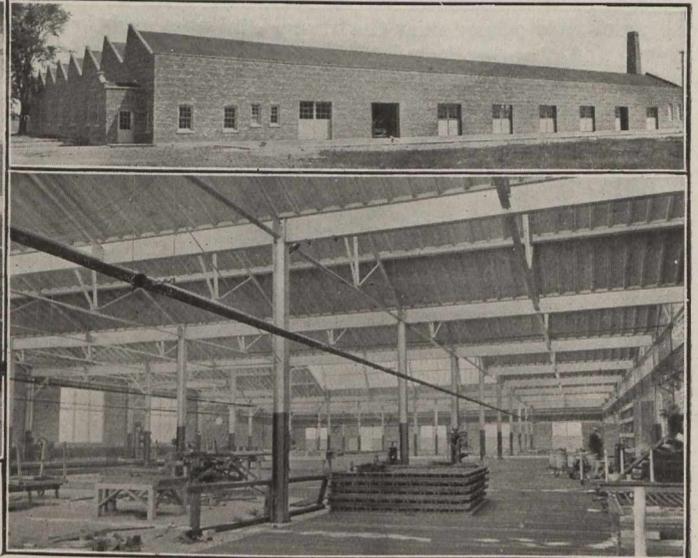
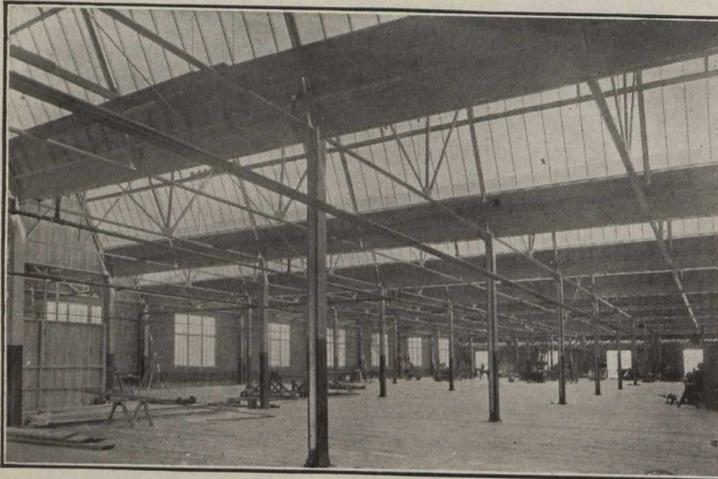


## GREENHOUSE FACTORY AT ST. CATHARINES, ONTARIO.

**T**HE Lord and Burnham Company, Limited, with plants in the United States at Irvington, N.Y., and Des Plaines, Ill., have recently established a Canadian factory at St. Catharines, Ont., opposite the Yale and Towne plant constructed there several years ago. The accompanying illustrations show the new plant practically at its completed stage. It will be devoted to greenhouse manufacture, and in this connection it is interesting to note that the owners are the largest users of glass in America.



Views of the Lord and Burnham Building, St. Catharines, Ont., Showing Interesting Type of Construction.

The building follows a highly standardized design. The owners, themselves, have had years of experience as designers in light steel work, and their standards, combined with those of the Standard Steel Construction Company, of Welland, and The Samuel Austin & Son Company, of Cleveland, builders, resulted in a factory building of extremely low cost.

The building is approximately 225 x 250 feet, of one-story saw-tooth construction, with steel frame, brick exterior, maple finish floor, cement tile roof, and with clear glass throughout.

There are no pilasters. The 9-inch brick walls run straight by all the columns, with anchor bolts to insure each stiffening the other. This gives a maximum of floor space with a minimum of steel work. The cement roofing tile, Austin standard, Hollospan type, was made on the ground; the purlins are spaced at 8-foot centres, which long span is made possible by the vertical members of the tile, and makes possible a still further reduction in the structural steel.

The saw-tooth trusses were designed by the Lord & Burnham Company, and refigured by the Standard Steel Construction Company, with a considerable resultant saving in steel.

Good ventilation is assured by the opening of a continuous row of ventilators in each saw-tooth by the owners' own sash operating device, and ample clear glass area in saw-tooth and side walls gives one of the best lighted factory floors in Canada. The saw-tooth sash are all wood, of selected quality cypress, Lord & Burnham standard. Wood frames and sash are used in the rest of the building as well.

The floor is probably one of the most substantial and best ever put into a factory building for machine shop work. It consists of a concrete sub-base, with two inches of tar-rok, a 2-inch hemlock sub-floor, and a  $\frac{7}{8}$  finished factory maple floor. This gives ample substantial beds for all except the heaviest machines and affords good protection against rotting of the sub-floor from dampness or other causes.

The owners are now installing their own heating system, operated with Burnham boilers. The machinery has all been placed in position and is rapidly turning the raw wood and iron into shape for the construction of the numerous greenhouses which the firm have under contract.

Mr. W. A. Burnham is president of Lord & Burnham Company, Limited, and Mr. David Warwick is manager of the new Canadian plant.

## PRODUCTION OF EXPLOSIVES.

The total production of explosives in the United States during the year 1914, exclusive of exports, according to figures compiled by Albert H. Fay, of the United States Bureau of Mines, was 450,251,489 pounds or 225,126 short tons, as compared with 500,015,845 pounds or 250,008 short tons for 1913. The production for 1914 is segregated as follows: Black powder, 206,099,700 pounds; "high" explosives other than permissible explosives, 218,453,971 pounds; and permissible explosives, 25,697,818 pounds.

The figures represent a decrease of 23,839,831 pounds of black powder, 23,932,573 pounds of high explosives, and 1,907,952 pounds of permissible explosives, as compared with 1913.

## THE DELAWARE AND HUDSON COMPANY IN CANADA.

The Delaware and Hudson Co. owns two railways in Canada—the Quebec, Montreal and Southern, extending from Noyan Junction to Belleville, 81 miles, from a junction with the G.T.R. at St. Lambert to Fortierville, 109.69 miles, and from St. Constant Junction to Napierville Junction, 1.40 miles, a total of 192.09 miles; and the Napierville Junction, from St. Constant Junction to Rouse's Point, Que., 27.06 miles. At the latter point connection is made with the Delaware and Hudson road's main line, which extends south to Wilkesbarre, Pa. Together, these roads form 25 per cent. of the total mileage of railways owned and operated by the company.