

trade of the South Seas, will most probably have a similar effect on the manufacture of oils from bituminous shales, which has, of late, been practised on an extensive scale in France.

In Northern Germany, coal oils are very largely used for street illumination, on the railroads, and most exposed localities. They are largely manufactured in Hamburg; but if crude Canadian Native Oil were laid down in that city, at the cost at which it can be supplied from the Canada wells seaborne, by a Company having its own vessels (freight, insurance, and profit being added), the manufacture of coal oils would cease.

In Saxony and in Prussia, similar results would follow; a cheaper illuminator and a better, being in the field, the Bituminous-Shale-Oil Works, so common in these countries, would soon be abandoned; for it must be borne in mind that such manufactures yield but small profits, even with all the skill of the German and French practical chemists. It is of the utmost importance to notice that if crude Canadian Native Oil were imported it would not occasion any material change in machinery, for all the larger products which are the chief sources of profit, the Canadian Native Oil is capable of producing in common with coal. These products are—

1. NAPHTHA used as a solvent for caoutchouc, and different resins and gums.

2. BENZOLE, a valuable substitute for alcohol, ether, and turpentine; a preparation of it called benzoline dissolves India rubber and gutta percha (in consequence of which it has given opportunity for a variety of manufactures of elastic fibres, and has greatly advantaged the progress of electric telegraphs, submarine, and otherwise). Benzole dissolves fats, and is largely used in woollen, cotton, and silk manufactures; it restores faded colours; removes tar, paint, oils, grease, and resin, and possesses many other remarkable qualities. It is more generally known in trade as "Mineral Turps," having been largely substituted in the making of paints, as well as in other cases for turpentine, owing to the rise of price in the latter, owing to the war between the United States. There is also another use to which benzole may be applied—the making of a brilliant gas, at very trifling expense, with no difficulty, and with a most simple, compact, and accessible machinery. A stream of air driven through benzole becomes so inflammable as to serve for the purpose of illumination. In this mode of using the hydrocarbon, it should be kept slightly warm to assist its evaporation. A machine on this principle, of American invention, has been employed to illuminate houses. The air is driven through the benzole by a very simple contrivance, the motive power being a descending weight.

3. ILLUMINATING OIL, respecting which nothing further need be said.