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Hugh Fletcher, from Judge Prowse, of St. John's, seems to be specially deserving of careful examination. Splinters or small pieces of these black shales kindle readily from the flame of a lighted match, agreeing in this respect with the best of the oil-shales found in New Brunswick or Nova Scotia. On inquiry as to the location of the samples sent, Mr. Howley writes that there are several places on the island where shales of a more or less bituminous character are found, but that no attempt to exploit them for oil has ever been made, though borings for oil have been made on the west coast at several points for a number of years. An analysis of a sample of oil-shale from the north side of Notre Dame bay, made in Philadelphia some years ago, gave of volatile hydrocarbons, 36 per cent; fixed carbon, 35 per cent, and ash, 29 per cent, and was styled a cannel shale. It should be a good oil-shale.

This sample apparently came from the northern extension of a considerable body of black shales found on Deer pond and Grand lake near the line of the island railway,

and may be a continuation of the shales and coals found on the lower Codroy.

On the west coast, about the shores of Port-au-Port bay, characteristic bituminous shales like those known in New Brunswick as Albert shales, were observed several years ago, and have been bored for oil, without finding it in commercial quantity.

Regarding the Deer lake rocks, Mr. Howley remarks that loose pieces picked up are very black, and thin fragments held in the flame of a candle ignite readily and give off a clear flame with the odour of petroleum. Also that large quantities of similar shale are reported as occurring in a small tributary running into the Humber above Deer lake, and that there is much shale of this description along the north side of Grand lake. At the present time but little definite information can be given as to the extent or nature of these deposits.

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## DISCUSSION.

C. Archibald.—Many years ago a namesake of mine started to work shale beds in New Brunswick and to manufacture oils, but found he was not able to compete with crude oil wells, and I myself was induced to put some money in one venture, namely, the albertite mine in New Brunswick. We shipped some of the mineral to New York and to Scotland. Then we tried to introduce it as a gas improver. I understand shale is brought from Australia to London for that purpose.

H. Piers.—Some ten or twelve years ago there was an unsuccessful attempt made to mine shale at East Bay, Cape Breton, for distillation. I should like to know whether Mr. Fletcher has any knowledge of the result?

H. FLETCHER.—Dr. Ells said that the small quantity of valuable shale there was against the district being one that could be profitably worked. I do not think that they did much work there. If it had been one of a number of beds the result might have been different.