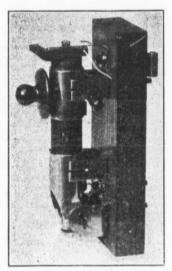
NEW EQUIPMENT FOR POWER PLANT

Only Descriptions of New and Interesting Equipment Can be Published. No Mere Manufacturers' Write-Ups Can be Used.

New Type Circuit Breaker

Both fuses and circuit breakers are recommended by the Fire Insurance Underwriters for use with motors because in the smaller installations the circuit breakers are too expensive. For this reason fuses are often used even though the work of replacing them when blown is excessive. Fuses are in many cases dangerous as well as expensive and troublesome to maintain. It is not an infrequent sight to find a blown out fuse replaced by so heavy a wire that it could burn out only with a current which would severely damage the apparatus it is supposed to protect.

The general use of circuit breakers has



New Tyre of Circuit Breaker.

been limited because of the first cost of the installation. In order to provide a breaker which shall be able to compare in price with enclosed fuses, the Canadian Westinghouse Co., Hamilton, has developed a small carbon break circuit breaker known as the type F.

The illustration shows the compact and neat construction of the circuit breaker, suggesting the appearance of a cartridge fuse. The tripping device is inside the movable arm, it may also be tripped by hand by the small insulating handle. In addition, an auxiliary magnet coil may be attached to provide for tripping the switch from a distance, such as is required in connection with automatic limit switches on machine tools.

These circuit breakers are made in four sizes for 12½, 25, 50 and 75 amperes. Each has an operating range of from 80 to 160

per cent., that is, the tripping device may be set for any current within these percents of the rated capacity. Adjustment is made by a knurled nut at the lower end of the arm and may just be seen in Fig. 1. These breakers are made in single pole types for direct current up to 2.0 volts and alternating current up to 440 volts.

The standard circuit breaker is mounted on a porcelain base, similar to the mounting of a fuse, with all the connections on the face of the porcelain to permit being placed directly on the wall. However, it is also supplied for switchboard and control tablet work where the connections are made on the back; two screws are provided for mounting under these conditions. The outfit as a whole takes up practically no more space than an enclosed fuse of the same capacity.

Catalogues Worth Having

These Catalog will be sent by the firms upon quest. Mention The Canadian Manufacturer.

Power Presses. General catalogue of the E. W. Bliss Co., Brooklyn, N.Y. This is a cloth-bound book containing 580 pages, illustrating a complete line of presses and similar tools made by E. W. Bliss Co. It is a regular encyclopedia of modern practice in this line of tools.

A. Baillot Cupolas. Catalogue of Jules de Clercy, 62 Ontario Street West, Montreal, illustrating and describing the Baillot cupola, which attracted so much attention at the convention of the American Foundrymen's Association held in Toronto last June, where it was shown in operation. This cupola has some features which should be investigated by all users of cupolas. Features claimed for it are: 15 to 30 per cent. saving in fuel; economy in attendance, time and power; better quality of cast iron; and continuous operation. Included with the catalogue is a copy of the paper: "Sone Chemical Reactions in Foundry Cupola," read before A. F. A. by Jules de Clercy.

GISHOLT TOOLS. A neat little booklet of the Gisholt Machine Co., Madison, Wis., illustrating turret lathes, vertical boring mills, universal tool grinders, horizontal drilling machines, double emery grinders, worm hobbing machines, gear testing machines, chucks, etc. It is made pocket size for ready reference.

GENERAL TOOL CATALOGUE. Something exceptionally fine in the way of a general catalogue is that of the Warner & Swasey Co., Cleveland, O. The illustrating is a work of art. The printing leaves nothing to be desired. The information contained is concise and to the point. It is a most valuable catalogue for a mechanical reference library.

Bearings. Catalogue of the Hill Clutch Co., Cleveland, O., illustrating and giving detail information about their collar oiling

bearings in their various mountings. This company announce the preparation of a new edition of their general catalogue.

ELECTRIC TRAVELLING CRANES. A most interesting, particularly to railway men, bulletin of the Whiting Foundry Equipment Co., Harvey, Ill., Montreal, Canadian Agents Dominion Foundry Supply Co., containing a selection of crane installations in railroad shops of wide range. One of these is in the Canadian Pacific Railway shops in Montreal.

REINFORCED CONCRETE FACTORIES AND WAREHOUSES.—Bull tin No. 5 of the Turner Construction Co., 11 Broadway, New York City, containing a d tail description with fine illustrations of the reinforced concrete building put up by this firm for Keuffel & Esser Co., Hoboken, N.J.

ELECTRIC LOCOMOTIVES.—Special publication No. 7031 of the Canadian Westinghouse Co., Limited, Hamilton, illustrating and describing electric locomotives for industrial and mine use. These locomotives are built by the Canadian Westinghouse Co., and the Bal lwin Locomotive Works, there thus being combined wide experience in electrical work and in locomotive work. This publication is a specially interesting one, and from it suggestions can be gleaned as to where money could be saved in industrial transporation.

GRINDING VS. CUTTING: HELPS-DON'TS; ALUNDUM.—Three little booklets published by the Norton Co., Worcester, Mass., containing a lot of useful data and information on grinding. "Helps-Don'ts" is a particularly useful booklet to have on hand for reference.

NERNST MULTIPLE-GLOWER LAMPS.—Neat little bulletin containing a treatise on the Westinghouse Nernst multiple-glower lamps, well illustrated, sent out by the Canadian Westinghouse Co., Hamilton.

Conveying Machinery. — Little bulletin of the Jeffrey Mfg. Co., Columbus, O., and Montreal, containing numerous illustrations of installations, of Jeffrey conveying machinery in saw mills, lumber mills and woodworking industries, which illustrations furnish ideas as to how logs, lumber, refuse, sawdust, shavings, pulp wood, chips, boxes, barrels, etc., can be handled.

"Bulletin," the official organ of the Montreal Bulletin," the official organ of the Montreal Builders' Exchange, appeared last week in a handsome cover of heavy green paper. We note with pleasure the growth of the "Buletin" both in size, and in the value of its news of the building trades.

Open Meeting of C.A.S.E.

On November 20 there will be an open meeting of Lodge No. 1, Toronto, of the Canadian Association of Stationary Engineers, at which meeting C. B. Turner, New York, will address the meeting on Formation and Prevention of Boiler Scale.