

Grain Elevators

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The four-bushel bags are carried automatically from the trucks into the ships holds, or deposited into the grain shed. They are worked by electric power from the Ultimo Power House. When the truck is in position, the grain bags are tilted onto a pair of polished bars, just beneath which are a succession of timber cross pieces, which, as they are moving onwards, catch the bulging portion of the bag, which thus is carried along and held in position by the smooth bar. The revolving belts, upon which the timber cross pieces are arranged so that the travelling bags are passed on from one to another. First, the long procession of bags (dumped onto the “travellers” as quickly as four men can handle them) may be seen mounting an incline. They go along a level plane, then they automatically drop onto a smooth chute and run down for 20 to 30 feet onto another inclined plane, up which they are taken and run again to a simple “saddle”, which in their own momentum swing them to a longitudinal belt, by which they are carried along the outer edge of the shed until just opposite the vessel’s hatchway. Another “saddle” automatically twists them, and throws them onto the first of a succession of chutes, down which they slide, dropping gently from one to another right into the ship’s hold. In deep vessels, the bags descend in an “artistic” zig-zag of the iron chutes. The wheat is thus not handled from the time it leaves the railway truck until the labourers receive it for stacking in the ships hold, a journey of perhaps 150 to 200 feet, during which they may be seen taking more than a dozen turnings – now climbing, now descending, now turning to the right or left, and climbing and descending again.

Under the previous system of slinging the grain by cranes, the loading of a big vessel occupied three weeks or a month. Now they load easily in less than a week.

The elevators may facilitate stacking in any part of the grain shed, or at any level, instead of from the trucks. In the shed the grain is generally stacked 32 bags, or about 50 feet high. The shed is capable of holding 300,000 bags. The greatest quantity received in a day was 30,956 bags, equal to 380 truck loads. As many as 18,962 bags have passed through on elevator in a day, loading from the shed to the ship at a rate of 901 to 903 tons per hour, whereas the old system the limit was about 25 tons.

The railway authorities can now get trucks away quickly. Since last December 2½ million bags of wheat have been received by rail, from which 77 vessels have been loaded with 1,676,671 bags. Owing to the drought, the total amount last season was only 3,329 bags.