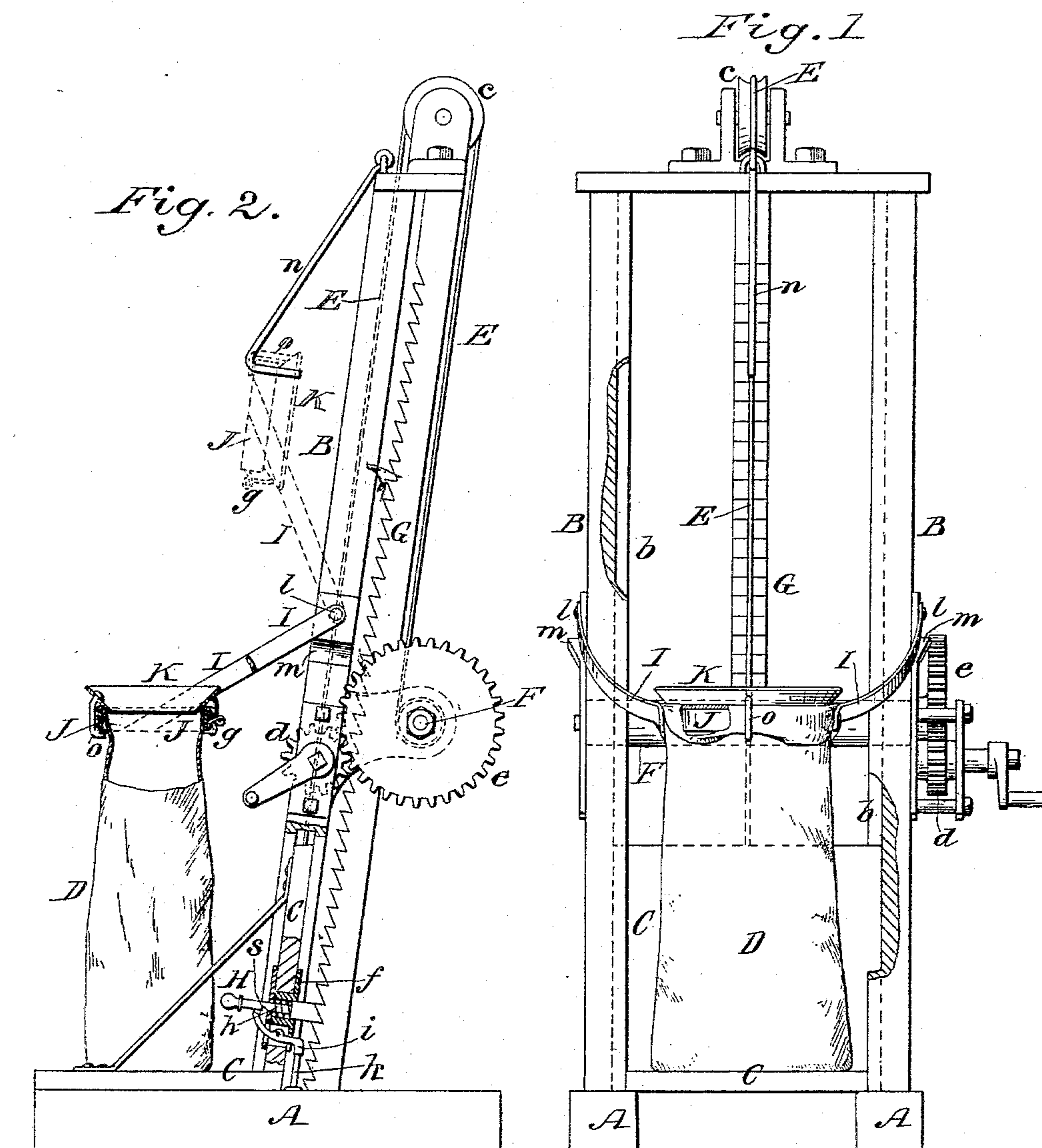


(No Model.)

J. A. HAMSCH.
BAG HOLDER AND LIFTER.

No. 315,778.

Patented Apr. 14, 1885.



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BAG HOLDER AND LIFTER.

SPECIFICATION forming part of Letters Patent No. 315,778, dated April 14, 1885.

Application filed June 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. HAMSCH, of Traverse City, in the county of Grand Traverse and State of Michigan, have invented a new and Improved Bag Holder and Lifter, of which the following is a full, clear, and exact description.

This invention consists in an apparatus of novel construction, mainly designed to be used as a holder of bags or sacks when being filled, and as an elevator of such filled receptacles, but which may also be used as an elevator of different objects or articles.

The apparatus, which may either be stationary or portable, as desired, comprises a step-like platform arranged to move up and down uprights or guides by means of a rope and windlass operated by suitable gears, an upright ratchet-rack, and a peculiar click controlled from the platform for locking the platform when raised or at any desired point, and bag-holding devices connected with the frame of the apparatus, substantially as hereinafter described and claimed. As a bag holder and lifter it may be used in a stationary form in mills and other buildings, and as a portable device may readily be transported to wherever it may be needed—as, for instance, to the field, for use in connection with a thrashing-machine to lift the filled bags, and so dispense with much labor. The accompanying drawings represent the apparatus in a portable form, with its lifting-rope, pulley, and operating-gears suitable therefor. When in a stationary form, the lifting-rope may be otherwise run and directed by pulleys for operation from the side of the frame by a different arrangement of gears.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a partly-broken front view of a bag holder and lifter embodying my invention, with a bag in position for filling, and Fig. 2 a partly-sectional side view of the same.

A indicates the base portion of the frame, and B B its side uprights, which may be of any desired height, and be set slightly inclining backward.

C is a step-like platform on which the bag

D to be filled is placed, and by which when filled it is lifted. The back of this platform is fitted to slide up and down within grooves *bb* in the uprights. Said platform is raised by means of a rope, E, arranged to pass over an upper pulley, *c*, and secured to a windlass, F, which may be operated by a crank and gears, *d e*, from the one side of the frame.

G is a ratchet-rack secured to the frame in parallel relation with the grooved uprights B B, and arranged in rear of the platform, extending from the top to the bottom of the frame, between the uprights. In the back of platform C, opposite this rack, is a click-bolt, H, fitted to automatically engage with the teeth of the rack to lock or hold the platform, when raised, from descending. Said click-bolt works through a metal box, *f*, arranged in the back of the platform and containing a spring, *h*, which shoots the bolt. When the click-bolt is drawn out from engagement with the rack, to permit of the descent of the platform, a weighted pivoted catch, *i*, in the back of the platform automatically engages with a notch, *s*, in the bolt to keep it drawn out until the platform descends to its lowest level, when the catch, striking an upright stop, *k*, on the base of the frame, is released from its hold on the bolt that then shoots into engagement again with the rack, ready for a repetition of its hold of the platform on its next ascent.

The bag-holder is composed in part of a swinging frame or bars, I I, pivoted to the uprights B B at *l l*, and carrying in front what may be termed a "lower ring," J, through which the mouth end of the bag is inserted when the bag is being filled, and in part of an upper ring or mouth-clamp, K, hinged, as at *g*, to the rear of the lower ring, J. The frame I I rests, when down and in use, on stops *m m* on the sides of the uprights, and when raised and out of use is held by a hook, *n*, attached to the main frame, and engaging with the lower ring, J. The upper ring or mouth-clamp, K, is provided with a hook, *o*, for securing it, when closed, down or over the mouth end of the bag and ring J.

The operation is as follows: Supposing the platform C to be down in its lowest position, as shown in the drawings, and the bag-holder to be raised, as shown by dotted lines in Fig. 2, and held raised by the hook *n*, the operator,

taking hold of the frame I I of the bag-holder with the one hand, turns said holder a little backward, and with his other hand lifts the hook *n* to release it from the holder. He then
 5 turns the bag-holder down till its frame I I rests on the stops *m m*, and afterward throws the upper hinged ring or mouth-clamp, K, back from off the lower ring, J. He then slips the bag D inside of the lower ring, J, and,
 10 turning the marginal mouth portion of the bag over said ring, brings the upper ring, K, down upon and within said turned-over marginal mouth portion of the bag, and fastens it down by turning the hook *o* under the lower
 15 ring, J. The bag, being thus held open, is then filled, and afterward the hook *o* released, when the bag will readily slip out of the holder, and said holder is again thrown up and back, and held by the hook *n* out of the way of the
 20 operator and bag. The bag is now tied, and the windlass worked by the operator with his own hand applied to the crank of the gears until the bag reaches the required height, where it is held by the click-bolt H in its en-
 25 gagement with the rack. The bag is next removed from the platform, and the operator, applying his fingers to the click-bolt H, releases said bolt from the rack G, when the platform will descend ready for another lift.
 30 The click-bolt H, when drawn back or out, is retained in such released position by the automatic catch *i*, to prevent any interference with the rack during the descent of the platform.

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

1. The combination, with the platform C, the guiding uprights B B, and the lifting-rope

E, of the ratchet-rack G and an automatic click or click-bolt arranged to engage with said rack 40 to hold the platform, when raised, and an automatic catch operating to hold the click-bolt, when released, substantially as specified.

2. A bag holder and lifter comprising the raising and lowering platform C, the guiding 45 uprights B B, the swinging bag-holder frame I I, with its attached ring J, the upper ring or mouth-clamp, K, hinged to and fastening on or over the ring J, and a hook or fastening for retaining the bag-holding frame, with its at- 50 tached rings, when raised, out of the way of the bag on the platform, essentially as described.

3. A bag holder and lifter comprising a raising and lowering platform for carrying the 55 bag to be filled and raised, a pivoted or swinging bag-holder capable of being raised and lowered and of being opened and closed to hold the bag in an open position when being 60 filled, and to be released from the bag and swung out of the way after the bag has been filled, and a ratchet-rack and automatic click or click-bolt arranged to hold the platform, when raised, substantially as specified.

4. The combination, with the raising and 65 lowering platform C and the ratchet-rack G, of the spring click-bolt H, the automatic catch *i*, arranged to engage with said bolt to hold the bolt released from the rack, and the stop 70 *k*, for automatically releasing said catch from the bolt when the platform has completed its descent, essentially as described.

JOHN A. HAMSCH.

Witnesses:

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 LORIN ROBERTS.