

UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN BAG-HOLDERS.

Specification forming part of Letters Patent No. 206,537, dated July 30, 1878; application filed May 31, 1878.

To all whom it may concern:

Be it known that I, EMILE CARTIER, of Nassandres, in the Republic of France, have invented certain new and useful Improvements in Apparatus for Filling Bags or Sacks, of which the following is a description, reference being had to the accompanying drawing, which forms part of this specification.

This invention consists in certain novel constructions and combinations of parts in an apparatus for filling bags or sacks, whereby increased facilities are afforded for filling a bag or sack by means of a shovel, and for holding the bag or sack in a filling position, and for detaching it when filled.

Referring to the accompanying drawing, Figure 1 represents a front elevation of a bag-filling apparatus constructed in accordance with my invention; Fig. 2, a vertical section of the same in a plane at right angles to Fig. 1, and Fig. 3 a side view of said apparatus.

The apparatus, which may be constructed wholly or mainly of metal, consists, in part, of a stand or frame, that may be in the form of a tripod, having legs A A and A¹. The two legs A A are rigidly secured together at their upper ends by a cross-bar, A², by means of screws or otherwise, and preferably stayed by means of braces B, which are riveted or bolted at their one end to the cross-bar A² and at their other end to the legs A A. These legs I prefer to construct of angle-iron, for the purpose of combining lightness with strength. The other leg, A¹, which may be also of angle-iron, has its upper end jointed at *b* to the cross-bar A², and, if considered necessary, it may be braced, when extended, by a hook or any other convenient means.

D is a cross shaft or rod arranged immediately above the cross-bar A², and parallel with it. This rod D is secured at its ends, by means of screws or otherwise, in the upper parts of the legs A A of the stand or frame, and serves as a means of attachment for the hopper E, or combined hopper E and upright hood F, with provision for the two latter to swing or turn on the rod D by eye rods or arms *cc*, connecting the hopper in a jointed, pivoted, or turning manner with said rod. Jointed or pivoted also, or connected in a free or turning manner, with the shaft or rod D is a bow or

open frame, G, which serves to support the mouth end or portion of the bag H to be filled.

Below the cross-bar A², and parallel with it, is a shaft, I, having its end bearings in or connected with the legs A A, and capable of turning therein. This shaft I is provided with two claws or toes, *d d*, which serve to pinch, at suitable distances apart, the mouth-end portion of the bag or sack against the under side of the bow or open frame G after the bag has been placed in a suspended position upon said bow or open frame. Attached to said shaft I, by means of a socket or otherwise, outside of one of the legs A, is a tooth, F, which, when the claws or toes *d d* are turned up to hold the bag H in suspended position, engages with a lever, J, to hold the toes *d d* raised; or said lever may have the tooth *f* attached to it, and engage with a projection on the shaft I.

The upright hood F of the hopper E is arranged at back of or to the rear side of the hopper when the latter is in position for filling, as shown by full lines in the drawing, and under which condition it occupies a position immediately above the bow or open frame G, the latter, in its turn, resting upon the cross-bar A².

It will be seen that this hood prevents the accidental throwing beyond the mouth of the bag of the substance with which said bag is to be filled, and, besides, relieves the persons using the shovel from the trouble of watching each shovelful, as the hood forms a shield and guide, which directs the substance in the proper course. Said hood is provided with flaring sides and top, and extends entirely over the mouth of the hopper.

When it is required to remove the filled bag the combined hopper and hood are turned over on the rod D to the position shown by dotted lines in Fig. 2.

If the hopper and hood be made of wood, it will be advisable to furnish the hopper with a metal facing-piece, that, when the hopper is adjusted into the position shown for it by dotted lines in Fig. 2, will strike the legs A¹ of the frame, and so protect the hood from injury.

To suspend the bag in position when it is required to fill the same, the mouth end of the bag is passed up within or through the bow or open frame G and said end or marginal portion folded over or around such frame, after

which the shaft I is turned to bring the toes *d d* up against the folded-over mouth end of the bag on one side of the open frame, and the opposite marginal portion of the mouth end of the bag is doubled completely around the back portion *i* of said open frame a distance or length of two fingers, more or less, the open frame being turned or adjusted on its supporting-shaft D, if necessary, to facilitate this attachment of the bag. The hold of the bag through the toes *d d* is secured by the engaging means hereinbefore described, consisting of the locking-lever J and tooth *f*. After the bag has been filled I turn over the combined hopper and hood E F into the position represented by dotted lines in Fig. 2, and, by freeing the engaging means J *f*, relieve the toes *d d* of their hold on the bag, which latter, having been filled, may then be removed.

In this way, or by these means, the bag or sack may be readily put and held in position for filling and be filled by a man with the shovel, and said bag, after it has been filled, be quickly

and easily removed or withdrawn. Furthermore, the apparatus is readily portable, so that it may be moved from place to place, as circumstances require.

I claim—

1. The hopper E, having the hood F, constructed with flaring sides and top, extending entirely over the mouth of the hopper, in combination with the supporting-stand and bag-holding devices, substantially as specified.

2. The combination of the rock-shaft I, mounted in suitable bearings, and provided with the clamping-toes *d d* and locking-tooth *f*, the swinging handle J, provided with a suitable shoulder for engaging said locking-tooth, and the bag-supporting bow, the whole being supported upon a suitable stand or frame, substantially as described.

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Witnesses:

LOZZO CH. ZORYA,
LOUIS GENÉ.