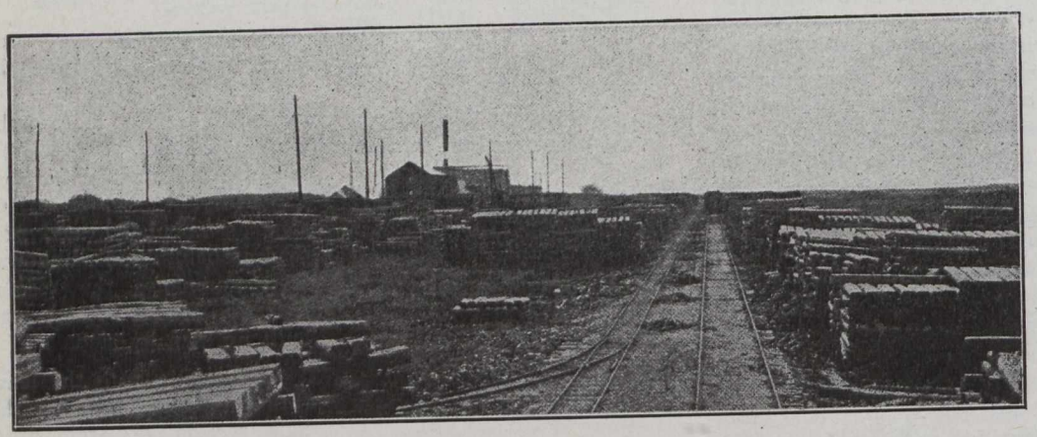
THE NEW PLANT OF THE DOMINION TAR AND CHEMICAL COMPANY, LIMITED.

The Dominion Tar and Chemical Company, Limited, has just erected a creosoting plant for the treatment of railway ties. The plant is located about six miles east of Winnipeg and is now operating. The plant has a contract to treat from 500,000 to 1,000,000 ties for the Canadian Pacific annually for ten years, which marks the first use of treated timber for ties on a large scale by that road. The plant also has a contract to treat some ties for the Canadian Northern, which will be used for experimental purposes, and large paving block contracts are being executed successfully for various cities in Western Canada.

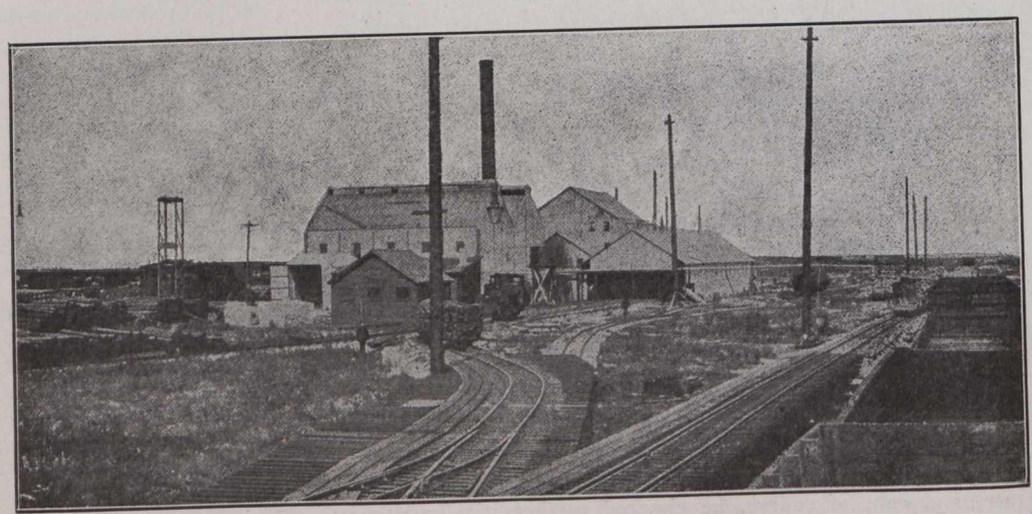


A View of the Storage Yard for Ties.

The plant was built on a comparatively small scale, but was designed with a view to future enlargement, and some additions are now being made, while others are definitely planned. The two cylinders now being operated have a capacity of over a million ties annually upon the basis of present operations. The ties treated are principally jack pine, Norway pine, tamarack and white spruce, while some experiments are being made with British Columbia spruce and fir, and black spruce and poplar from Ontario. Although some of these species are not as well adapted to treatment as some other woods, they are used because they are easily obtainable along the company's lines. The climatic conditions in Canada are such that decay in ties is not so rapid as on roads located further south, the period of the year in which the frost is out of the ground, which is the only time that decay can seriously affect the wood being much shorter. The plant is equipped to treat timber by any method. The C.P.R. and C.N.R. contracts specify the Bethell process, injecting a minimum of two United States gallons per tie. The ties are receiving from 2 to 3½ gallons, depending upon the size of the ties. The process consists of preliminary steaming, when the timber is not air-seasoned, followed by a vacuum, after which the cylinder is filled with creosote and the desired amount of oil injected into the timber. After the oil is ejected from the cylinder, the timber is allowed to stand a short time to recover the drippings. Most of the oil used is secured from the distilling plants which the Dominion Tar and Chemical Company operates at Sault Ste. Marie, Ont., and Sydney, N.S.

The treating plant occupies a tract of 40 acres, with the buildings located near one end of the yard. It is planned to add 30 acres to this next year, which can readily be done, as the company owns 110 acres. There are four long yard tracks serving the storage piles, which are designed to accommodate 700,000 ties, and the additional yard space planned for next year will provide for the stacking of over a million ties.

Practically all of the ties that reach the plant are shipped with the bark on the sides, which must be removed as the ties are unloaded. At present this work is being done by hand, but, when an adzing and boring plant is installed, as is planned for next year, it is hoped that some arrangement can be made to bark the ties by machine when they are adzed, although no detailed plan for effecting this has yet been prepared. All ties are seasoned before treatment, the length of time varying with the species of the wood and the requirements for treated material. Each yard track is paralleled by a narrow-gauge track for the operation of the cylinder cars. The narrow-gauge cars are operated by two narrow-gauge locomotives, one of which is of English make. A five-ton locomotive crane is used for handling some of the treated ties and paving block baskets and for switching standard gauge cars when necessary. It has also been found very useful in the building of tanks and other facilities about the plant. The yard is connected at one end with the main line of the Canadian Pacific and at the other with a branch line of the Canadian Northern. An elevated loading platform of frame trestle construction is provided for loading treated ties in standard gauge cars for shipment. This platform is served by two narrow-gauge tracks.



General View, Showing Treating Plant.

The treating plant is housed in steel frame buildings covered with corrugated iron. There are two treating cylinders 6 ft. 6 in. in diameter and 135 ft. long now in use, a third one 6 ft. 6 in. in diameter and 84 ft. long is practically completed, and a fourth one 6 ft. 6 in. in diameter