make good bricks without straw. With the appointment of Mr. Theo. Denis some two years or more ago, wa scommenced a new regime. The department ceased to be apathetic, content merely to remain in the rut of routine, but instead set the pace for the other mining bureaus of the Dominion to follow. The Quebec report for 1911 in typographical appearance and general presentability closely rivals the British Columbia report; as regards the quality of its contents it compares favourably with any Government mining report yet published in the country. During the summer months of 1910 and 1911, and again this year, the programme the Department has mapped, qualified engineers and geologists have been sent into the field to ascertain the possibilities of mining expansion in unexplored territory. So far, unhappily, the results have been largely negative. But negative results have also value. Dr. Barlow's report on the Chibougamau region saved both the Government and private undertakings much useless expenditure; Dr. Bancroft's report on Keekeek District was equally effectual in preventing vain effort and possibly in squelching the aspirations of certain promoters. On the other hand Prof. Dulieux's investigations of the magnetic sands, the titaniferous and other iron deposits of the province promise to have a direct economic value. But whether immediately or otherwise, the energetic and commendable course adopted by the Quebec Department of Mines to facilitate the development of the mineral industry of the Province will bear fruit.

EDITORIAL NOTES.

The English consul at Dairen reports that an asbestos deposit, of an estimated area of about 340 acres, was discovered last year at the foot of Mount Sansom, near Chinchow, and operations were commenced at the beginning of this year. The asbestos obtained is said to be of good quality. It is white or reddish-brown in colour, some of the fibre being over 2½ inches in length.

In a paper read at the annual meeting of the German Chemists' Association at Freiberg, Dr. Bergius, of Hanover, gave an interesting description of experiments conducted by himself to produce coal from its original substances in the laboratory. In a specially constructed apparatus, allowing the application of great pressure at high temperature, he heated either cellulose or peat with water to about 340 degs. under a pressure of more than 100 atmospheres, in each case the two materials being transformed into a product which, according to chemical analysis, was indentical with natural coal. At a temperature of 310 degrees the process required 64 hours for its completion; at 340 degrees it occupied no more than 8 hours, the speed of the reaction doubling for every increase of the temperature by 10 degrees. Upon this basis Dr. Bergius calculated that the peroid of natural coal formation at the temperature of the earth's crust would be about 8,000,000 years—a figure that approximately agrees with the periods established by geologists.

A capital story is related by The Financier (London), of a syndicate, with a capital of £2,000, which, having been formed to acquire options in Nigeria, despatched an engineer to inspect a property it had obtained the right to purchase. Within a few weeks of his arrival, the following cable was received: "Property absolutely valueless. Coming home." As may be imagined, this caused considerable disgust, but the chagrin soon changed to joy when a further cable was received, announcing that the engineer had been eaten by cannibals. He was insured for three thousand pounds, and out of this sum the shareholders were paid their first and final dividend of 150 per cent. It is to be hoped that the publication of this story will not have the effect of causing a great run on mining engineers, with the object of sending them, heavily insured, to inspect and report on properties in countries where they are likely to be regarded as additions to the visible food supply. At the same time there are some that might be spared; and there is a moral to the tale, indicating that even the most worthless of us may have his uses.

A DOMINION DEPARTMENT OF MINES.

Memorandum: Embodying the Views of the Canadian Mining Institute on the Organization, Purposes and Functions of a Federal Department of Mines; With a Note on a Proposed Mines Act.

In point of productive importance, mining occupies an eminently important position among Canadian industries. Thus the present mineral output exceeds in value and total exports of agricultural products, including animals and their produce; and considerably exceeds the value of the exports of the forest, fisheries and factories of the Dominion.

The development of the mineral industry in recent years is strikingly reflected by the official statistics of production. For example, in the year 1886 the mineral yield represented a value of, approximately, $10,000,000; in 1895, the valuation was $20,000,000; in 1900, $64,000,000; in 1905, $69,500,000; and in 1910, $105,000,000; or an increase in twenty-five years of over tenfold. As a further illustration it may be pionted out that while in 1886 the mineral production represented only $2.23 per capita of the population of the country, in 1910 it was equivalent to about $13.00 per capita.

There is, meanwhile, every likelihood that the future expansion of the industry will be at least commensurate with past achievement in this direction; more especially as new areas, notably in the direction of Hudson's Bay, in which the geological conditions for the discovery of minerals are peculiarly favourable, are about to be rendered accessible by the construction of railways thereto. It is eminently desirable that an industry of such importance to the country in general should be represented in the Cabinet of the Dominion Government by a minister, who, as such, would devote his time exclusively to the direction and administration of the Department of Mines. This plea has been repeatedly advocated by the Canadian Mining Institute, the