series of drawings prepared by the architect's branch of the Department of Public Works is presented, of which blue prints on a scale of one inch to two feet can be had free on application to the Dairy and Cold Storage Commissioner, while the bulletin itself can be had, also free, by writing to the Publications Branch, Department of Agriculture, Ottawa. Five different plans are given in the bulletin, with complete specifications for each and a statement of quantities of ice that can be stored.

"Good Lighting is Clear Profit."—The present tendency in factory and office-building construction proves that architects realize the value of good arrangement, satisfactory wentilation and scientific lighting, as they affect efficiency.

Probably the most important consideration in manufacturing buildings is the natural and artificial lighting facilities. Sufficient light, well diffused, will correct the time waste, errors and accidents of the dimly illumined or the improperly lighted building. Glare will cause eye-strain a surely as will a poorly lighted interior. And cye-strain affects the health of the workman and detracts from his accuracy and speed and has therefore a direct influence on the product.

These facts are emphasized and a remedy provided in a booklet published by the National X-Ray Reflector Co., Chicago, which gives details of increased production in fifty instances where systems of properly diffused lighting were installed in construction work, advertising purposes or the always present necessity for protection against prowlers.

The book is illustrated with reproductions developing its arguments, sound logic of interest to the architect of any type of construction where the problems of either natural or artificial lighting become of unusual importance.

Electrical Specialties.—The new general supply catalogue, just issued by the Northern Electric Company, is one of the largest electrical catalogues as yet printed, containing no less than 1.485 pages and weighing by pounds ready for malling. It gives a

## MAY NEED TWO BILLION FEET OF LUMBER FOR WAR.

Estimates prepared by the Lumber Committee of the Advisory Commission of the Council of National Defense of the United States show that 2,000,000,000 ft. may be used for purposes directly connected with the war in the next twelve months. Construction of the sixteen cantonments which will house the new army will absorb a large amount of the Government's lumber purchases. The cantonments will require about 500,000,000 ft. Second in quantity of lumber required comes the wooden ship-building programme, now estimated at 400,000,000 feet.

## CANADIAN WOODS FOR STRUCTURAL TIMBERS.

CANADIAN WOODS FOR STRUCTURAL TIMBERS.

Too many Canadians in the past have been prone to think that what comes from abroad is better than what is produced at home. Largely because of this idea imported timber has been used in buildings on the edge of our timber lands. The Forest Products Laboratories of Canada, under the Forestry Branch of the Department of the Interior, have been investigating this question and have found that some of our Canadian timbers are superior to those imported, and just as cheap, or cheaper. This means much to us in war time, when every dollar produced or saved makes it by so much the easier to win the war. The results of this investigation have been published in Forestry Branch Bulletin No. 59, entitled "Canadian Woods for Structural Timbers." Lumbermen, builders, manufacturers, or others interested who have not yet received a copy may obtain one free on application to the Director of Forestry, Otlawa.

# FRANCE TO BUILD HER OWN HOUSES.

The annual review of the work of the Canadian Commercial Intelligence Service has recently been issued. The report contains a few matters of interest to contractors. In regard to the portable house industry and trade it states that six models of portable houses were sent to Paris about midsummer of last year and were set up in the Tuilleries Gardens, a short time after the opening of the Reconstruction Exhibition held there. Mr. Frank Pauze, of Montreal, a member of the Canadian Trade Commission which visited France, furnished valuable information to several builders who made enquiries regarding portable houses. The six model houses were presented to the "Secours National," and are being utilized by the Canadian General Hospital No. 8, at St. Cloud. It was ascertained, the report says, that the policy adopted by the French authorities would be that the construction of houses for the devastated regions should be undertaken as much as possible in France.

### PROGRESS OF THE PULPWOOD INDUSTRY.

The war, with its changes in trade routes and markets, has tended to greatly increase the pulpwood and pulp industry in Canada in the last three years. In fact, the industry has grown steadily since its inception. These facts are shown in a bufletin just issued by the Forestry Branch of the Department of the Interior. The total value of the pulpwood made into

pulp in Canada and exported in the raw state for manufacture abroad was nearly \$20,000,000. The amount of pulpwood made into pulp in Canada was 1,764,912 cords, an increase of about 300,000 cords over 1915. While over a million cords of wood were exported in the raw state for manufacture abroad, this was lower in proportion to the total pulpwood made into pulp in Canada than ever before, showing that the Canadam manufacturers are working up more and more of this raw material in our own country. The statistics of the industry are set out in Bulletin 62B, Pulpwood, 1916, which may be had free by application to the Director of Forestry, Ottawa.

# CONTRACTORS and SUB-CONTRACTORS

### As Supplied by The Architects of Buildings Featured in This Issue

Administration Building, National Sanitarium Association, Toronto.

Administration Building, National Sanitarium Asson Toronto.

Boilers, Dominion Radiator Co.
Brick, Fiske & Co.
Brick Work, Teagle & Son.
Cabinet and Woodwork, Thos. Painter & Son.
Electric Fixtures, McDonald & Wilson.
Electric Fixtures, McDonald & Wilson.
Electric Wiring and Apparatus, McDonald & Wilson.
Elevators and Hoists, Otis-Fensom Elevator Co.
Expanded Metal, Pedlar People.
Fire Escapes, McGregor & McIntyre.
Fioring, Marble, Gibson Marble Co.
Furniture, Maccy Furniture Co.
Hardware, Jobbers, Aikenhead Hardware Co.
Hardware, Jobbers, Aikenhead Hardware Co.
Hardware, Yale & Towne.
Heating, Purdy, Mansell, Ltd.
Hollow Tile, Don Valley Brick Works.
Interior Painting, McCausland & Son.
Marble, Gibson Marble Co. and Vermont Marble Co.
Ornamental Iron, McGregor & McIntyre.
Paints, Pratt & Lambert.
Plumbing Fixtures, James Robertson Co.
Pumps, Purdy, Mansell, Ltd.
Plaster, R. C. Dancy.
Radiators, Gurney Foundry Co.
Roofing, Geo. W. Bryan.
Stone. Indiana Quarries Co.
Stone Work, Nicholson & Curtis.
Structural Steel, McGregor & McIntyre.
Tile, T. Eaton Co.
Terra Cotta, Northwestern Terra Cotta Co.
Vaults, J. & J. Taylor.
Vacuum Traps, C. A. Dunham Co.

Registry Building, Toronto.

### Registry Building, Toronto.

Boilers, John Inglis & Sons Co.
Brick, Don Valley Brick Works.
Cabinet and Woodwork, J. A. Berridge.
Carpets and Rugs, Murray-Ray, Ltd.
Concrete Work, James A. Wickett, Ltd.
Electric Fixtures, Robt, Simpson Co., Ltd.
Electric Globes and Glassware, Robt, Simpson Co., Ltd.; MacRath-Evans. Concrete Work, James A. Wienell, Liu.
Flectric Fixtures, Roht, Simpson Co., Ltd.
Flectric Globes and Glassware, Roht, Simpson Co., Ltd.;
Beth-Evans.
Electric Wiring and Apparatus, Fred Armstrong Co., Ltd.
Elevators and Hoists, Turnbull Elevator Co., Ltd.
Expanded Metal, Pedlar People, Ltd.
Fire Doors, A. B. Ormsby, Ltd.
Fire Hose, Goodyear Tire & Rubber Co.
Fittings, Office Specialty Co.
Flooring, Marble, Missisquoi Marbles, Ltd.
Furniture, G. N. Reynolds & Co.
Grilles, Tuttle & Balley.
Hardware, Jobbers, Alkenhead Hardware Co.
Hardware, Yale & Towne.
Heating, Jos. McAlear and M. F. Thomas.
Hollow Tile, Don Valley Brick Works.
Interior Fittings, Cabinet, Decoration, Hughes & Co.
Marble, Missisquoi Marbles, Ltd.
Metal Door and Window Trim, Henry Hope & Sons.
Metal Lath, Pedlar People, Ltd.
Ornamental Iron, Geo. B. Meadows Co., Ltd.
Paints, Pratt & Lambert.
Plumbing, Purdy, Mansell, Ltd.
Plaster Work, W. J. Hynes, Ltd.
Plaster Work, W. J. Hynes, Ltd.
Radiators, Dominion Radiator Co.
Roofing, Paterson Mfg. Co. (Barrett Specification).
Steel Equipment. Office Specialty.
Stokers, Burke Furnace Co.
Stone, Geo. Oakley & Son.
Structural Engineer, E. J. Smith.
Tanks, John Inglis & Co.
Vacuum Traps, C. A. Dunham Co.
Ventilating System, Canadian Blower and Forge Co.

## Transportation Building, Ottawa.

Transportation Building, Ottawa.

Boilers, Efficiency Boilers & Heating Co., Ltd.
Concrete Work, Norcross Bros.
Electric Fittings, U. E. Davis.
Electric Fixtures, Etc., Electric Repair Contracting Co.
Elevators and Hoists, A. B. See Elevator Co.
Flooring, Cement, Darbnell, Ltd.
Glass, Hobbs Mfg. Co.
Hardware, Russell & Erwin Co.
Mail Chute, Canadian Cutler Co.
Mail Chute, Canadian Cutler Co.
Mill Work, Geo. M. Mason; Estate Jos. Davidson,
Ornamental Iron, F. A. McKay.
Painting, G. T. Green.
Plumbing, McKinley & Northwood,
Plastering, Frank Hunt.
Roofing, Sheet Metal, MacFarlane Douglas, Ltd.
Stone, Granite James Brodie Sons.
Stone, Limestone, Hooper Bros.
Structural Steel, Dominion Bridge Co.
Tile, A. K. Mills & Son.
Terra Cotta, Atlantic Terra Cotta Co.
Ventilating, McKinley & Northwood.