

ALLOYS OF NICKEL.—Hitherto in the manufacture of the binary alloys of nickel and iron, known as ferro-nickel and steel-nickel, either metallic or pure nickel, or the crude nickel or nickel mattes, derived from the smelting of oxidized nickel ores carried on only up to the point where the elimination of the iron would begin, are employed. The first of these is, however, expensive, and, on the other hand, crude nickel contains a considerable amount of foreign matter, which is not desirable.

An invention by H. Marboeu, of Paris, consists in the manufacture and employment for the production of ferro-nickel or steel-nickel of a carburized alloy containing nickel, iron and manganese obtained by the reduction of oxidized nickel ores with iron ores and manganese ores, preferably in a blast furnace. This alloy, which might be called nickelo-spiegel, is cheaper than pure nickel, and is purer than crude nickel. The proportion of the three ores will vary according to the percentage of the three metals required in the carburized alloy. The following may be given as an example: Nickel ores (10 per cent. nickel,) two tons; iron ores (50 per cent. iron,) 12 cwt.; manganese iron ores (10 per cent. manganese and 40 per cent. iron,) one ton. In the employment of this nickelo-spiegel for the production of ferro-nickel or steel-nickel the nickelo-spiegel can be treated in a converter so as to obtain steel nickel or ferro-nickel containing the required percentage of nickel. The presence of excess of manganese in the nickelo-spiegel permits of obtaining the heat necessary for the good working of the operation in the absence of silicium.

The following are the official gold returns so far received at the Mines Office for the month of November:

District.	Mill.	Qtz. crushed.	Oz. Gold
Goldenville.....	Goldenville	15	2
do	Miners.....	17	2
Oldham	Oldham G. M. Co.....	150	39½
Waverley.....	Lake View	1076	140
†Cariboo	D. Touquoy	356	58½
"	Moose River G. M. Co. .	108	20½
Uniacke.....	Puonix.....	214½	35½
do	Withrow	8½	8½
East Rawdon	Rawdon.....	250	86
15 Mile Stream.....	Egerton G. M. Co.....	387	416
Renfrew.....	Free Claim.....	2	1½
*Central Rawdon.....	Central Rawdon	125	91
Malaga.....	Malaga.....	50	173
Do.....	Parker Douglas	506	103½
Gold or Scraggy Lake.....	Mortared Gold	—	5½
† Surface soil and dump...301	* Quartz, tons.....	35	
Quartz	Surface, "	100	

The Annual Report for 1889 of the Division of Mineral Statistics and Mines of the Geological and Natural History Survey of Canada, compiled by Elfric Drew Ingall in charge, and H. P. Brumell, Assistant of the Division, has lately come to hand. The great value of the work is admitted by all, and the present report bears evidence on every page of the painstaking care of its compilers. The tables of statistics are in many instances illustrated by diagrams which show at a glance the yearly production, and in the completeness of the details there is a decided improvement over previous issues.

Mr. Peter Imrie is writing a series of letters to the *Herald* on the Sudbury Nickel district, in which he strongly favors the imposition of an export duty. He may be right, but we should not be surprised, now that nickel has become such a prominent metal, to hear of its being discovered in other localities; and if such should prove to be the case, an export duty on the Canadian metal might result in the closing up of the mines now being worked at Sudbury. In the matter of an export duty on nickel we would do well to "look before we leap."

MOUNT UNIACKE.—Four or five different forfeiture cases of valuable gold areas in the Mount Uniacke District, which were to have come up before the Commissioner of Mines on Tuesday, fell through for want of proof of service of process.

NEARLY SIX OUNCES OF GOLD TO THE TON.—On Saturday last we were present at a trial test of quartz which was made in the new Wiswell Mill, on the Royal Gold Mine, Whiteburn.

The ore was some that was taken from a lead on property now owned by Messrs. Cyrus A. Perkins, C. D. Pickles and N. F. Douglas at Whiteburn, formerly known as the Corrigan, Deranoy and Barkhouse property. The quartz, (seven hundred and sixty pounds) was carefully weighed in our presence, then put through the rock-breaker, and conveyed down stairs to the crusher in pails and every precaution made and carried out to have a fair test. When the mill had sufficiently crushed the ore, and the amalgamator had finished panning out the pulp, the result, to which we are prepared to attest, was two ounces of gold! And this without taking off any amalgam from the plates.

This proves that there are rich leads in Whiteburn yet to be developed, and that the Wiswell mill can be relied upon for extracting gold from quartz, if that much coveted article is present in the ore.

We may add that the Manager, Mr. James E. Gammon, took every precaution to have the battery free from grease or other substance by first running through a quantity of wood shaves, and personally fed the quartz under the rollers. Mr. Gammon, we need hardly add, has great faith in the Wiswell crusher, and well he may.—*Gold Hunter.*

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