

The names of the exporting or commission firms that are blacklisted—other than those having distinctive German names—are reprinted here because it is believed that some of them may have had certain dealings in Canada in the past.

Serious and weighty reasons must obtain for these firms having been placed on Great Britain's blacklist. While the British act may possibly be not legally binding upon Canadian citizens until the names are gazetted officially in Canada, there is surely no doubt but that the names will be so gazetted,—and this may have been done by the time this issue is printed,—but, in any event, whether they are so gazetted in Canada or not, no Canadian engineer or municipality cares to deal with any firm while reasons exist for that firm's name being upon Great Britain's blacklist.

### PERSONAL.

N. D. PAINE, of the staff of Price Bros. & Co., Limited, Kenogami, P.Q., has been elected an associate member of the American Institute of Electrical Engineers.

Dr. J. A. BANCROFT, of McGill University, has left to make a reconnaissance survey of that portion of the Transcontinental Railway between La Tuque and Bell River.

D. O. LESPERANCE, ex-M.P.; D. H. PENNINGTON, and ALFRED S. GRAVEL have been appointed harbor commissioners of Quebec City. Mr. Lesperance will be the chairman.

F. K. BRUNTON, formerly assistant superintendent of the British Columbia Copper Co.'s smelter at Greenwood, B.C., is now on the staff of the A. S. & R. Co.'s smelting works at Garfield, Utah.

JAMES WHITE, deputy head and assistant to the chairman of the Commission of Conservation, Ottawa, is attending the western Canada irrigation convention that is being held this week at Kamloops, B.C.

L. R. TALBOT was recently appointed construction engineer for the Shawinigan Water & Power Company, at Shawinigan Falls, Que. Mr. Talbot will work on the storage dam on the upper St. Lawrence River and on the construction of a transmission line.

THOS. GEOFFREY LEITH, manager of the Canadian head office of the British Aluminium Co., recently sailed for England and has become attached to the aeronautical branch. Mr. Leith was trained for the Army, and for some years held a commission in the Gordon Highlanders. He came to Canada about ten years ago, and was associated with the engineering department of the Canadian Northern Railway. Later the firm of Parke & Leith was established, handling the products of the British Aluminium Co. and, after the retirement of the late Mr. Parke, Mr. Leith was appointed manager.

### OBITUARY.

JOHN HENDRY, prominent in timber, railway and mine interests in British Columbia, died recently at Victoria, B.C., at the age of 73.

GEORGE RENNIE, building contractor, died at his home in Toronto on July 20th. Mr. Rennie was in his 61st year, and was born in County Tyrone, Ireland, coming to Canada over thirty years ago.

ERNEST G. BARROW, for many years city engineer of Hamilton, Ont., died in Toronto on July 21st.

For a number of years Mr. Barrow was engaged as assistant consulting engineer, and afterwards succeeded E. B. Wingate as city engineer, retiring in 1909. During his regime the waterworks system was remodelled, the third main and James Street reservoir constructed. He was considered one of the best hydraulic engineers on the continent. Before entering the employ of the city Mr. Barrow was a member of the firm of Barrow & Hunting, contractors, who constructed the Mimico waterworks.

### INDUSTRIAL USES OF HYDRO-ELECTRIC POWER.

(Continued from page 76.)

working industries of this country are dependent almost entirely upon electric furnace abrasives, carborundum and alundum. The manufacturer of agricultural machinery, locomotives, firearms, milling machinery, automobiles, and countless other metal products must have these abrasives, and they can now be made only where water-power is developed cheaply.

The electric furnace also turns out calcium carbide, the only source of acetylene, which is being so extensively used in Canada. The oxy-acetylene flame has become of intense value in the welding of metals and the cutting of steel. This same calcium carbide is the important factor in the fixation of atmospheric nitrogen, and is the source of supply upon which we may have to rely for nitric acid and nitrates employed in making munitions of war and fertilizers.

All the artificial graphite used in the world to-day is produced at Niagara Falls, by cheap waterpower. Its uses are manifold. Practically the whole supply of abrasives on this continent is from Niagara.

Considering the products of electro-chemistry alone, chlorine stands out as of first importance. The sterilization of water supplies of countless cities has been made possible by the use of bleaching powder or hypochlorite, and in communities where this is used extensively, typhoid has been largely eliminated. The armies of Europe use chlorine to avert typhoid, and other chlorine products, including chloroform, are used surgically, both as anesthetics and antiseptics. This same chlorine, or bleach, makes possible the manufacture of white cotton goods and white writing paper. Other products of chlorine, produced electrically, enter into the manufacture of soaps. Even into fire extinguishers goes this product of cheap electricity.

To meet the shortage in coal-tar dyes, by the combination of chlorine with coal-tar benzon and tuluol, there is now beginning to be produced quantities of those necessary intermediates formerly made and exported from Germany.

Metallic sodium, also a product of electricity, is the basis for sodium peroxide, which is used in generating oxygen for hospitals, for laboratories, and for submarines and mine-rescue apparatus. It also enters into the manufacture of hydrogen peroxide. Without sodium cyanide, many gold and silver mines could not possibly operate at a profit.

These are but a few of the products of every-day use which will largely depend upon water-power. Many of these, a few years ago, had no known value. What other products remain to be developed with the growth of electricity, no one can predict.

There can be no question regarding the fundamental and essential relation of water-power to the economic and industrial situation in Canada.