

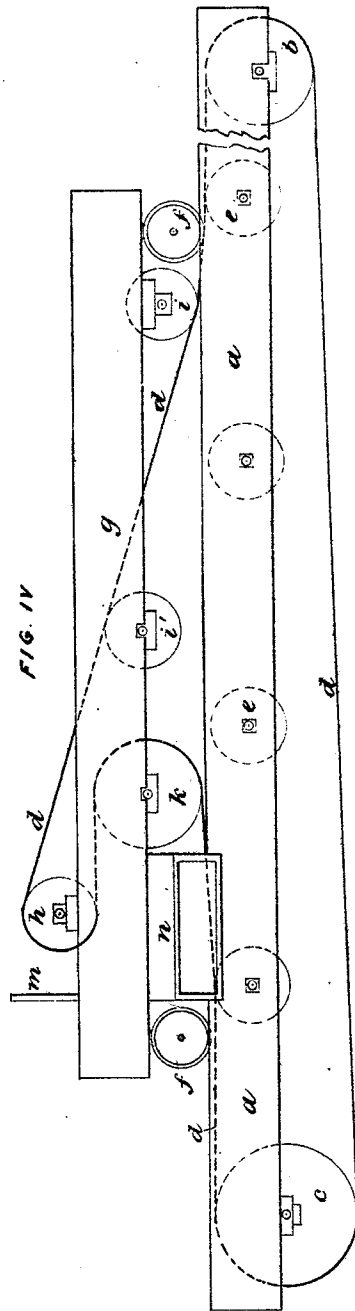
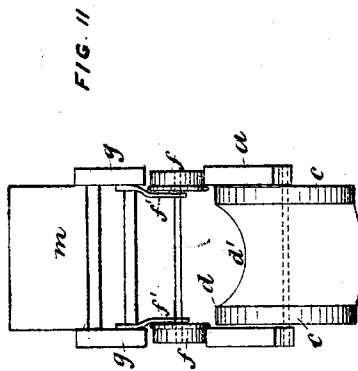
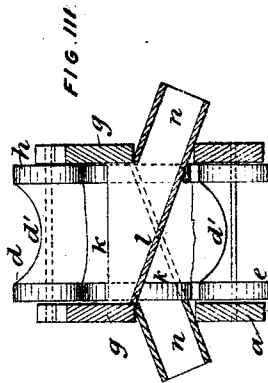
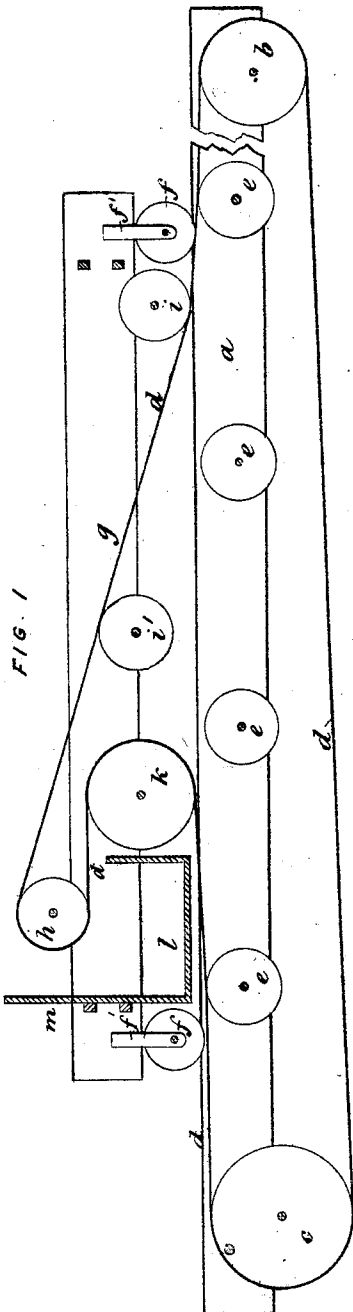
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O. M. GOULD.

Improvement in Grain Carriers.

No. 121,867.

Patented Dec. 12, 1871.



Witnesses

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IMPROVEMENT IN GRAIN-CARRIERS.

Specification forming part of Letters Patent No. 121,867, dated December 12, 1871.

To all whom it may concern:

Be it known that I, OVID MINER GOULD, of the city of Montreal, in the district of Montreal, in the Province of Quebec, Canada, gentleman, have invented new and useful Improvements on Grain-Carriers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, where—

Figure I represents a longitudinal sectional elevation of carrier. Fig. II represents an end elevation of carrier. Fig. III represents a transverse sectional elevation of carrier. Fig. IV represents a side elevation of carrier.

This invention has reference to improvements on the carriers at present in use in warehouses for the storage of grain, &c., and affords, in addition to the advantages possessed by the old carriers, that of delivering the grain carried by it at any intermediate point, which, as the carriers as at present constructed are often of great length, is a desideratum, obviating, as it does, a large amount of hand-labor in the way of shoveling grain, &c., and saving expense in the way of extra spouting.

In the drawing, in which similar letters of reference indicate like parts, *a* is the frame of a carrier, and *b* and *c*, respectively, pulleys (carried in proper bearings, and having motive power applied to the shaft of either) placed at either end, over which the belt *d* (clearly shown in Figs. II and III, with bag *d'* for the reception of grain, furnished with bars, as usual) passes, being supported between *b* and *c* by friction-wheels *e*. So far, this corresponds to the carriers now generally in use; but my addition thereto for the purposes above stated may be briefly described as follows:

Upon two pairs of flanged wheels, *f*, placed one pair at each end, is supported a smaller carrier-frame, *g*, constructed in the most simple manner, as shown in the drawing, the wheels *f* being secured to the ends of the carrier by brackets *f'*, delineated in Fig. I. *h* is a drum or pulley supported in any suitable manner, and over which the belt *d* with bag *d'* passes, traveling from the drum *b* under the friction-wheel *i* and over that lettered *i'*, and after leaving the pulley *h* passing around the tension-pulley *k* and over the friction-wheel *e* to the drum *c*. *l* is a hopper

placed under the pulley *h* to receive the grain, and arranged so that the bottom can be reversed, thus enabling it to discharge on either side of the carrier, as shown in Fig. III, into any convenient or suitable spout, *n*. *m* is a shield, formed by carrying up the front of the hopper *l* so as to direct therein the grain passing over the drum *h*.

The operation of my invention is as follows: Motion having been imparted to the shaft of either of the drums *b* or *c* by a belt, or in any ordinary method, the belt *d* begins to revolve, and the carrier-frame *g*, running easily by means of the flanged wheels *f* on the frame *a*, is brought opposite the exact place where the grain is desired to be discharged, and then secured in any convenient manner. Instead, however, of the belt *d* simply traveling from *b* to *c*, as in the old method, it passes over the friction-wheel *e*, and respectively under and over the friction-wheels *i* and *i'*, carrying its load of grain over the drum *h* and discharging it into the hopper *l*, whence it may be conveyed by any usual spout, &c., to the required place of deposit, the shield *m* preventing any waste of grain. The belt *d*, meanwhile, passes round the tension-pulley *k* and over the friction-roller *e* and drum *c* back to the drum *b*, the action being as continuous and steady as in the old apparatus.

It will be noted that it is by no means necessary to stop the machinery in order to shift the position of the carrier *g* on the main carrier *a*.

Having thus described its construction and operation, I beg to state that what I claim as my invention, and wish to secure by Letters Patent, is as follows:

1. A carrier-frame, traveling on the main carrier, substantially in the manner and for the purposes set forth.
2. The novel combination and arrangement of the carrier-frame *g*, mounted on flanged wheels *f*, with friction-wheels *i* *i'*, drum *h*, tension-pulley *k*, hopper *l* with reversible bottom, or their equivalents, all working together in combination with carrier-frame *a*, drums *b* and *c*, and belt *d*, substantially as and for the purposes set forth.

Montreal, 23d day of October, A. D. 1871.
O. M. GOULD.

Witnesses:

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