they were oil shales, that they were not as good as Colorado shales, and that nothing less than 40 gollons of oil, and 40 lbs. of Sulphate of Ammonia, to the ton, would induce American capitalists to iuvest in Nova Scotia shale lands, or oil shale industries. Well, then, Nova Scotia can meet his stated, or any other American, demand, in these two important requirements. Nova Scotia has, in the corner of one county alone, hundreds of millions of tons of shale, giving an average of 45 to over 60 gallons per ton. And she has an oil coal, the Stellarite, which yields, in the middle part of the seam, 126 gallons and in the bottom part, or bench, 63 gallons to the ton, an average of 94 1-2 gallons. The United States has no known oil coal to match that.

Commerce, the world over, at the present time, demands of oil shale two principal products: first, that it will yield oil, and second, that from it can be produced Sulphate of Ammonia. Nova Scotia shale can not only meet these, but other more or less important requirements.

Is a largely, oil bearing shale required? Then Nova Scotia offers the Stellarite and the Curly shales, and other shales as well, with a mininum of 20 gallons, and a maximum of 126 gallons to the ton.

Is a shale, a large yielder of Sulphate of Ammonia, required? Then we can offer one which, by laboratory test, shows 70 lbs. of Ammonia, and more, to the ton. The expert from across the line asks for a shale yielding 40 gallons oil, and 40 lbs. Ammonia and from the same seam. Nova Scotia can meet his requirements at any turn, or rather can more than meet them—in the main. The oil, from ordinary shale, as yet tested, may fall two gallons short, but then it is no less than 30 pounds better, than the requirement in Ammonia, which makes it a shale, in every way, greatly superior to a forty and forty shale, for at the present time Sulphate of Ammonia, is in greatest demand and sells at, say, six cents a pound.

Further, as to quantity: In order to test the shale, a bore hole, 670 feet deep, was sunk on the East side of the East River, Pictou County. In this comparitively short distance no fewer than 351 feet of shales were bored through. Not all these shales, possibly, are oil bearing. The Analyist or Engineer may have been in doubt, as he did not label all of the divisions of the shales as 'oil bearing', but from 584 to 670 feet, a distance of 92 feet, is described as oil bearing. The boring was stopped after this 92 feet had been gone through, presumably from the belief that sufficient demonstration, as to quantity, had been made.

Now for the main point, which is: Will it pay?

My answer is in the form of a question: 'Why should it not'? In Scotland the industry has been in operation for over fifty years. In its last annual review of Scottish industries, referring to the shale industry, the Glasgow Herald says that, "after a hazardous voyage, the industry is now in tranquil waters." There are a half dozen plants in Scotland, giving employment to 10,000 workmen. The returns from the three chief of these are as follows: PUMPHERSON, lowest dividend in twelve years, seven and one-half per cent., highest fifty per cent.; average for twelve years, twenty-five per cent.; capital $1,650,000. OAKBANK, lowest seven and one-half, highest fifteen per cent. (five years in succession), average eleven years, twelve per cent., capital $1,500,000. BROXBURN, lowest seven and one-half, highest twenty per cent., average eleven years, fourteen per cent., capital $1,675,000. These figures do not include 1917 and 1918. If the industry is in tranquil waters now, it must be assumed that profits are adequate.

The report of the Scottish expert is that, in Nova Scotia, the industry should yield a profit of $8,00 a ton net, at war prices. He figures on a plant retorting a thousand tons of shale a day, and costing, to erect, $900,000. At pre war prices he figures the profits at $4,00 net a ton. I am willing to cut the profit in two and place it at $2,00 per ton, and begin with a plant to retort 400 tons a day, and the working days in a year at 300. Four hundred multiplied by three hundred, gives a yearly tonnage of 120,000 tons, which, at a profit of $2,00 a ton, gives $240.000. Allowing that the plant, of this capacity, costs $600,000, the profit is forty per cent. We are told that a plant to retort 1,000 tons a day will cost fram $900,000 up, for a full plant. Let us put the cost at $1,200,000, the yearly tonnage being 300,000. The profit, then, is $600,000 or 50 percent. I cannot entertain the belief that these two Scottish experts would risk injuring their reputation by giving other than an honest opinion on profits, yet, once more cutting them in two, we have, in the case of the smaller plant, twenty per cent., and in the case of the larger of twenty-five per cent. net profit, which even a niggardly fellow might be compelled to own was 'not so bad'.

Fifty odd years ago, works for the distillation, of oil from shales, had been planned, and were on the point of being erected at New Glasgow, when announcement of the discovery of oil wells in the U. S. stopped the project. The flow of oil from wells is now rapidly declining, and large expenditures in boring for new wells, of late years, have proved very unsatisfactory, therefore, it would appear, the day of shale has come. The question is, and it is of momentous importance, 'Will Nova Scotia rise to her immeasurable opportunity or will she, leave the exploitation of her oil shales, as she did in the case of her coal industry, in every instance, save one, to British and 'outside' capitalists?

It has been said that the three sources of Britains supremacy are its possession of rich mineral deposits, geographical position, and the genuine untiring energy of her people. Nova Scotia possesses the first two, will she from now make plain demonstration that she can lay just claim to the third?

As a postscript, let me add that while reference has been made to Saccarhine and Margarine, and while both were very largely used in Britain and other countries during the war, I do not think that, in normal times, either will be sought after as a bye-product of bituminous coal and shale, for two reasons, chiefly, first the high cost of production, and second, the lack of food value.