet sugar factory will be built at Ogden, which will be in operation about September 10th of this year. It is about the same size as the one at Lehi, except that the building is put up for double the capacity, though only the same size of machinery at present as the Lehi factory. The Ogden company is incorporated at a capital of \$500,000.

"Present indications are that next year a beet sugar factory will be erected near Mount Nebo, in the southern end of Utah county.

"Utah parties are also erecting a beet sugar factory at La Grande, Ore., of the same capacity as the Ogden plant. The adjoining farmers have guaranteed a supply of beets for five years, and the community has given the company a bonus of \$80,000. Mr. Cutler says that a two-years' guarantee is ample, as in that the farmers will realize that beets are a most profitable crop. At Lehi the factory can scarcely take all the beets that are offered, and, unfortunately, was not built with a view of increased capacity.

"Surely there is here much food for thought for Colorado men, and it is high time that tangible steps were taken looking to the early establishment of the beet sugar industry in one or more of our agricultural districts in Colorado.

"It is also interesting and instructive to a Colorado man to learn that about one-tenth of the wool clip of Utah is manufactured in Utah, the principal factory being at Provo. During 1897 this one factory, employing over 150

people, manufactured \$250,000 worth of people, manufactured \$225,000 worth of cassimeres and the balance blankets, flannels, etc. Three-fourths of the product of the factory are shipped to wholesale houses in Chicago and the East.

"When will Colorado have a successful woolen factory?

"As to mining, the magnitude and resources of Utah are little known, and certainly are not realized outside of that State. From the very interesting information I gathered during my week's stay in Utah, I propose at no distant date, if I can so arrange, to take the necessary time to visit Tintic, Mercur, Park City, Bingham and other districts. Speaking generally, the mining industry of Utah seems practically free from 'wild cat companies' and 'town lot boomers,' which have done much to bring discredit and doubt on the legitimate mining industry of Colorado.

"I did manage to visit the Highland Boy group at Bingham (representing English capital), of which Samuel Newhouse, formerly of Denver, is the managing director. It is a wonderful property. No. 1 ore chute is already practically exposed by tunnels, cross-cuts and winzes, for over 400 feet laterally, over 200 feet vertically, with a width ranging from 50 to over 100 feet, or a total of 6,000,000 cubic feet of pay ore, of which about 1,500,000 cubic feet is oxidized ore, averaging about 15 cubic feet to the ton, or 100,000 tons, and about 4,500,000 cubic feet is sulphide ore, averaging about 8 cubic feet per ton, or 560,000 tons. The oxidized ore averages about \$10 per ton, and is amenable to the cyanide process, but the sulphide ore, after mining, hauling and treatment, \$20 per ton. A second, but somewhat smaller, ore chute is also opened up. A third ore chute, presumably as large and good as the first, judging from surface prospecting, is about being opened up by tunnel at 850 feet below the surface, and there is every reason, from the local conditions, to anticipate a series of additional similar ore chutes in the extension of the vein in the large tract of ground not yet prospected. All the present indications are that the Highland Boy will, in the early future, take rank among the bonanza mines of America, and arrangements are now being perfected for the construction of a short line of railway and a smelter in connection with this mine.

"A comparison of present conditions in Colorado and Utah apparently indicates that an outside investor can get a better mining property relatively at a less price and on more reasonable terms in Utah than in Colorado, and in the business revival following the early close of the present war this difference will doubtless have an important influence on capital.

"Brigham Young used to impress upon his people: 'Be self-sustaining; keep your money at home.' The extent to which they followed that sound and shrewd advice has had very much to do with the solid upbuilding of Utah, the development of her marvelous resources and the present comparative prosperity of the whole community. Generally speaking, the distinguishing features of Utah are industry, thrift, sobriety, small farms, thorough cultivation, and the absence of beggars and tramps.

"There should be an ever increasing community of interest between Colorado and Utah, between Denver and Salt Lake City, which existing railroad facilities are calculated to foster. While the Denver & Rio Grande and Rio Grande Western route is by far the most interesting and picturesque, that of the Union Pacific and Oregon Short Line is sufficiently shorter and less mountainous to save ten hours' time between the two cities. A Den-