C. B. HORTON.

Flour Sacker.

No. 87,934. Patented March 16, 1869.

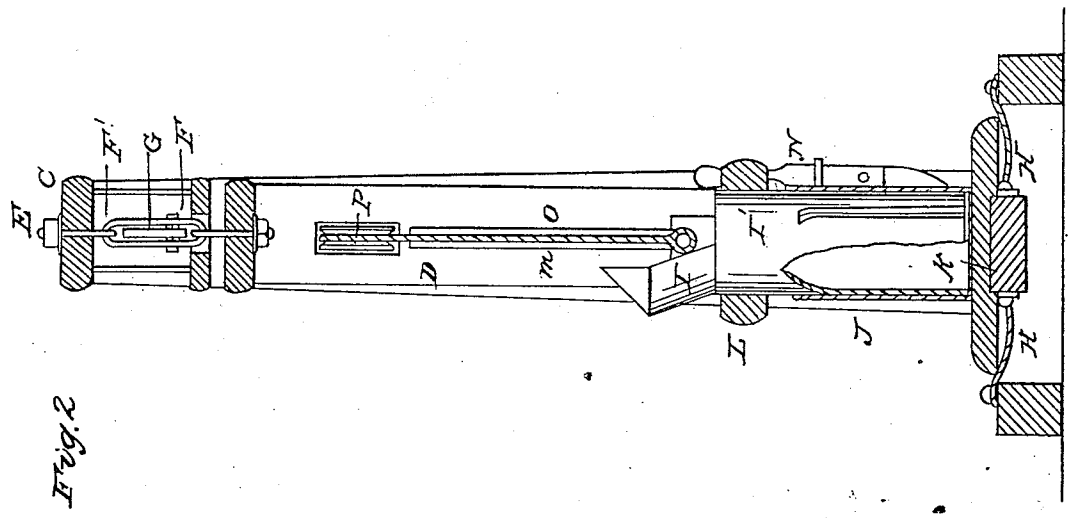

Fig. 2

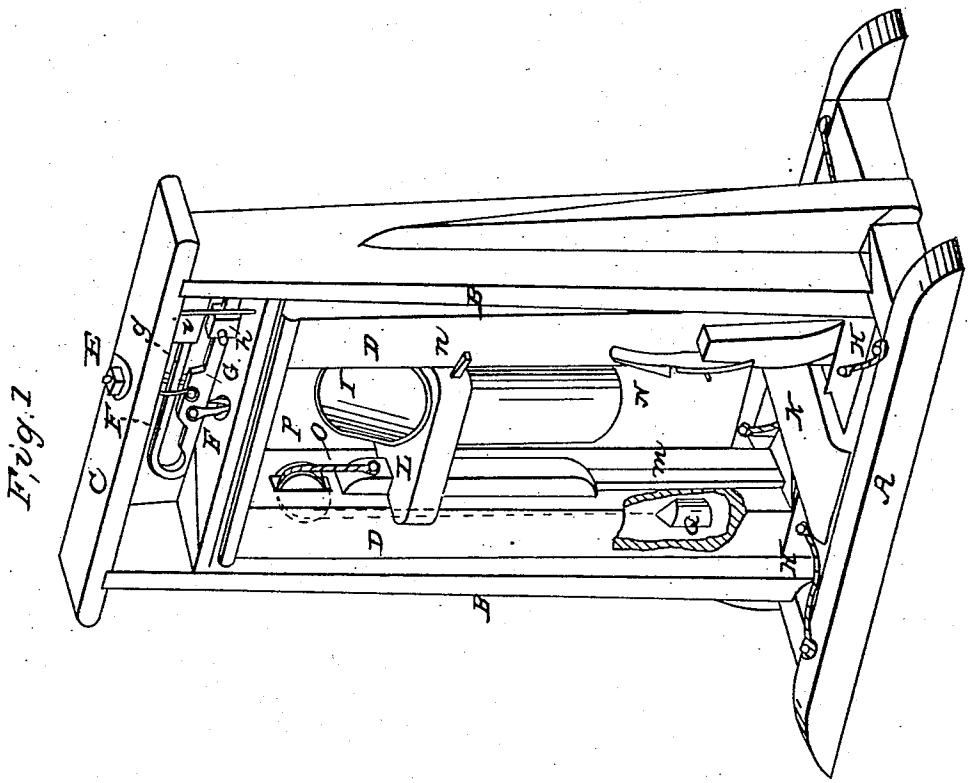

Fig. 1

Witnesses
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Inventor
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United States Patent Office.

CHACE B. HORTON, OF SAND BANK, NEW YORK.

Letters Patent No. 87,934, *dated March* 16, 1869.

IMPROVED FLOUR-SACKER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, CHACE B. HORTON, of Sand Bank, in the county of Oswego, and State of New York, have invented a new and useful Improvement in Flour-Sackers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a perspective view of the machine, and Figure 2, a vertical transverse section, exhibiting the funnel partly in elevation.

My machine is to facilitate the filling of flour-sacks and the weighing of sacks of flour.

It is especially intended for the paper sacks, or bags, in which flour is so extensively sold in fractional parts of a barrel.

A suitably-constructed tube, or funnel is mounted in a sliding counter-weighted gate, mounted in the vertical frame of a platform, which, together with its adjuncts, is balanced on a scale or weigh-beam, through the medium of which it is supported.

The bag, or sack is slipped upon the funnel when in its elevated position, and the funnel is then depressed, until the bag rests on the platform, and secured in that position by a suitable catch.

The flour is then fed in until the beam of the scale, at the desired weight, oscillates, when the funnel is released, and automatically elevated, for the reception of another sack, and the removal of the filled one, which remains on the platform, and is withdrawn by hand.

In the drawings—

A B C are the base, standards, and bridge-piece of the machine.

The frame D is to receive the flour-sack and its charge of flour, and is suspended loosely within the stationary frame, thus formed from the bolt E, by the intervention of the stirrups F F' and beam G.

Cords H, at the lower angles of the frame D, are intended to limit its lateral oscillation, but do not affect the operation of weighing.

The scale-beam has an upper arm, *g*, on which a weight, *i*, is adjusted, so as to balance the weight of the suspended frame, with its adjuncts.

The lower weight *h* is adjusted on the notched lower portion of the beam, according to the weight of flour desired—ninety-eight pounds, forty-nine pounds, or at any other point or proportion that may be required.

I represents the tube, or funnel, which is preferably of the form represented in fig. 2, and is mounted in a gate, L, adapted to slide vertically upon cleats *m*, on the inside faces of the upright bars of the frame D, being connected by cords O, passing over pulleys P, at the upper end of the frame D, and, at its inner face, to weights Q, encased within said vertical bars of the frame, and so proportioned as to overbalance the gate and funnel, and elevate them when not held down.

While the funnel is in its elevated position, represented in fig. 1, the bag J is slipped on it, and it is then pressed down until the bottom of the bag rests on the platform K of the frame D, a spring-catch, N, on one of the vertical bars of said frame, then engaging with a pin, *n*, on the gate, and retaining it in that position, as represented in fig. 2.

Being thus ready for filling, the flour is fed into the funnel until the scale-beam tilts, when the catch N is withdrawn, and the gate and funnel immediately elevated by the weights Q, leaving the filled sack standing on the platform K, from which it is withdrawn by hand, and settled and closed in the usual manner.

As the flour is fed in, the air escapes from the bag, by means of a slit, or slot, I', in the side of the funnel, and then between the funnel and the bag, so as to avoid the puffing up of the flour, caused by the resistance of air beneath.

The scale-beam and its adjuncts may be below the platform.

Having described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The tube, or funnel I, mounted in the vertically-sliding gate L, and raised automatically by the weights Q, or their equivalent, when released, substantially as and for the purpose described.

2. The combination of the frame D, weigh-beam G, sliding funnel L I, elevating-devices O P Q, and spring-catch N *n*, all arranged to operate substantially in the manner described, for the purpose specified.

3. The slot I', when employed in the vertically-sliding tube, or funnel I of a machine for sacking flour, as and for the purpose set forth.

CHACE B. HORTON.

Witnesses:

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