

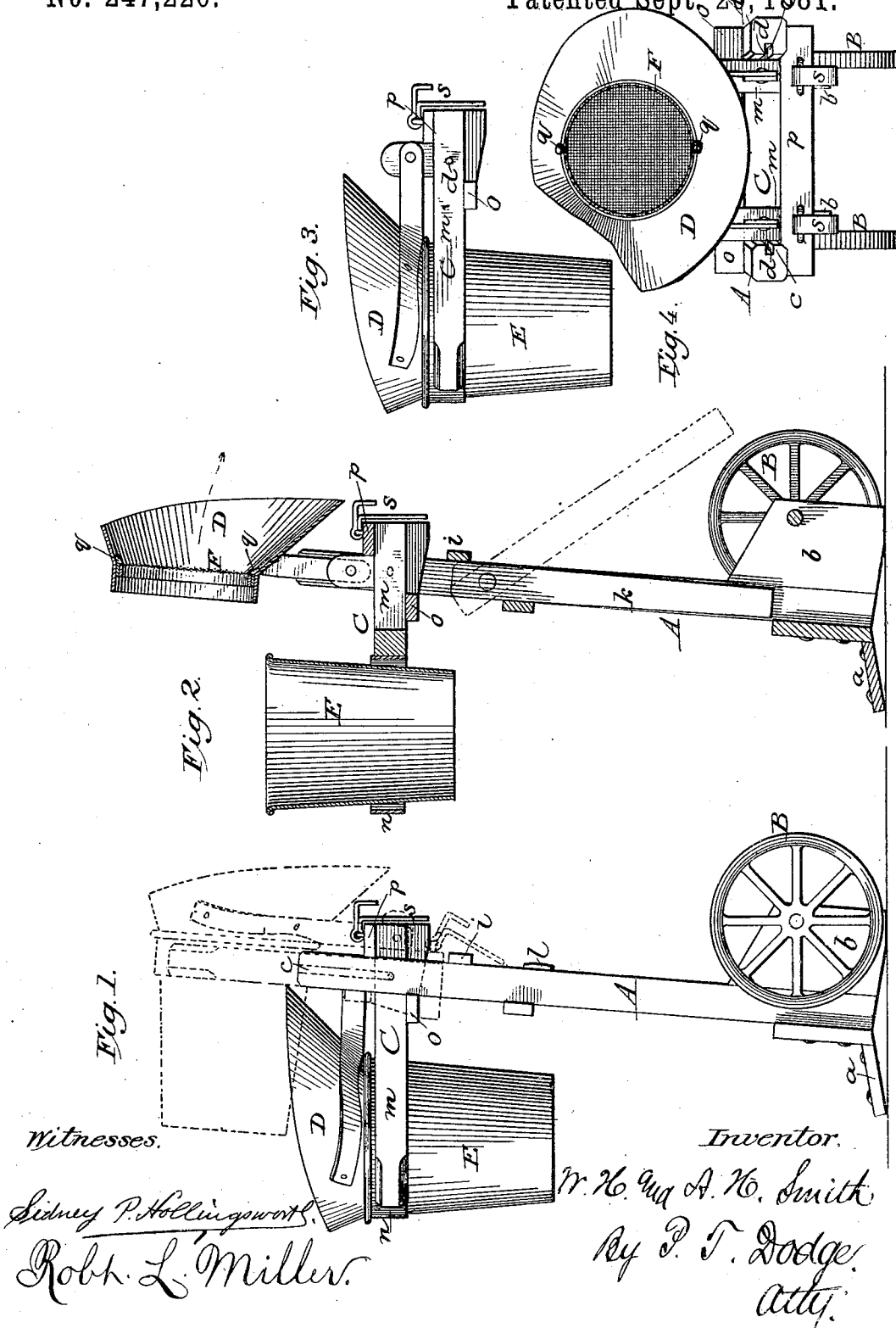
(No Model.)

W. H. & A. H. SMITH.

BAG HOLDER.

No. 247,220.

Patented Sept. 20, 1881.



UNITED STATES PATENT OFFICE.

WILLIAM H. SMITH AND ALDEN H. SMITH, OF PORTAGE, WISCONSIN.

BAG-HOLDER.

SPECIFICATION forming part of Letters Patent No. 247,220, dated September 20, 1881.

Application filed May 17, 1881. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM H. SMITH and ALDEN H. SMITH, citizens of the United States, residing at Portage, in the county of Columbia and State of Wisconsin, have invented certain new and useful Improvements in Bag-Holders; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters or figures of reference marked thereon, which form a part of this specification.

Our invention relates to an improved truck for use in filling and transporting bags and sacks; and it consists in various features hereinafter described, but more particularly in providing the sack-holder with a detachable cone or funnel for use in filling paper sacks; in hooked arms jointed to the bag-holder for attaching the same to the edge of a bin or other support, and in minor details.

Referring to the accompanying drawings, Figure 1 represents a side elevation of our truck and bag-holder in an operative position; Fig. 2, a vertical central section of the same with the bag-fastening and screen-supporting funnel thrown upward; Fig. 3, a side elevation of the bag-holding device detached from the truck; Fig. 4, a top-plan view of the entire apparatus with the parts in the position represented in Fig. 1.

A represents a truck, consisting, essentially, of two side bars or handles connected by means of a cross-bar, *i*, and sustained at their lower edges by means of two side wheels, B. The wheels are mounted on opposite ends of a transverse shaft seated in blocks *b*, secured to the lower ends of the side bars. The side bars are also provided at the lower end with an upwardly-extending flange or board, *a*, and the construction of the parts is such that when the truck is turned to an upright position it will be sustained firmly upon the board *a* and blocks *b*, in the manner represented in Figs. 1 and 2, with the wheels B clear of the floor. This arrangement of parts to secure the elevation of the wheels above

the floor is of importance, in that it gives the machine a much firmer support than it would otherwise have, and avoids the danger which exists in ordinary bag-filling trucks of the machine being thrown downward accidentally. The side bars of the truck are provided, as usual in this class of apparatus, with pivoted sustaining-legs *k*, by which the machine may be supported in a substantially horizontal position when being loaded as a truck. Buttons *l* are applied to the frame to lock the legs in the frame, when desired.

For the purpose of sustaining the bags or sacks while being filled, we provide the truck at its upper end with a detachable frame, C, such as shown in the drawings. This frame consists, essentially, of two side bars, *m*, supporting at their forward ends a ring or band, *n*, and provided at their rear ends with two cross-bars, *o* and *p*, with extended ends and projecting pins *d*, as represented in all the figures. The frame C is connected to and sustained upon the truck by means of the pins *d*, which are inserted into vertical slots *c*, formed in the side bars of the truck, as represented in Figs. 1 and 4, the bars bearing against the front and rear sides of the truck-frame, and thereby maintaining the frame C in a horizontal position. This method of attaching the frame C to the truck admits of the frame being lifted at will, in order to raise the mouth of the sack and settle the grain down therein. It also admits of the frame C being readily removed from the truck at will.

The ring *n* is designed to sustain the mouth of the bag to be filled, and in order to secure the bag therein a hopper, D, having a circular mouth, is connected by hinged arms to the frame C, and arranged to close down snugly within the bag-sustaining ring *n*, as shown in Figs. 1 and 3. While this arrangement is all that is necessary for filling woven bags, additional means of support are required when paper sacks are to be filled. We therefore provide the machine with a long detachable funnel or tube, E, having a flanged upper end, by which it may be sustained within the ring *n*, as shown in Figs. 1 and 3. In Fig. 2 this funnel is shown partially removed.

For the purpose of screening the grain as it is delivered to the bag, and removing all coarse impurities and foreign matters, the hopper D is provided with a detachable screen, 5 F, the screen being provided with annular rim or frame, which is seated snugly within the mouth of the hopper, and retained in place by means of lips *g* on the inside of the funnel, as clearly shown in Fig. 2. The screen, being 10 forced downward, springs past the lips *g*, and is retained firmly in place thereby, or may be removed by a strong upward pressure, when desired.

The arms by which the hopper D is sustained are arranged to permit the hopper to 15 be thrown upward and backward past a perpendicular position, in order to discharge the foreign matters from the screen, and it is in this connection that the screen-holding lips 20 are of importance.

In order to adapt the bag-holding device for attachment to the edge of grain-bins or to other suitable supports, when required, the frame C is provided at the rear end with two 25 hooked arms, *s*, hinged thereto, as clearly represented in the drawings. These arms, being engaged over the upper edge of a bin or a horizontal bar, will sustain the frame C in an operative position, and will at the same time 30 admit of the frame being raised as required to settle the grain down in the bag.

When the frame C is removed from the truck the latter may be used in the same manner as an ordinary truck for the transportation of sacks or other bodies. 35

We do not claim herein a hinged bar attached to the rear end of the bag-holding frame, nor do we claim hooks rigidly secured thereto, both of said devices having been used 40 in a machine hitherto patented to W. H. Smith. We are not aware, however, that any one has hitherto hinged sustaining-hooks to the bag-holding frame in such manner that the frame could be instantly applied to and removed 45 from the edge of a bin, and that when attached it could be turned upward.

Having thus described our invention, what we claim is—

1. In combination with the detachable bag-holding frame C, hooked sustaining-arms 50 hinged to the rear edge of the frame, as described and shown, whereby the frame may be instantly attached to or removed from the edge of the bin and swung upward when attached for settling the grain in the bag. 55

2. In combination with the bag-sustaining ring *n* and the movable hopper co-operating therewith, the detachable funnel or extension tube E, for supporting paper sacks.

3. The combination of the ring *n*, hopper 60 D, and removable tube E, having the flanged mouth.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM H. SMITH.
ALDEN HYLER SMITH.

Witnesses:

N. J. CURRIER,
ALX. CARNAGIE, Jr.