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MODERN CRANE EQUIPMENT

DESCRIPTION OF UP-TO-DATE APPARATUS FOR LOADING AND UNLOADING OF MATERIAL AND SUPPLIES WHEN SPEED OF OPERATION IS A VITAL FACTOR.

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THE loading and unloading of material in bulk, such as coal, ore, slag, sand, gravel and the like is a matter of serious expense and consequently of great importance to mines, dealers, contractors, consumers, etc. There is no doubt that in many cases this matter is not given due attention and that the material is still handled in an out-of-date way by unnecessarily expensive labor from ships to cars or storage or from cars to storage or vice versa. One important consideration in this connection is the question of avoiding delays in despatch of vessels and cars and the consequent demurrage on same, as by modern methods a saving of days or weeks can usually be effected.

It is a proven fact that modern handling plant will in most cases pay for its

which, when handled by out-of-date methods, may be crushed and deteriorate in quality. Also, the trend of business and trade will always go to well-equipped plants, i.e., plants with the most favorable conditions for quick service and low prices. These loading and unloading equipments vary in their type and construction according to the purposes they are to be used for.

If the goods are simply to be loaded from boat into cars or vice versa, a slewing crane with grab bucket will be the correct equipment, especially if the boats are not too large or fitted with high masts. These cranes may be stationary or travelling, and driven by steam, as shown in Fig. 3, or by electricity where current can be easily supplied by wire or by a third rail. If it is necessary to clear

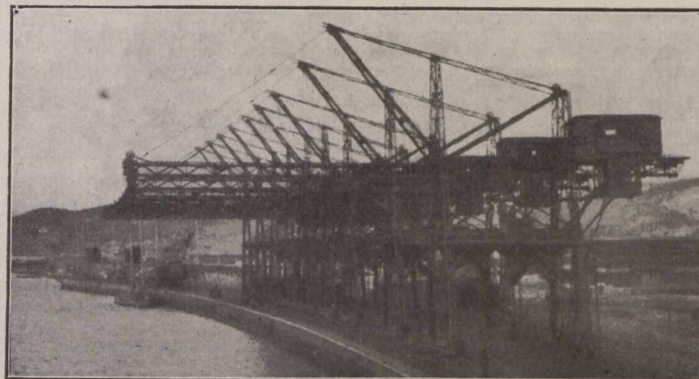


Fig. 1.—Loading Towers for Handling Large Quantities.

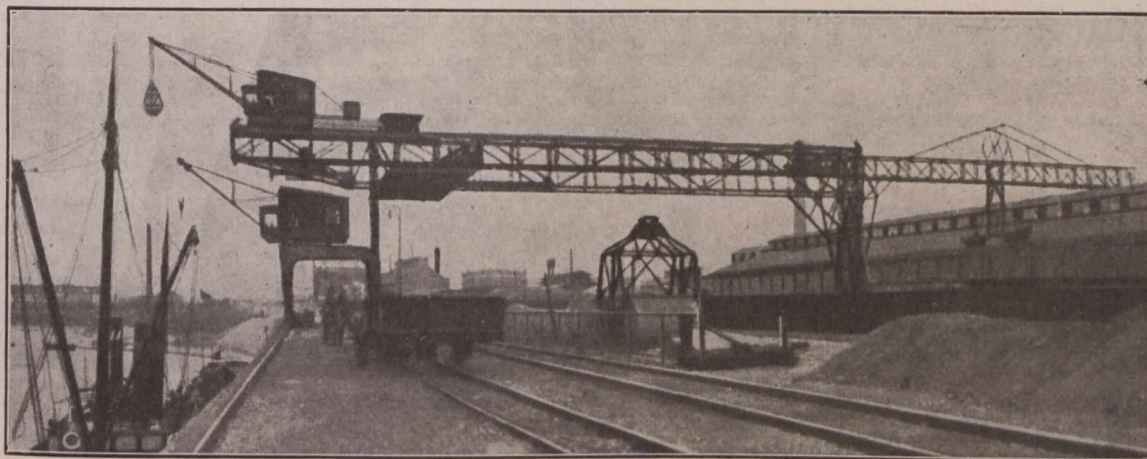


Fig. 2.—Travelling Slewing Crane Running on Bridge Girders.

first cost in a very short period by the saving in labor, demurrage and risk of accident. Besides these direct advantages there is the fact that such modern handling plants minimize any impairment in the material in the course of conveyance, especially in the case of coal,

one or more railroad tracks, the crane can be placed on a full or semi-portal and the jib can also be built to raise in order to clear the masts of the boats. (Fig. 4).

The capacity of such slewing cranes runs from 4 to 15 tons, including weight of bucket. They may be also