## CONSTRUCTION

## Robt. Simpson Company's Mail Order Building

By THOMAS D. MYLREA

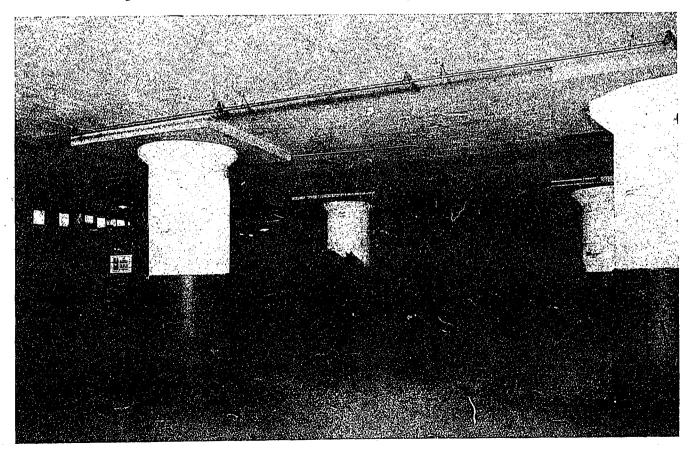
OTABLE among the buildings constructed in Toronto during 1916, is the Robert Simpson mail order building on Mutual street, near Wilton avenue. Eleven stories and basement in height, it has a frontage of two hundred and seventy-nine feet, and a depth of one hundred and fifteen feet. With the exception of the spandrel walls, which are of brick, and the staircases, which are of steel, the entire structure is reinforced concrete. The architect in his design has made no attempt to disguise the mode of construction, but has developed a motive in concrete which presents a pleasing appearance, at the same time being distinctively concrete. The measure of his success may be appreciated from a consideration of the front elevation, and from the view taken from the southwest, in which both the new building and a previously existing structure may be seen.

The facade over each main entrance on Mutual street, together with the panel on each side of it; the frontage of the lower two floors and the parapet wall on this street, as well as the lane to the south, are treated entirely in concrete. During the construction, recesses were left in the panels beneath the window sills, and ornamental blocks of pre-cast colored concrete were secured in place.

The method of interior illumination adopted is rather unusual, all wall columns being kept back from the outer surface and the window sash run continuously past them. By this means the amount of light obstructed by the wall columns is reduced to a minimum. In addition the panes in the upper half of all windows are made of prismatic glass, which refracts the light striking them horizontally to the innermost parts of the building.

After extensive tests as to the nature of the soil and its bearing strength, the engineers decided that it would be more economical and would give a more substantial structure if the column loads were carried by means of caissons down to rock—a very firm shale being found at about fifty feet below grade line. Details of these caissons are given in an accompanying schedule.

As speed of construction was an exceedingly important element, the contractors resorted to a scheme whereby excavation might proceed in a maximum number of caissons simultaneously. Over each hole a tripod was erected in which was framed a windlass operated by a cable-driven sheave. At one end of the building a hoisting engine was installed, driving the cable, which passed from tripod to tripod, making a



DRIVEWAY UNDER BUILDING AT GROUND FLOOR LEVEL, ROBERT SIMPSON MAIL ORDER BUILDING, TORONTO.