

NEW INDUSTRY FOR CANADA.

The Chicago Bridge and Iron Works, which has developed a prominent type of steel water tank for municipal, factory and railroad service, has built and is now operating a new plant at **Bridgeburg, Ontario**. This company began twenty years ago to construct for small towns and cities the hemispherical bottom type of tank, and since then has built a great number of tanks in every province in Canada and in every state in the United States.

About ten years ago Mr. George T. Horton, now president of the Chicago Bridge and Iron Works, designed and patented the elliptical bottom tank intended at first only for locomotive service. This tank, as shown by the cut above, has a large diameter and shallow depth, thus giving, as nearly as possible, the absolutely uniform pressure that is so desirable for all kinds of water service. Its special feature is the large steel riser pipe riveted directly to the tank bottom. This construction eliminates the leaky expansion joint and wooden frost casing, common to all other types of tank, and makes an all-steel structure which will last indefinitely. The large riser pipe is built from three to six feet in diameter, depending upon the climate. The success of the design is well illustrated by the municipal tank at Moose Jaw, shown herewith, which has never been put out of service by the coldest weather.

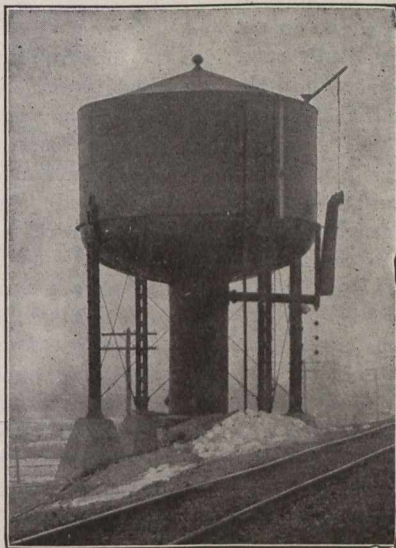
The tank bottom is practically flat where the riser is attached. It is, therefore, flexible and is in itself an ideal expansion joint, as is testified by the large number of high tanks of this design now in successful service. One in particular, a 200,000 gallon tank, 175 feet to the bottom, shows how well the expansion is taken care of. This elliptical bottom is now widely used for municipal and sprinkler as well as for locomotive service.

The large riser, besides doing away with wooden frost casing and expansion joints, serves as a settling basin. The inlet and outlet pipes extend up into the large riser several feet so as to be above any possible accumulation of sediment. A washout valve, operated from the outside, is installed at the bottom, so the tank can be cleaned without emptying or interrupting its service.

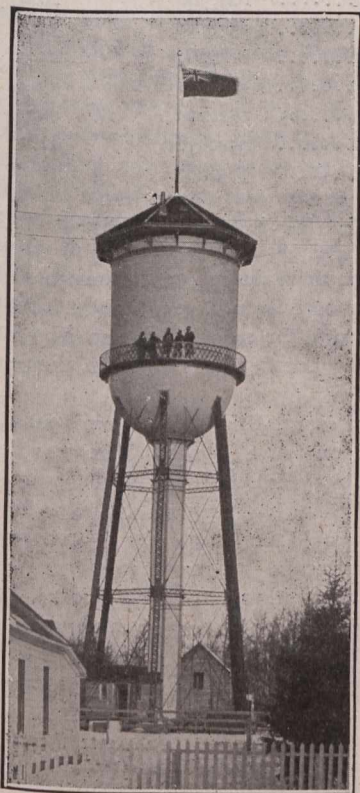
The self-cleaning feature of these tanks proved so important that Mr. Horton went a step farther. He designed and patented for railroads using extremely muddy water a conical bottomed tank with a large riser. This tank differs from the elliptical type only in that the bottom makes an angle of not less than forty-five degrees with the vertical so that the sediment has no chance to stop on its way to the settling basin.

How well these tanks are liked by the railroads is shown by the fact that they are in use on 85 railroads in numbers from 1 to 150 tanks per railroad.

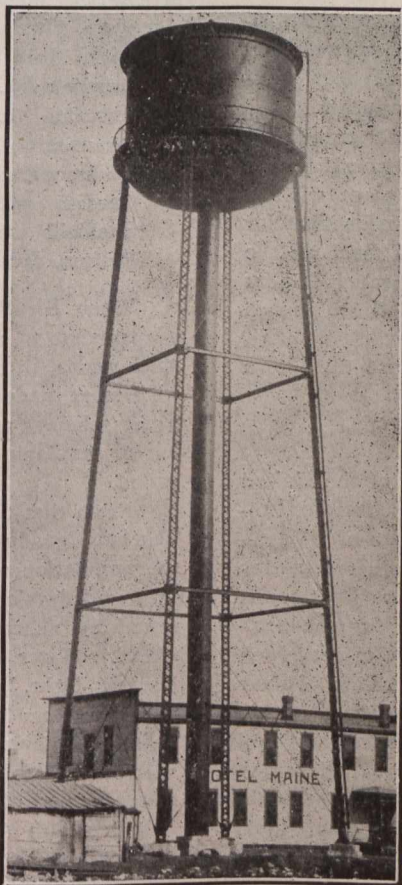
Three years ago the Chicago Bridge and Iron Works' all-steel locomotive ser-



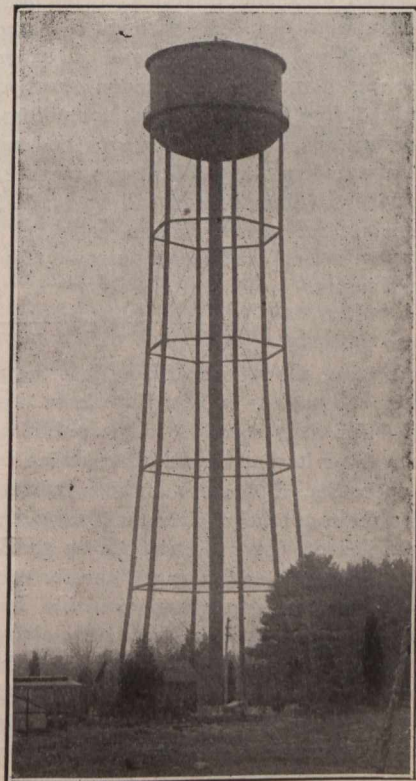
**Grand Trunk Pacific Railway;
Capacity, 50,000 Gallons;
Height, 20 Feet to Bottom.**



**Edmonton, Alberta; Capacity,
75,000 Gallons; Height, 81
Feet to Top.**



**Capacity, 100,000 Gallons; Height,
111 Feet to Top; Moose
Jaw, Saskatchewan.**



**Standard Elliptical Bottom Design;
Capacity, 200,000 Gallons; Height,
175 Feet to Bottom.**