

Iowa Hill Canal.

For many years the divide lying between the North and Middle forks of the American river, has been, comparatively speaking, almost worthless for mining purposes, from the fact that there has been no adequate means provided to obtain a supply of water, an element equally as essential in mining as the precious metal itself. During the past twenty years numerous projects have been commenced to supply this deficiency, but have all failed; some from the lack of means to carry out so stupendous an undertaking, and others from the fact that the result would not be remunerative.

Last spring several of the hard-fisted miners in conjunction with the business men of Iowa Hill, determined that the project of bringing in a supply of water from the head branches of the North Fork of the American river was feasible, and that they had waited long enough, Micawber like, for something to turn up. They accordingly formed themselves into a company, incorporated under the laws of this State, fixing their capital stock at one \$1,000,000 divided into one thousand shares of \$1,000 each. The present officers of the company being: J. W. Chinn, President; C. F. Macy, Secretary; and "William Van Vactor, Superintendent. The Trustees are, "W. H. Kinder, J. W. Chinn, William Van Vactor, D. "W. Spear and C. F. Macy. On the first of June the company had three hundred men at work and have about completed all of the ditching from the head of Indian canon to Tadpole canon, a distance of twenty-five miles, and if fair weather continues for three or four weeks longer they will have completed all of the fluming on that portion of the canal. The last half mile, before reaching Tadpole canon, will be by far the heaviest work on the route, the side of the canon being very precipitous, requiring a large amount of blasting to enable them to get a foundation for their flume.

The company have procured a portable steam saw mill, which is at present located at Secret Springs, and it is turning out about ten thousand feet of lumber per day. Men are now at work putting in the flume, the principal portion of which will be at Pioneer gap and Tadpole canon. The canal is seven feet on the bottom, nine on top, and four feet deep; the flumes are seven feet wide and four feet deep. The reservoir of the company is located on what is known as the Fish and Brown ranch, about five miles from Iowa Hill, is said to be one of the finest pieces of work in the State. The embankment at the bottom is one hundred and fifty feet wide and is about forty on top at the present time. The towers in which the gate frame works are fifty-five feet high. The trunk and gate were made at the Union foundry in San Francisco; the trunk is one hundred and fifty feet long and thirty inches in diameter, and made of No. 12 iron, heavily coated with asphaltum. The reservoir as, at present constructed, covers an area of sixty-five acres at an average depth of twenty- two feet. Next year the embankment will be raised ten feet higher, and it will then cover one hundred acres, at an average depth of twenty-seven and one-half feet. The total amount of money expended up to the present time is about \$60,000;

This is the result of energy, perserverance and determination on the part of a few resolute men, and we trust that they maybe enabled to meet with the liberal reward they have so well merited and that their example may be followed by others, so that ere long we may be enabled to truthfully say that Placer county is second to none in the State, in the systematic and thorough development of her mineral resources. —Placer Argus.

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The Iowa Hill Canal,

A correspondent writes to the Placer Argus giving an account of the season's work on the Iowa Hill canal, from which we make the following extracts: The right of route is one of the best in the State; the cost of construction so far, for so large a work, taking as a basis of comparison the figures given in

Langley's Pacific Coast Directory of all the canals in the country, amounting together to over 6,000 miles, is I am safe in saying, far less than any similar work in the State; the water shed is simply enormous; the expense, of repairs, and attendance, from the favorable character of country it passes through, except the upper end, will be trifling; the territory it commands is inexhaustible in wealth and extent, for by a judicious system of reservoirs, which is the cheapest process in the end, the water supply, without going farther than Sailor and New York canyons, can be delivered over the whole of the upper portion of the county, from Iowa hill to Michigan bluffs, in abundance, for seven or eight months in the year, and that is long enough. I might with advantage mention several more salient points this great work possesses over its compares in other parts of the State, only I am afraid of being too lengthy.

As a matter of course, those at a distance having an interest in the matter, either peculiarly or otherwise, will like to hear about the progress of the work this season. I believe I may say it has been satisfactory in every way. I have already expressed through the columns of a San Francisco paper the respect I felt for the leading men of the company for the vast amount of work they have accomplished during the first season under the most pressing difficulties. Financially, the present season has been equally harassing; but with true California pluck, they kept economically and steadily at work, and the results as they stand to-day, rather increase my admiration than otherwise. The hardest part of their labors is over; the remainder is easy. There are now 26 miles of canal, seven feet on the bottom, with reservoir, waste gates, and flumes to Tadpole lake, complete. The main ditch in its original capacity, stops about four miles from town, and is thence divided into two branches, somewhat smaller, going respectively to Iowa and Wisconsin hills, and covering all the claims on either side of Indian canon. Some of these claims are now fixing up on an extensive scale, having in all cases not less than 500 feet pressure.

The main reservoir eight miles from town, has been raised from 32 to 50 feet, widened 10 feet, and extended from hill to hill bounding the valley, making the total length of wall 286 yards. The amount of dirt put in the reservoir this season by 10 Chinamen and four horses was 17,000 cubic yards, besides doing 34 days outside work in the neighborhood. Since the horses were drawn off on account of storms, a railroad has been put on the entire length of the reservoir, and two large cars will be kept running all winter. The track raises the wall an additional two feet, so that the entire available capacity of the reservoir is now from 48 to 50 feet of water in depth at the main trunk, 286 yards in width, with an overflow of somewhat over 100 acres. Basing my calculations upon the amount of water discharged to Judge Spears claim, for six consecutive weeks, last season without any supply coming in, I make the cash value of such filling about \$7,500. Now if as some contend, it can be filled four times in an ordinary season, we see at once the respectable sum the company will realize this winter; but whether it can be filled four times or not, for I admit there is a difference of opinion upon the matter, one thing is certain, the company will realize enough to place them beyond all external pressure in the future. This I mention as a final victory secured beyond controversy.

The demand for water this season is about 5,000 inches a day, but the company will not attempt to supply more than 3,000. Can they really supply this large amount? Let us see. On the first of the current month, there were 25 feet of water in the reservoir, with a daily supply of 400 inches, besides 2,000 inches turned off at Tadpole, owing to a break in the flume at that place, but which will be repaired before you receive this letter. Here then in solving the question of supply one finds this startling fact; in two seasons' work the company is in a position on the 1st of December, 1874, to supply 2,400 inches a day, a fact unprecedented in the history of this divide, and I believe unlocked for by the most sanguine. Of course this supply at so early a period, will be greatly reduced, perhaps stopped altogether when frost and snow set in at Tadpole. Well, never mind that, what we want to get at is the actual and possible

supply, that is, what can really be done under ordinary circumstances. It is. a money calculation and must be free from all bosh and exaggeration. In this spirit I hold the facts as we find them to-day, settle the question of supply in the affirmative, and just a little more; they silence forever the miserable croakers who in turn, are glad enough to take the pay and feed of the company when they can get it, but who in turn, foolish and ungrateful to the extreme, can never give them a well earned word of praise or encouragement.

From the reservoir to the Secret house, the canal has been cleaned and widened, and put in perfect condition, except in one place, which the early break in the weather prevented being finished thoroughly. These few rods however, will not materially interfere. It would simply have been better if the cement at this place could have been cut down a little. From the Secret house to Tadpole, a fine substantial flume one mile and a half long, six feet and a half wide, and five feet deep, round an almost inaccessible point of rocks has been built, and is, perhaps, the most creditable portion of the whole work. It has certainly been the most tedious and difficult. This ends the season's work. Next season all that is required will be to reach Sailor canyon, if possible, and to build a couple of reservoirs. That done, and Placer county may be proud of the Iowa Hill canal, for in every respect, it will be a magnificent property, and reflect the highest credit, both as regards the time and cost of construction, upon all who have been entrusted with its management.

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