

or long and two inches wide, the surface of the water being maintained at a height of six inches above the upper edge of the outlet, is, for each inch of aperture, one and fifty-seven hundredths cubic feet per minute, or two thousand two hundred and sixty-seven cubic feet in twenty-four hours. For convenience, a miner's inch may be described as equivalent to a stream of water one inch square in section, moving with a velocity of three feet nine inches per second. Such a stream will deliver forty-five cubic inches per second, one and fifty-six hundredths cubic feet per minute, ninety-three and seventy-five hundredths cubic feet per hour, and two thousand two hundred and fifty cubic feet in twenty-four hours, equal to sixteen thousand eight hundred and seventy-five gallons. A distinct standard is the Smartville inch, which consists of the amount of water that will escape in twenty-four hours through an orifice one inch square, with the water ten inches deep, measured from the center of the aperture.

Some of these large ditches are owned by mining corporations which use the water exclusively in their own operations. Others, having more than they need for themselves, sell a portion for use in mines along the route of the ditch. Still others are simply water companies, whose distributing ditches convey the indispensable liquid to many

localities. In the early period of hydraulic mining, the general price paid for water was \$1.00 per inch, but as ditches of greater capacity were constructed, capable of supplying an almost unlimited quantity of water during the entire season, the price gradually declined. Water is now sold at from twelve and one-half to twenty cents per inch, according to location.

One can not consider the statements and statistics given above, in connection with those in the article on "Hydraulic and Placer Mines," in the April WEST SHORE, without being amazed at the vastness of the industry they represent, as well as at the enterprise and financial daring of the men who have invested such large sums of money through a long series of years, without any return until after all these costly improvements and preparations were finished. This amazement is much akin to that experienced by one who, for several miles, has ridden or walked along a mining ditch, through which the water was gently flowing, as though along the bed of a peaceful creek, and then has stepped down into a claim and seen that same water hurl itself with resistless force against the crumbling wall of gravel. It seems almost impossible that such an apparently feeble element should possess the power of converting itself into so mighty an engine of destruction.

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