

**RESIDENCES**

Hamilton, Ont.—Work is starting on the erection of two brick residences to cost \$3,000 each for J. McNaught, 477 Wilson Street. The contractors for the various trades are as follows: Plastering, H. Trewolla, 729 Cannon Street, E.; plumbing, J. H. Kerr, 32 Sherman Ave. North; electrical work, F. Thornton, 174 Balmoral Avenue. The owner will do masonry, carpenter work and roofing.

London, Ont.—Thos. Redge, 286 Huron Street, has the contract for remodelling residence of Edward Shea, 572 Wellington Street. Cost \$3,000.

Ottawa, Ont.—W. Villeneuve has the general contract for erecting a brick veneer residence, 1½ storeys, for W. C. Leech, 140 Spadina Avenue. Cost \$2,500.

Toronto, Ont.—The three-storey brick and stone residence of E. Taylor, 140 Carlton Street, is being converted into apartments, at a cost of \$8,400.

Toronto, Ont.—A permit has been granted to H. Bell, 1847 Dufferin Street, for the erection of three attached stores and dwellings on the north side of St. Clair Avenue, to cost \$10,000.

Reinforcing, Trussed Concrete Steel Co.  
Terra cotta, Atlantic Terra Cotta Co.  
Tile, Denison Interlocking Co.

**C. P. R. Terminal, Vancouver**  
Architects, Barrot, Blackader & Webster.  
Elevators, Otis-Fensom Elevator Co.  
Generators, Canadian Westinghouse Co.  
Glass, Pilkinton Bros.  
Heating, American Radiator Co.  
Ice machines, Linde Canadian Refrigerating Co.  
Ornamental iron work, Mitchell Co.  
Paints, Sherwin-Williams Co.  
Roofing, Standard Paint Co.  
Steel, Coughlan & Son.  
Stone, trim, Bedford Stone Co.  
Ventilating fans, Sheldons, Ltd.

**CONTRACTORS and SUB-CONTRACTORS**

As Supplied by The Architects of Buildings  
Featured in This Issue

Connaught Laboratories, University of Toronto

Boiler, Warden King, Limited.  
Carpentry, Geo. Sparling.  
General contractors, Hoyby Bros.  
Electric equipment, R. A. Lister & Co.  
Heating, Fiddes & Hogarth.  
Hollow tile, Sun Brick Co.  
Ornamental iron, Dennis Wire & Iron Goods Co.  
Plastering, R. C. Dancy & Sons.  
Refrigerator, John Hillock & Sons.  
Refrigeration equipment, Linde Canadian Co.  
Sheet metal, Geo. Duthie & Sons.  
Structural iron, Hepburn & Disher.

Brown Copper & Brass Rolling Mill

Architect, Henry Simpson.  
Boilers, Dominion Radiator Co.  
Brick, Milton Pressed Brick Co.  
General contractors, Hoyby Bros.  
Interior woodwork, Jas. McKenzie.  
Radiators, Dominion Radiator Co.  
Terra cotta, Federal Terra Cotta Co.  
Vaults, J. & J. Taylor.

Palmolive Soap Company's Building

Art stone, Cockburn Lumber & Concrete Co.  
Brick, Milton Pressed Brick Co.  
Electric equipment, E. W. F. Salisbury.  
Elevator, Otis-Fensom Elevator Co.  
Fire doors, A. B. Ormsby Co.  
General Contractors, Russell, Navin Construction Co.  
Hollow tile, National Fireproofing Co.  
Painting, J. Cohen & Son.  
Plastering, E. C. Cates.  
Plumbing, Sheppard & Calvin.  
Radiators, A. Welch & Son.  
Reinforcing, Baines & Peckover.  
Roofing, Bird & Son.  
Sash, Steel & Radiation Ltd.  
Stone, Geo. Oakley & Son.  
Structural iron, Dennis Wire & Iron Goods Co.  
Vaults, J. & J. Taylor.  
Ventilating system, Geo. Matheson.

Norlite Building, Ottawa

Boilers, Weil Bros.  
Electric wiring, McCallum Electric Co.  
Electric fixtures, McDonald & Willson.  
Elevators, A. B. See Electric Elevator Co.  
Galvanized iron, McFarlane-Douglas Co.  
General contractors, Doran & Devlin.  
Interior finish, James Hill.  
Marble and tile, Italian Mosaic and Marble Co.  
Painting and glazing, J. B. Duford, Ltd.  
Marble, Missisquoi Marble Co.  
Plastering, Frank Hunt.  
Plumbing and heating, Gauthier & Co.  
Plumbing fixtures, Cluff Bros.  
Radiator traps, C. A. Dunham Co., Ltd.  
Radiators, Gurney Foundry Co.

Art Museum, Toronto  
Cut stone, Indiana Quarries.  
Electric equipment, Crouse Hinds Company, Squad D Company.  
Electric lighting, Geo. J. Beattie & Co.  
Elevator, Otis-Fensom Elevator Company  
Floors, David E. Kennedy Company.  
Floors, Geo. W. Koch.  
Glass, Jos. McCausland & Son.  
Hollow tile, Denison Interlocking Tile.  
Marble, Vermont Marble Company.  
Metal skylights, Architectural Bronze & Metal Co.  
Roofing, Geo. Duthie & Sons.  
Stone contractors, Witchall & Sons.

**THE AUTOMATIC TELEPHONE**

The need of adequate telephone service has become more emphasized under war conditions than ever before. In this issue are shown cuts and a description of the new office building erected in New Toronto last year by Brown's Copper & Brass Rolling Mills, Limited. This concern has installed a complete private automatic telephone system throughout their offices and works and are now able to keep all departments in instant touch without in any way delaying or interfering with their outside telephone service.

The two interior views of the office both show the location of the telephone switchboard behind a plate glass panel at the side of the stair landing. The motor generator set and storage battery are located in the basement immediately below and the charging of the storage battery is automatically controlled from the switchboard.

Twenty desk telephones are located throughout the office building and from the office building to the plant a lead covered cable is run on a private pole line. Distribution cable is run along the outside wall of the factory on the street side branching into every building to serve the telephones in that section. The factory installation in itself includes thirty desk telephones serving all departments.

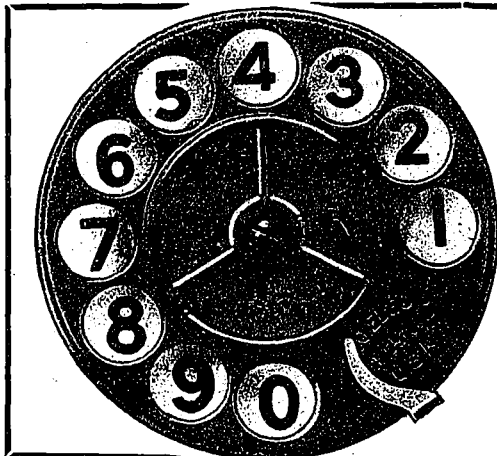
The garage telephone is approximately 3,000 feet from the switchboard, but when talking from it to any other part of the plant the voice transmission is just as clear and distinct as if the two phones were in the same room. This is easily understood when it is known that the same equipment is being used for long distance work in Western Canada.

In connection with the automatic telephone, the automatic code system is installed by which the executives can be instantly located no matter where they are in the plant. This code system, it is claimed, is the only one on the market that is tied into the telephone system so that a code call on the separate code bells or horns throughout the plant can be put on from any telephone and answered from any other telephone, thus starting and stopping the code bells and making instant connection for talking. In service, calls are being answered in from 10 to 25 seconds.

To anyone not familiar with automatic telephones their operation is marvellously quick and sure. Take off the receiver at any telephone, dial two figures, and instantly the phone at the other end is being automatically rung, or if busy, the busy signal is given to the calling party and he is locked out from the number he called.

In short the outstanding advantages of the automatic telephone are speed, accuracy, secrecy, availability, service. It is possible to call any phone in three seconds. There is no such thing as getting the wrong number, no false busy signals. Also it is impossible for a third party to "butt in" or "listen in" on a conversation. It is also claimed that an automatic telephone can do anything that a manual phone can do, and when that is done can go a half further in giving extra service to meet the special needs of any business. It gives service twenty-four hours a day seven days a week without an operator.

The system was installed by Signal Systems, Limited, Toronto, who are representatives for Eastern Canada of The Automatic Electric Co., of Chicago, the makers of the equipment.



**PAX** The Automatic Telephone  
For Private Plant Service

<b>Brown's Copper &amp; Brass Rolling Mills Co., Ltd., New Toronto, 50 Line</b>		
Massey-Harris Co., Ltd. ....	Toronto ....	100 "
Gutta Percha & Rubber, Ltd. ....	Toronto ....	100 "
John Bertram & Sons Co., Ltd. ....	Dundas ....	100 "
Lake Superior Paper Co. ....	S. Ste. Marie.	100 "
Electro Metals, Ltd. ....	Welland ...	50 "
McIntyre Porcupine Mines ....	Schumacher..	50 "
Hamilton Hydro Electric System .....	Hamilton ...	25 "

**SIGNAL SYSTEMS, LIMITED**  
26 QUEEN EAST TORONTO, ONT.