

## GOLD MINING IN THE EASTERN TOWNSHIPS.

A correspondent to the *Sherbrooke Gazette*, describes a visit paid to the gold mines at Ditton in the Eastern Townships. He says:—We reached the mines at noon, the mine proper covers nearly fifty acres of land, which has been thrown into mounds and otherwise disfigured by the miners, in the haste to secure the precious metal, and to-day scarcely one acre of its former even surface can be found. Sluices nearly half a mile in length are kept constantly running during the summer months, emptying the tons of earth and broken slate on some place already worked, or on a neighbouring group of standing trees, and when the mound has reached a height considered dangerous, the stream is aimed at some vacant lots and another mountain not on the map of Ditton appears. In many places groups of standing trees have been covered, leaving only the tops alone visible, and it is with the greatest difficulty that the stranger makes his way over the different mounds and through excavations, water courses, &c. In and around the mine we were astonished to find gold in the different sluices in abundance, gold in the sands and for nearly two miles higher up the river, the bed rock seems to be covered with gold, and enough to furnish constant and profitable employment to many hundreds of Canadians for centuries. An active man can with pick, pan and shovel earn \$3.00 per day's work of ten hours. Skilled labor, together with the necessary mining appliances, have produced results sufficiently encouraging to induce the proprietor to contrive and extend his business, and now at the end of ten years he finds his boarding houses, barns, &c., too small, and insufficient for the wants of this rapidly increasing colony, and new and larger buildings are in course of construction.

The connecting tubes of the first arch of the St. Louis Bridge have been successfully placed in position. The *St. Louis Republican*, of September 17th, says:—"At present the weight of the superstructure is supported by the cables, and while that is the case the expansion and contraction of the tubes by heat and cold is of no consequence, but when it comes to putting in the last tubes, expansion and contraction cut a pretty big figure. When the connection is once made and the supports removed, so that the arch is self-sustaining, a new element comes into care—the contraction from pressure. When the cables are slackened, the arch at the centre will from this cause settle about 3 in. Provision has been made for this by increased length in the tubes, all the calculations being based on a temperature of sixty degrees. At that temperature it is known to the sixtieth of an inch what would be the intervening space between the approaching tubes, and the last joints have been dimensioned accordingly. Only once, since the workmen have been ready to put in these last tubes, has the temperature been favourable. On Sunday morning at 5 o'clock, the conditions were all right, but owing to some unexpected tardiness the workmen did not get there till eight. One tube was put in and it fitted to a nicety. In the meantime the sun shone on the bridge, and when they came to put in the other tube it would not go entirely to its place, being about a thirtieth of an inch too long on account of the expansion of the tubes in place. An attempt was made to drive it in place with sledges, but without effect. In consequence of not being able to put in the second tube, the first one had to be taken out again and a more favourable opportunity waited for. On Monday morning, the expansion was still greater, being  $\frac{1}{2}$  in., and on Tuesday morning  $2\frac{1}{2}$  in., owing to the warmth of the day before. The prospect being that a delay of several days would occur before the exact temperature required would be obtained, it was determined to try a little strategy in the case by reducing the temperature artificially. About two o'clock yesterday morning forty-five tons of ice were applied to the tubes, and bound on by many yards of gunny bagging, which formed perhaps the most extensive ice poultice ever used. At three o'clock yesterday afternoon the expansion had been reduced about 2 in., and it was calculated that at five o'clock in the morning it would be sufficiently so to admit of the tubes being put in place." The application of the ice proved entirely successful, and on the following day the connecting tubes were put in and the first arch completed.

## HABITS OF THE BALTIMORE OYSTER.

In a conversation with a prominent oyster packer, says the *Baltimore American*, some curious and interesting features of the oyster trade were related. As is well known, the habits of this bivalve are an entire mystery, what it eats and how it lives are questions not yet understood. The spawn of the oyster floats around with the action of the waves and tide, and adheres to whatever it may come into contact with. Oysters taken from a rocky bed are of superior quality; those taken from a soft bottom are comparatively poor in quality. Thousands of "poor innocent" oysters die annually from resting on a soft bottom, a fact which should arouse the sympathies of all tender hearted people.

The weight of the oyster, as it gradually matures, sinks it beneath the surface; and as soon as it is covered with sediment or mud, it dies. Many people suppose that the oyster really eats, and kind hearted people, buying oysters in the shell sometimes throw corn meal over them thinking to feed them. The peculiar noise emanating from them has been supposed to be produced by feeding. All shellfish at times have their shells open, and when touched will instantly close them. The noise thus produced has been mistaken for mastication, when, in reality, it is from fright.

Most of the Baltimore dealers in raw oysters during the summer months transact their business at Fair Haven, Conn., where large beds of Baltimore oysters have been transplanted. The beds are so arranged that, on the receding of the salt water tide, fresh water from a small stream covers the oysters; it is said that this fattens oysters better than any other method. Oyster dealers received for the article in question during the summer months, and they are taken from the beds and shipped with the greatest possible dispatch, and many eat them with apparent relish, notwithstanding the warmth of the season. Altogether the oyster packing trade of Baltimore is an enormous one, and, in connection with fruit and vegetable packing business, employs a capital of about \$25,000,000, a fact which sufficiently expresses the great importance of this interest to Baltimore.

COMMON SCIENTIFIC LANGUAGE.—The *Athenaeum* notices, as worthy of remark, that Prof. T. Thorell, of Upsala, has lately advocated the introduction of a common scientific language; and, as in these days a return to Latin is neither to be expected nor desired, he considers it not improbable that English may at some time succeed to this position. This he believes, not only because English is far more widely diffused than any other tongue, but also because it can by most Europeans, be more easily acquired than any other language. Prof. Thorell has given us an earnest of his belief by writing his recent work, "Remarks on Synonyms of European Spiders," entirely in English—in such English, too, that (says the same authority) none of our countrymen need be ashamed to own it.

A NEW COVERING FOR STEAM PIPES.—A new method of covering steam pipes is being applied in different mines of the Saarbrücken district, which has proved very efficient. A coat of thin loam wash is first given to the pipes, which serves to increase the adhesion of the mass with which they are to be covered. The composition consists of equal parts of loam or clay, free from sand and brick dust, with an addition of cow hair. This is well mixed up and put round the pipes in a hot state. For better securing this coating, wood splints, 0.26 metre long, 13 m. broad, and 22 m. thick, are laid along the whole length of the pipes and fastened by thin iron wire. After applying the loam-wash again to the dried mass till all the cracks have disappeared, the pipes receive another coating of the mass, until they feel quite cool, which will be attained after the mass has been laid on to the thickness of from 124 m. to 140 m. A coat of linseed oil and cement is finally given. This method answers at present all requirements, the covering being perfectly air-tight and free from cracks. The mass is not hygroscopic, a property making it all the more suitable for pipes in the open air. The cost of the covering per foot of 8-inch pipe is 6d., while the expense of the old proceeding amounted to nearly 8d. The inventor, Herr Wiess, has taken out a patent for his method.