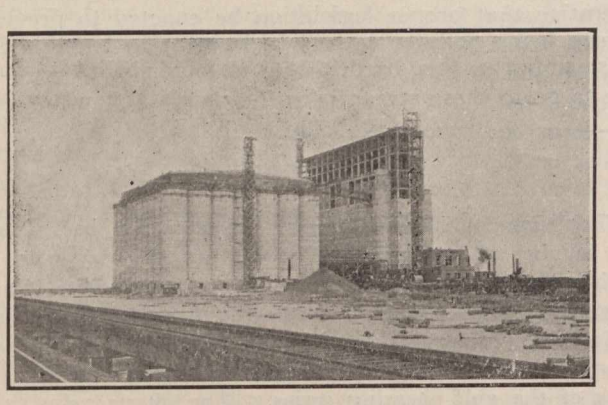
GOVERNMENT ELEVATOR AT PORT ARTHUR.

THE construction of the Dominion Government grain elevator at Port Arthur has reached the final stages and the structure is just being put into commission. The machinery is practically all installed and the high potential power line into the plant is almost completed. Tracks have been laid to give the Canadian Pacific and Canadian Northern access to the elevator and arrangements will shortly be made to give the Grand Trunk Pacific Railway a similar connection.

The elevator is of reinforced concrete construction throughout, except that in the walls of the working house brick panelling is used in a skeleton of reinforced concrete. This latter construction was used to facilitate rapid erection of the house, and adds to its appearance as well. No inflammable material is included in either building or machinery.

The elevator will be operated by electric power throughout, and a separate motor has been installed for each machine. Twenty cars can be unloaded simultaneously, the unloading capacity of the house being about forty cars per hour. An interlocking device connecting the valves of the car hoppers prevents any possibility of mixing the contents of one car with those of another. The normal loading capacity to boats will be about 75,000 bushels per hour, but for the first hour this can be increased to 115,000 bushels.



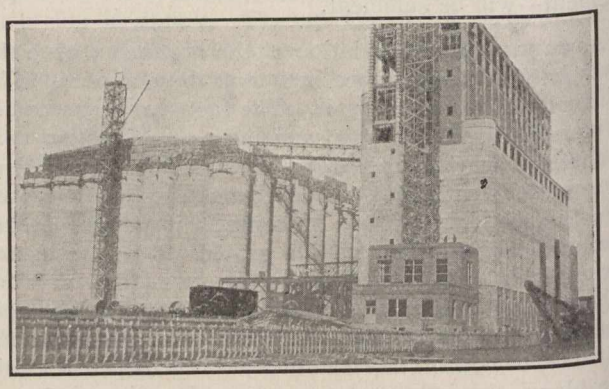
The Government Elevator at Port Arthur in Course of Erection.

The working house towers to a height of 185 feet above the water level. It contains seventy-five circular bins of about 7,000 bushels capacity each, fifty-six interspace bins of 3,000 bushels and thirty-six outer-space bins of 1,500 bushels capacity each. Its total capacity is about 750,000 bushels. The storage house has seventy circular bins, each 24 feet in diameter and ninety feet in height of 30,000 bushels capacity, together with fifty-four interspaces of about 8,000 bushels capacity each. The total capacity of the elevator is 3,250,000 bushels. In designing the elevator especial provision was made for a large number of bins of small capacity for storing small lots of grain that may require separate binning.

The working house is equipped with ten hopper scales of 2,000 bushels capacity, with a garner of equal capacity over each scale. The elevator legs are as follows: five for receiving, five for shipping, five for cleaning, one for screenings, one for drying, one for oats, and two for flax. Fifteen sets of receiving cleaners are provided for cleaning oats, wheat and barley, and fifteen additional cleaners can be installed when they are needed. Special machines are also installed for separating oats from wheat, in addition to two screenings separators and two flax separators.

At the south end of the working house a drying plant is installed in a separate building. This has a capacity of 48,000 bushels per day, and is for drying damp, tough or wet grain, and putting such grain in condition for storage.

A revetment wall is being built around three sides of the site, which contains about 32½ acres. The site was formerly covered by water, but is now being filled in level



Another View of the Structure.

with the top of the revetment wall. A slip 1,200 feet long will provide ample space for the largest lake boats alongside the working house. Four lines of railroad tracks extend through the house and beyond it for a distance of 800 feet, so that eighty cars can be spotted at one time, and taken into the house by the car pullers. Provision has been made for increasing the capacity of the elevator to a total of ten million bushels, should additional capacity be required, and the site affords ample space for increasing this capacity still further.

The production of peat in 1912 in Canada given in Mr. McLeish's report on Economic Minerals and Mining Industries was 700 tons, and was valued at $2,900.

The total production of pig-iron in Canada in 1912 was 1,014,587 short tons and of steel ingots and castings 957,681 short tons. That the domestic production is insufficient to meet home demands is indicated by the large imports which in 1912 exceeded 1,300,000 tons of pig-iron, ingots, blooms, etc., plates, bars and rods, structural steel, rails, pipe, nails, wire forgings, castings, etc. The opportunity in so far as the market is concerned for the development of Canadian iron resources is evident.

The Eighth Annual Convention of the Federation of Trade Press Association in the United States will be held at the Hotel Astor in New York, September 18th, 19th and 20th. It is expected that a great majority of the technical and trade journals in Canada will be represented. Relative to journalism of this nature, it is stated that the capital invested in trade journals in the United States has been estimated at not less than $50,000,000, and that the Federal papers represent a capital investment of more than $35,000,000. The Federation was organized in 1906. At the start it concerned itself chiefly with press problems, but in later years more consideration has been given to ways and means of promoting best interests of the trade press in many other directions. Managers, manufacturers and advertising men interested in the idea of business promotion through trade press efficiency, which are to be featured at the coming Convention, should consider well the invitation to attend, as there will be papers and addresses to all these, as well as to paper and book publishers.