CURRENT INDUSTRIAL NEWS

SIBERIAN IRON ORE

Recent surveys of the iron deposits of the basin of the Telbeso and the Tamir Tau district in Siberia result in aggregate estimates of 20,000,000 tons of iron ore. A large proportion of the deposits yield 55 per cent of iron.—A. McMillan.

RUSSIAN WAX SCARCITY

In a general notice on honey and wax in a Russian contemporary, it is observed that the demand for beeswax, although the past year was a good bee year, cannot be satisfied. As Germany used to be the principal source of supply, candlemakers found themselves in a difficult position shortly after the outbreak of war. The production of candles at home was so limited that the diocesan authorities were obliged to remove candles from the churches that had run out of them. The price has risen from 60 to 80 kopecks per funt before the war to 2 and 3 roubles per funt now.—M.

ELECTRIC POCKET-LAMPS

According to the *Electrician*, a new form of electric portable lamp, the light from which is adjustable is being brought out in Germany. A small spiral resistance in series with the lamp and switch is mounted above the battery. The resistance can be readily varied by the motion of a small knob at the side of the case, the brightness of the lamp being thus altered within the limits of maximum intensity and a dull red glow. This enables the current to be economized when only a small light is needed, prolonging the life of battery and lamp. The resistance is also useful in preventing the tendency to overrun the lamp unduly when a new battery is substituted for an old one.—M.

PETROLEUM PRODUCTION IN ARGENTINE

According to a report in the *British Board of Trade Journal*, the Argentine Minister of Finance has been authorized to hand over 746,607 pesos ($326,500) to the Comodoro Rivadavia Petroleum Exploitation Committee for the purchase of additional machinery and materials for the working of deposits.—M.

VALUE OF LICHENS AS FOOD AND FODDER

A paper in *J. prakt. Chem.*, 93 (1916), 254, discusses the possibility of using native lichens as substitutes for foodstuffs and states that Iceland moss gelatin, in the form of jellies flavored with chocolate or other flavors cannot be distinguished from those made with sago or with agar agar. *Cetraria nivalis* is also recommended as a cheap and pleasant flavored article of food. *Cetraria islandica*, in the air-dry condition, contains 80 per cent of carbohydrates and from 13 to 14 per cent water. The bitter taste is removed by preliminary treatment with cold 1 : 100 potassium carbonate solution.—M.

BRITISH OIL SUPPLIES

Speaking at the Royal Society of Arts, London, on the subject of British oil supplies, Dr. Forbes-Leslie declared that investigation had revealed the presence in Norfolk, England, of an oil-shale series of very considerable importance. On a test from a ton of the shale, 40 gallons of oil have been obtained, also 66 lbs. of sulfate of ammonia and 25,000 cu. ft. of a dry gas of high illuminating properties. There was little doubt that a large oil-shale bed existed in Norfolk, and England did not seem, in his opinion, to be so entirely destitute of oil resources as many people supposed. In the near future, the oil-fields of the Kimmeridge outcrop might be supplying much of the oil and petrol consumed in the country.—M.

OIL TEST

Mr. H. W. Petty, in a recent paper on lubrication, read before the Association of Engineers, London, recommended the following simple test for oil which had undergone oxidation and become resinous: Place a small quantity of the oil in a glass beaker and put in a nearly equal amount of nitric acid. Should the oil have no tendency to gum, the acid and oil will combine and get very thick, while should there be any objectionable characteristic, the oil will remain thin.—M.

PETROL SUBSTITUTE

A patent has recently been taken out by Mr. H. K. Tompkins, London, for a new petrol substitute, the constituents of which are cheap and easily obtainable. The fuel consists essentially of a solution of ethane and its higher gaseous homologues or isologues in paraffin oil, or other liquid hydrocarbon under pressure. Coal gas produced by low temperature distillation of coal is washed with paraffin oil or other liquid hydrocarbon under pressure and the solution of hydrocarbon gases so obtained is delivered under pressure into drums. For use, the solution of gases is drawn off from the bottom of the drum and is delivered into the carbureter through a small orifice without wire-drawing so as to obtain the full atomizing effect of the dissolved gases. The paraffin oil is partly or entirely volatilized in the carbureter according to the proportion of the dissolved gases.—M.

SPANISH MINERAL INDUSTRY

The Council of Mines has just published complete statistics for 1915, of mining and metallurgical industries of Spain. The following table gives the various figures of interest to the chemical world:

	Production (Tons)	Value at Mine
Asbestos	39	$ 1,560
Antimony	300	10,500
Bitumen	4,521	11,074
Sulfur	28,937	41,237
Baryta	4,218	15,096
Bismuth	16.8	4,716
Zinc	81,921	1,225,541
Copper-pyrites	2,001	32,191
Copper-ferro-pyrites	1,464,349	4,520,355
Fluorspar	370	1,702
Iron-pyrites	730,568	1,654,578
Iron ores	5,617,839	7,120,286
Magnesia	1,400	1,036
Manganese ore	14,328	54,968
Platinum	210.4	21,991
Lead ores	285,265	13,371
Argentiferous lead	2,934	42,795
Salt	305,035	348,041
Soda sulfate	191	800
Aluminous earths	314	2,198
Wolfram	511.3	43,664

—M.

DIESEL ENGINES IN INDIA

In the early stages of the development of the Diesel engine, says the *Times Engineering Supplement*, India was one of the most promising fields for its application for stationary work, but manufacturers do not seem to have devoted sufficient attention to the possibilities of the country. As a result, while heavy oil-engines of the Diesel type are to be found in fairly large numbers throughout India, there are still great opportunities for their further utilization, the relative prices of oil fuel and coal being such as to give the oil-engine a distinct advantage over steam. There is an excellent prospect for Diesel engine manufacturers in India after the war. Practically none of the manufacturers—British or Continental—has European representatives in India and, in the opinion of the above journal, a really capable agent thoroughly trained in internal combustion engines would have no difficulty in doing good business in India.—M.