following, among other products: fertilizers, explosives, dyes, pyrotechnics, match photographic chemicals, etc., and is used for assaying and in gold extraction, etc.

Fertilizers are manufactured in the form of calcium nitrates, by a solution of limesto in nitric acid, or the direct leading of the gases from the furnaces over slaked lime. It a well known fact that the soil demands the nitrogen extracted from it by the plant to returned in the form of manure Of the well known fertilizers, nitrate of lime as produc by the Norway plants, has been found to be the most economical. They contain abo 13% of nitrogen in the most active form and 25% to 30% of lime in a soluble conditio The nitrogen being in a readily soluble form is distributed quickly through the soil a thus comes at once within reach of the plant roots. It is assimilated by the plants witho having first to undergo transformations in the soil as in the case of sulphate of ammon and almost all other compounds of nitrogenous substances. In Canada with its gre agricultural farm lands the market will in the future be an unlimited one, and in t meantime British Columbia ports are excellently placed for the shipment of fertilisers an all water route through the Panama Canal to Europe.

The enormous use of explosives in British Columbia for logging, quarrying, railw construction and public works, will make the future demand for this commodity mu greater than in the past, and as the base of all explosives is nitric acid, it will be realiz that a great local market will be available for utilising their manufacture.

The manufacture of calcium carbide is the oldest of the electro-chemical industries Canada. It is obtained by causing quicklime to react on coke at the temperature of t electric arc; its principal use is in the production of acetylene gas, and also for the productio of calcium cynide for nitrogenous fertilisers. At present in eastern Canada there are plan utilising 14,000 H.P. and producing 12,000 tons per annum, half of which is exported. British Columbia is favourably situated for this industry with all the raw materials abundance, there are opportunities in this field for profitable investment. The calciu carbide industry* originated in Canada with Mr. Wilson of Ottawa as one of the pioneer and there are now 70 plants in different parts of the world absorbing 360,000 H.P. for i production. In 1910 the world's production was 250,000 tons, which had increased 340,000 tons in 1913; it will be seen that there is also a great future for the enterprise capital in this industry.

In the field of electro-metallurgical work probably few countries in the world hav greater promise for its development and the opportunities for the use of electric smelters i a country so rich in mineral resources is unbounded. The reader is referred for informatio on this subject to an interesting paper on "The Electric Furnace in Metallurgical Work" published by the U. S. Bureau of Mines, as it is impossible to do more than refer to th possibilities here. The establishment of electric metallurgical refineries for copper in th

* See paper, "Making our Water Powers Valuable," by Arthur Surveyer, M. Can. Soc. C.E., Proc Can. Soc. C.E., 1914.

† See Bulletin No. 77, Washington, Government Printing Office, 1914.
See also Bulletin 67, "Electric Furnaces for Making Iron & Steel," 1913.