

MINING.

A WISE APPOINTMENT.—Mr. E. Gilpin, the efficient Inspector of Mines, has had his office amalgamated with that of the Deputy Commissioner of Works and Mines, and will therefore succeed Mr. Kelly as deputy head of the department. The local government have made the best possible appointment, and the amalgamation of the two offices is a move in the right direction. The deputy commissioner should be a man above suspicion, and we pay no empty compliment to Mr. Gilpin when we say that he has all the qualifications necessary to make a most successful official.

Other changes in the organization of the department are promised, and we are glad to see a disposition on the part of the government to place the department in that thorough state of efficiency that the large increase in the mining business demands.

MONTAGUE DISTRICT.—Capt. Hale is pushing operations on the Kaye-Symonds property, and from all accounts is meeting with entire success. His foreman, Mr. Wm. Skerry, is one of the best miners in the Province, and as the property is known to be rich, there can be no doubt of the eventual success of the venture.

The Kempt Gold Mining Company (Limited) are at work taking out quartz from the rich lead that they have named "Pompei." They are also sinking on the "Boreo" lead, 18 ft. to the south of Pompei, with the intention of tunnelling across into the latter at 100 ft. below the surface. They have not done any crushing for some time, owing to the amalgamator being away. The last test crushing of the quartz now being mined, gave 3 oz. for 3900 lbs. rock. Mr. Cowan has just struck the Pompei vein on his property, and the formation appears to be just the same as on the Kempt property. This shows that the Kempt Co. have 1800 feet of it on the strike of the lead, and unless it is very different from other mines as to depth, there must be "millions in it."

The Carleton Gold Mine, Yarmouth County, is sixteen miles from the Town of Yarmouth, and five miles from Brazee Lake Station on the Western Counties Railway, it has a population of about two hundred. The principal industries heretofore have been lumbering, milling and farming. The village, which is one of the prettiest in Nova Scotia, is situated on the margin of one of those beautiful chain of lakes formed by a branch of the Tusket River, which gives unsurpassed water-power, at present being partly utilized by several lumber mills, which saw between two and three millions of lumber per year, and considering the almost unexhaustible quantity of spruce, pine and hardwood in the vicinity, this village should be connected by a branch railway with the western counties railway system.

The new gold find which is attracting a great deal of attention here at present, is situated within half a mile of the village and water-power. The vein is pronounced by judges to be a true fissure, having perfect walls four and one-half feet apart, running almost due east and west, lying at an angle of about 40 degrees. The quartz which is of a blue mottled kind, is from 7 to 8 inches in thickness on the foot wall, with the gold well distributed through it. Directly over the lead is about six inches of slate, making about 15 inches of crushing material, above the slate is 18 inches of whin rock and between this and the hanging wall comes in a soft slate, making it an exceptionally easy belt to mine.

The present owners of the property, Capt. Hale and Mr. A. C. Ross, who found this lead, have opened it in three places in a distance of two hundred and fifty feet, finding it equally rich in each shaft, proving that the pay shute extends at least that distance, the centre shaft has been driven to a depth of (35) thirty-five feet and the lead found to be improving in size and richness.

They have had several tests made and find that it will average 2½ oz. per ton. The best results were had by a test in the Wiswell Mill at Yarmouth after roasting the ore.

The enterprising owners have ordered one of the Wiswell Crushers, which will be run by water-power, the ore will be brought from the mine to the mill, a distance of less than ½ a mile, by tram way over a very easy grade. A contract has been given Messrs. Miller and Crosby, of this place, for the erection of a building and wheel for the crusher. A contract has also been made with Messrs. Burrell, Johnson & Co., of Yarmouth, for steam hoisting and pumping machinery, all of which is to be ready for work in five weeks.

It is proposed to roast all the quartz before milling it, which can be done at a very low cost, as all the fuel in the shape of slabs, etc., can be got on the spot for nothing.

The roasting of quartz will be somewhat of a new departure in Nova Scotia and should result in the saving of considerable gold if adopted at other mines.

There are now about 15 miners at work at this mine, which number will be considerably increased the first of next month, the 3 shafts are being driven down as rapidly as possible, the intention being to go down fifty feet before any stoppage is made. The proprietors expect to have 100 tons on deck by the time the mill is ready, and from all the indications and the push manifested by Capt. Hale and Mr. A. C. Ross, this mine promises to be one of the best and most profitable in Nova Scotia. Mr. Ross will have the management, and left last Saturday for the purpose of bringing his family here.

MINER.

The valuable deposits of tin in Dakota cover an area of seven thousand square miles. The mining of it has just commenced. Tin to the amount of several millions of dollars is annually imported into the United States.

A number of teams will leave Caledonia for Annapolis for a crusher for the Brookfield mines.—Mr. Minor T. Foster will put up a crusher on the property of John Annis and others at Whiteburn within sixty days. This property is considered by expert miners to be the richest in the Northern District.—*Liverpool Advance.*

AUSTRALIA.—A twenty-ounce nugget has been unearthed in the Madas mine, Sandhurst.—The Kimberly gold fields in Western Australia are pronounced a failure. A great rush had been made to the locality, and there was great suffering among miners and adventurers.—Gold has been found in South Australia, near the town of Katherine. The country prospects well, but the gold is very fine.

IMPORTANT IF TRUE—NATURAL GAS CONFINED IN THE EARTH.—Chambers Miller, of Zwickley, Pa., believes that natural gas is confined in the earth in a fluid state, and has just filled a caveat for a patent which is designed to conduct the fluid to the surface, and into receptacles for its preservation. If this theory should prove correct it will be the greatest discovery of the age, as fluid brought to the surface and confined at a pressure of say 600 pounds to the square inch can be utilized to an inconceivable extent as fuel. A locomotive, for instance, with a few gallons of fluid, would have a supply of fuel sufficient to run it from Pittsburg to Chicago, and an ocean steamer would require only a few barrels to make a trip to Europe. A test of the theory will, in all probability, be made at an early day.

CANADA'S MINERAL EXHIBIT.—Iron and Copper.—The exhibit of iron at the Indian and Colonial Exhibition comprise specimens from all parts of the Dominion—from Nova Scotia principally, then New Brunswick, Quebec, Ontario and British Columbia. The most important contribution is from the Londonderry iron mines. As to quality, the Canadian irons are to be considered as far superior to the average English iron. They are very pure and rich, nearly equalling those of Sweden. The extent of the iron trade in the Dominion is considerable. In 1884 the importation of iron and steel amount to about eighteen million dollars' worth. Now the local production could easily supply this demand.

The sulphates of copper come chiefly from Quebec, Ontario, and British Columbia. Ontario exhibits copper from the Lake Superior region, one of the most important on the globe, on account of the exceptional purity of the ore. English capital ought surely to be diverted towards this quarter.

Antimony, in very fine specimens, is shown from Rawdon, N. S. and also from Prince William, N. B.

The Precious Metals—The obelisks form the principal feature of this exhibit. That of British Columbia contains 250,000 cubic inches, and represents the amount of gold taken from the province in the last twenty-five years. The value is about sixty-two million dollars.

The Nova Scotian obelisk represents 395,000 cubic inches, the amount obtained up to this year. Value nine millions and a half. Alluvial gold is shown from different parts of the Dominion, but chiefly from St. George's parish, Beauce County, Quebec. One lingot was obtained from the bed of an old river, 200 feet below the surface of the soil. The specimens from Granite Creek, River Simulameen, British Columbia, are the most important. This district promises well. A magnificent specimen of auriferous quartz comes from the Albion mine, N. S. There is also some from the Huron mine, near Port Arthur.

Of silver, the most important specimens are those of M. P. A. Keefer, to whose activity is due the considerable collection from Port Arthur. It is contained in twelve presses made from the woods of the region. The silver consists of blendes mixed with copper pyrites. A large number of argentiferous veins have been discovered at different points in this region, but little has yet been done to develop them. The Castor mine is that which is worked to the best advantage.

Various Minerals.—Mica and soap-stone are well represented at the exhibition. There are also fine specimens of plumbago from Buckingham County, Quebec. Few persons are disposed to ask in an English stationer for lead pencils of Canadian plumbago; but they are to be had, just as cheap, and just as good as any.

Precious Stones—Amethysts are on exhibition from Thunder Bay, Lake Superior. They are very large and very pure. In one of the cases are also to be seen fresh-water pearls, collected by M. Steifert, Quebec. They are to be found in almost all the streams of the Province of Quebec, and their weight is from three to seventy grains.—*Translated from the Journal de l'Instruction Publique.*

From the days of Cortez, in 1521, down to the beginning of the century, and even to the present time, except when interrupted by revolution, the Mexican silver mines are known to have poured forth an unceasing stream of silver. It is estimated that the value of the silver coin and bullion of that country since the conquest is over \$3,000,000,000, and it is well known that some of the mines have been profitably worked almost without interruption from that time to this, and that one of them at least is still running out silver at the rate of over \$5,000,000 per year.

The *Industrial World* (Chicago) says that the importance of the coal fields of New Zealand becomes more evident as they are opened, for they appear to be very extensive. The San Francisco mail steamers use the coal. It contains 93.20 per cent. combustible matter, 4.20 per cent. water, and 2.20 per cent. ash.