

C. LAZAREVITCH.
Grain-Conveyers.

No. 145,112.

Patented Dec. 2, 1873.

Fig. 1.

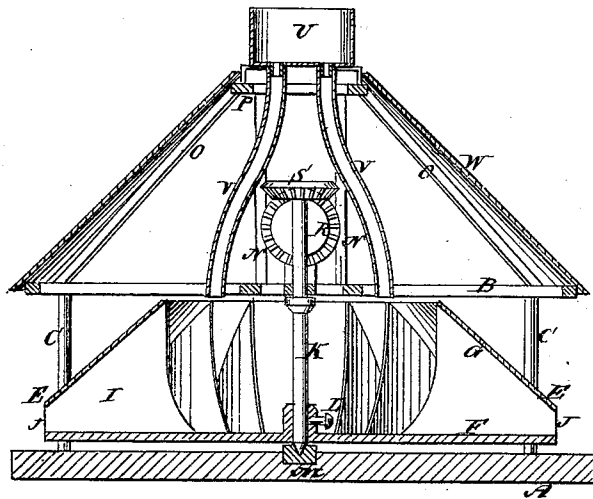
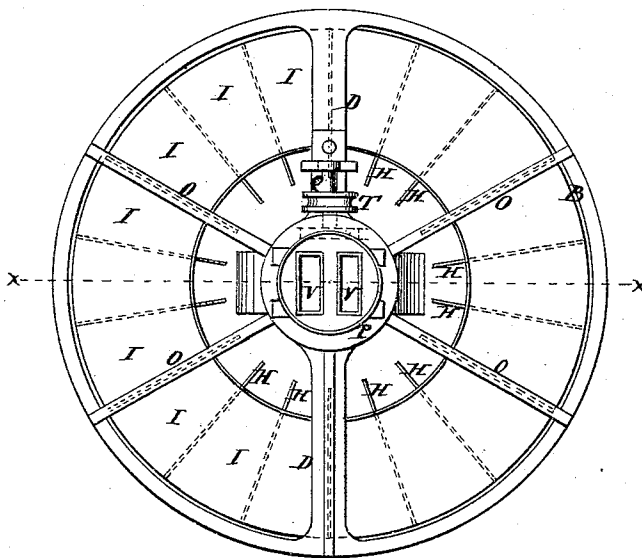


Fig. 2.



WITNESSES.

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IMPROVEMENT IN GRAIN-CONVEYERS.

Specification forming part of Letters Patent No. 145,112, dated December 2, 1873; application filed October 18, 1873.

To all whom it may concern:

Be it known that I, CONSTANTIN LAZAREVITCH, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Machine for Loading and Trimming Vessels with Grain in Bulk, of which the following is a specification:

The object of this invention is to obviate the necessity of shoveling grain in the holds of vessels, for the purpose of distributing it and properly trimming the vessel.

The hold of a vessel is an extremely uncomfortable place to labor in, on account of the heat and confined air, and the shoveling of grain is not only a laborious and uncomfortable, but an expensive, operation.

The invention will first be fully described and then pointed out in the claims.

In the accompanying drawing, Figure 1 is a vertical section of the machine taken on the line *x x* of Fig. 2. Fig. 2 is a top or plan view with the cap or shield off.

Similar letters of reference indicate corresponding parts.

A is the bed-plate. B is a ring, supported above the bed-plate by the posts C. D is a bar, which extends across the ring and supports the gearing and upper end of the central shaft. E is a shell-wheel, composed of a bottom plate, F, and an inclined annular upper plate, G, separated by the vertical partition-plates H, which latter divide the space between the two plates into a series of compartments, I, which have their outlets at J, a space between the outer edges of the two plates F and G. The grain is discharged through this space. K is the central shaft, to which the wheel E is attached by means of the set-screw L. This shaft runs on a point in the step-box *m*, and is supported by the cross-bar D, as seen. This bar is itself supported in the middle by vertical posts N and inclined stanchions O, connected with main ring B and the upper small ring P. Q is a

horizontal shaft, upon the inner end of which is a bevel-wheel, R, which meshes into the bevel-wheel S on the top of the central vertical shaft K. T is a pulley, on the shaft Q, which receives a belt from the elevator or any convenient motive power for giving motion to the wheel E. U represents a hopper, into which the elevator discharges the grain. V V are tubes, connected with the hopper, which convey the grain into the revolving-wheel.

The wheel is placed below the hatch and given a rapid revolving motion, and the grain is thrown from the wheel, through the compartments I and space J, by centrifugal force against the sides of the vessel and bulk-heads.

The grain is thus distributed, as fast as the elevator delivers it, without hand-labor, and in the most perfect manner.

The speed of the machine may be regulated by means of cone-pulleys or otherwise, so as to simply clear the wheel and allow the grain to fall nearly vertical for filling the middle of the hold.

The machine is moved from one hatch to another without inconvenience, and is protected by a conical shield, W, to screen the grain from the weather.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In combination with the horizontal rotary wheel, having close bottom and partly closed covering, of the hopper U and tube V V, to distribute the grain equally on each side of the wheel, substantially as shown and described.

2. The combination of the conical frame, arranged above the wheel E, with the conical shield W, substantially as and for the purpose set forth.

CONSTANTIN LAZAREVITCH.

Witnesses:

T. B. MOSHER,

ALEX. F. ROBERTS.