

Geological Survey of Canada.

Annual Report, 1888-89,

VOL. IV.

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ducts thereof, and granting warehouse receipts for the same; constructing and operating pipe lines for the transportation of oil, and the doing of all such other things as are incidental or conducive to the attainment of the objects aforesaid throughout Canada. Head office, Petrolia. Capital stock, \$150,000, in 1,500 shares of \$100 each. The provisional directors are Messrs. John McDonald and James Fiddes, of Petrolia, and Charles Henry Schooley, of Toronto.

Gillies Bros. & Co., (Ltd.)—Messrs. Greig and Jamieson, Almonte, solicitors for applicants, give notice that application will be made under the Companies' Act, for incorporation, to acquire and take over as a going concern in all its branches, the business of lumbering and manufacturing of lumber now carried on by James Gillies, Wm. Gillies, John Gillies, under the name, style, and firm of Gillies Bros. One of the objects of incorporation is to carry on a general mining business, to buy and sell and otherwise deal in mines, mining lands and minerals; to prospect, explore for, quarry, develop, work, extract and mine throughout Canada, and for such purposes to construct, establish and operate works, wharves and warehouses, and acquire and own real estate for such purposes. Head office, Carleton Place, Lanark Co., Ont. Capital stock, \$100,000 in 1,000 shares of \$100 each. The provisional directors are: James Gillies, Wm. Gillies, David Gillies, John Stark Gillies, all of Carleton Place; John Gillies and John Albert Gillies of Braeside, Renfrew Co., all in Ontario.

Sudbury Customs Smelting Co.—The following letter has been issued by this company: "We regret that owing to the difficulty of securing sufficient stock outside this place at par, and the refusal of the government to assist by the appointment of an assayer and chemist for the company, the directors of the Customs Smelting company have decided not to ask for further subscriptions at present, and at the last meeting of the board unanimously passed the following resolution:

"Whereas the local government of Ontario, has not considered it advisable to grant the petition of the citizens of Sudbury, of the Toronto Board of Trade, and of the deputation of those interested in the mining industry of the Sudbury District, for the appointment of a government assayer and chemist for the Sudbury Customs Smelting Co., (Ltd.), this board does not consider it advisable to ask for any further subscriptions of the stock in the Sudbury Customs Smelting Co., (Ltd.), and that the amounts already subscribed by others than the provisional board be refunded, and the said subscribers be relieved from any further obligation."

General Mining Association.—Mr. J. D. Hill presided at the half yearly general meeting which took place last month at the offices in London, and in moving the adoption of the report and accounts said that he thought he might safely congratulate the shareholders upon the state of affairs—the more especially in view of the fact that it was proposed now to declare a dividend of 8s. per share, instead of 6s. per share, being an increase of something like 25 per cent. He could not say that this was anything very brilliant. Still, looking to the fact that there had not been that active demand for coal which might have been expected, and that this was an era of low prices, not only for coals but for almost every other article of commerce, he thought there was good ground for congratulation. He thought £4, at which their shares of £8 stood in the market, did not represent their actual value; for, taking the last ten years, they had paid on an average 7s. a share, which, with the shares at £4, worked out at 9 per cent. The report was duly agreed to, and a dividend of 8s. per share declared. The retiring director, Mr. W. S. Cunard, was re-elected, as was also Mr. W. B. L. Atkins, the auditor.



The Separation of Nickel From Iron.—Dr. A. Classen observes that if the acid solution is treated with sulphuretted hydrogen, and then the excess of sulphuretted hydrogen boiled off, the solution oxidized, and the iron precipitated with an excess of ammonia, the ferric hydrate precipitate so formed will contain weighable quantities of nickel. It is therefore to be redissolved in hydrochloric acid, neutralized with ammonia, ammonium carbonate added, and the iron precipitated as basic carbonate on boiling. This may be redissolved and reprecipitated if necessary. When a precipitate has been obtained which consists of the oxides of nickel, cobalt and iron, these should be dried and reduced in a current of hydrogen. The weight of the metallic residue is then determined. It is then dissolved in nitric acid, neutralized almost completely with ammonia, ammonium carbonate is added, and the iron precipitated in the manner above described. The cobalt can be afterwards determined by precipitation with potassium nitrate. The weight of both nickel and cobalt having thus been ascertained, the difference between these and the joint weight of the three metals give the percentage of nickel. Both nickel and cobalt can also be separated from iron by precipitating them as oxalates; the double potassium iron oxalate is soluble.

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