

Dr Dawson and Sir Charles Lyall have both pronounced opinions upon the geological character of these shales; and Professor Hind describes them as being of a calcareous bituminous nature, "containing a great number of fossil fishes in a remarkable condition of preservation, every scale being in place, although the fishes are flattened by pressure; they have also their fins perfectly preserved. . . . Some specimens which I took from the parent rock near the Albert mines, resemble a fine calcareous mud, stratified in extremely thin layers, each layer being separated by a coating of bitumen. I counted upwards of one hundred of these layers in an inch." And he further adds, that, "a ton of these shales would yield upon distillation from 60 to 90 gallons of crude oil." It is more than probable that the first use to be made of these shales, will be as a source of oil for illuminating and other purposes, and in this respect they will bear very favourable comparison with any other. In "Geology of Canada" we find it stated that at Collingwood, oil has been distilled from bituminous schist which yielded only eight gallons of crude oil to the ton. The cost of the crude oil was 140 the gallon, when rectified it gave from 40 to 60 per cent of burning oil, and from 20 to 25 per cent of pitch or waste; the remainder being a heavy oil fitted for lubricating purposes. The Albert shales yield from 65 to 90 gallons of crude oil per ton, or from 85 to 100 gallons fit for illuminating purposes—and as the Canadian manufacturers considered that if the discovery of Petroleum had not materially lessened the price of burning oil, they would have realized handsome profits, it is therefore more than probable that a shale which yields ten times as large a quantity of oil might be made very profitable notwithstanding the enormous quantities of Petroleum now produced. The discovery of oil-bearing shales in parts of Scot-