

LITERARY NOTES.

of the Local Government Board, and William Ramsay, Ph.D., F.R.S., professor of chemistry, University College, London, with John Pedder, of the Home Office, as secretary. The committee was to enquire into and report (1) on the extent to which water gas and other gases containing a large proportion of carbonic oxide are manufactured and used for heating, lighting, and other purposes; (2) the danger attending such manufacture and use; (3) the means by which such dangers may be removed or diminished, either by the discontinuance of the use of such gas or gases or otherwise, and what regulations for the prevention of danger should be established. The summary and the recommendations of the committee are as follows: To sum up, we have come to the conclusion that, if the accidents attributable to water gas are not yet very numerous in Great Britain, the reason is that the proportion in which this gas has been used has not hitherto, except in a few instances, been high. A large increase in the use of the gas is, however, to be expected in several localities, and in some places the use of pure carburetted water gas is contemplated, in the absence of legislative restriction. We therefore think the present time opportune for dealing with the matter before the manufacture of water gas is established on a large scale, and we beg to submit the following recommendations, to which, if approved, effect should, in our opinion, be given by a public bill: 1. That it should be illegal for any person to make and distribute for heating and lighting purposes any poisonous gas which does not possess a distinct and pungent smell. 2. That all persons applying for statutory powers to make and distribute gas should be required to state in their application the kind of gas which they propose to sell, viz., whether ordinary coal gas, carburetted water gas, plain water gas, or other variety of gas, separately or mixed. 3. That before any kind of water gas is distributed in any place due public notice of the proposal should be required to be given; and that, so long as there is any water gas in a gas supply, that fact should be stated on every demand note. 4. That where water gas is distributed, records should be kept by the producer, showing the respective amounts of the gases issued day by day, distinguishing the gas supplied to each area (if more than one and separately served), and the day and night supply; that these records should at all times be open to inspection by any gas consumer or ratepayer of the district, and should be published quarterly in a local newspaper, and that a new column should be added to the annual returns made to the Board of Trade giving the total amount of water gas issued, as compared with coal gas. 5. That power should be conferred upon a central department to make regulations, enforceable by adequate penalties, limiting the proportion of carbonic oxide in the public gas supply at night to 12 per cent, or such greater amount as the department may consider desirable. These regulations might be applicable either generally over the United Kingdom or to any particular locality, and might contain such conditions, if any, as appeared necessary. 6. That powers should also be given for the regulation of the distribution and use of gas by means of by-laws, made subject to the approval of a central department and administered under local control. The matters to be so dealt with might include the following: The hours during which, or the arrangements by which, the limit imposed upon carbonic oxide should be enforced, the use in emergencies of more than the authorized proportion of carbonic oxide, the character of the gas burners, fittings and apparatus to be used, having regard to the circumstances of their employment, the testing of the gas, and other similar questions. 7. That the provisions of Sections 28 to 34 of the Gasworks Clauses Act, 1871, should be made applicable to the testing of gas for carbonic oxide, and that in all cases where a limit has been placed upon the carbonic oxide in the gas supply of a locality there should be some person empowered and required to test for carbonic oxide and publish the results periodically.

The incorporators of the Union Match Company, organized at Trenton, N.J., with an authorized capital of \$10,000,000, are: Erskine Henry Bronson and Levi Crannell of the Bronson & Weston Lumber Company, Ottawa, Ont.; William M. Ivins of New York, Camillus G. Kidder of Orange, N.J.; W. E. Cook of the Adirondack Match Company, Ogdensburg, and G. H. Williams of New York.

William T. Lancefield, Hamilton, has published "A Century of Achievement," by James H. Coyne, B.A. Mr. Coyne is president of the Ontario Historical Society. While necessarily condensed, the reader is given a most interesting account of the achievements of this century.

Williams' Official British Columbia Directory, 1899, is a particularly timely and valuable addition to the business man's library, as it includes not only the Omenica, Cassiar and Atlin mining districts in British Columbia, but also the Yukon district of the Northwest Territory, which is now the centre of so much interest and commercial activity.

The publishers of The American Artisan, Chicago, have issued a very valuable Manual of Receipts, compiled by Sydney P. Johnston, largely from material that has appeared in the columns of The Artisan, and the new volume makes a book of over 241 pages, and contains over 1,600 receipts and processes relating to metal working and allied subjects. From a hasty glance at the volume, we should say that this is the most complete budget of receipts and formulæ ever put together in one book.

FIRES OF THE MONTH.

April 7th. The Cariboo Lumber Company's sawmill at 110 Mile House, B.C., was partially destroyed by fire.—April 7th. The Langmuir Mfg. Co.'s trunk factory, Toronto; loss, \$60,000; partially insured.—April 7th. The Dominion Metal Works, Montreal, owned by C. Garth & Co., was totally destroyed by fire; loss about \$60,000.—April 14th. Reid Bros., Toronto, makers of billiard tables; loss about \$4,000.—April 18th. C.P.R. round-house, Fort William, Ont., seven locomotives destroyed.—April 20th. McComb & Stanley's oatmeal mill, Lucan, Ont.; loss about \$10,000.—April 30th. Beauty buildings, Montreal, containing Vinette & Co.'s shoe factory, New York steam laundry, Kieffer Bros., shoe machinery, Bernard & Magor, carriage makers; the Universal Patent Development Co., and Lymburner & Matthews, brass moulders; loss about \$100,000.

NEW SYSTEM OF FIREPROOFING.

Ever since the first fire took place in a building fitted with Luxfer Prisms, it has been recognized that, glazed as it is in four inch squares by electrolytically-applied copper, the prism panels form an efficient fire screen. Experimentally it is said to have proved that this was due to the small size of the lights, and the extraordinary strength of the metallic glazing, with the additional fact that continuous and intercommunicated support was afforded to the glass panel, throughout its area, by the electrically-toughened copper. In short, small squares of plate glass, glazed by the new copper process, were found to be similarly efficacious. Plate glass panels so made were fitted in an iron box 6 feet high, and 4 feet square. Open iron bars admitted air freely at the bottom, and a vent at the top permitted the requisite draught. The box was then fired with pine sticks soaked in kerosene, and an intense heat was maintained; cold water meantime being applied externally. Although shivered in every direction the glass panels withstood all persuasion to escape from the network of copper I bars binding them together. The result of this and other similar tests is that the Chicago and New York underwriters have highly commended the new Luxfer fire-proofing, and the Rookery, and several other of the largest buildings in those cities have adopted the system. Two great advantages are that windows furnished with Luxfer fire-proofing admit light at all times, while every chance of disaster from neglect to close the ordinary fire-proof shutter is precluded.

WANTED—Agents in Montreal and Toronto to push the sale of a high-grade English Leather Machine Belting in the Dominion. Commission only. Address "X.L." care of The Canadian Engineer.

FOR SALE

A good Water Power, 500 horse, situated one-half mile from railway, every facility for making siding to power. Address

J. D. THEUNISSON, Cookshire, Que.