(No Model.)

G. T. HEDRICK.

Grain Bag Nozzle and Stopper.

No. 235,237. Patented Dec. 7, 1880.

Fig. 1.

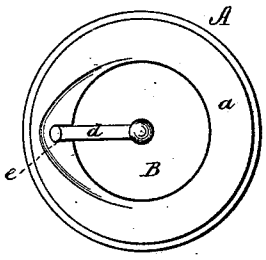


Fig. 2.

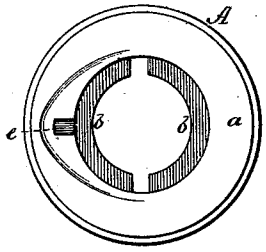


Fig. 3.

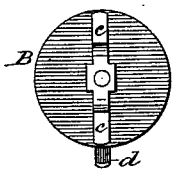


Fig. 4.

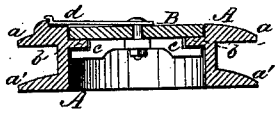


Fig. 5.

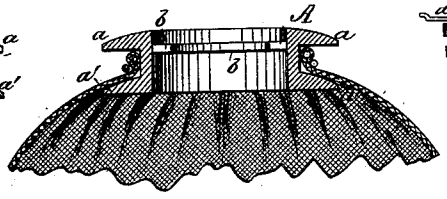


Fig. 6.

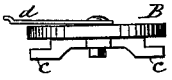
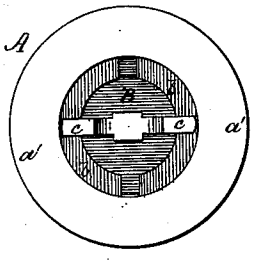


Fig. 7.



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UNITED STATES PATENT OFFICE.

GEORGE T. HEDRICK, OF WEAVERTON, KENTUCKY, ASSIGNOR TO HIMSELF AND JOHN T. BOHON, OF SAME PLACE.

GRAIN-BAG NOZZLE AND STOPPER.

SPECIFICATION forming part of Letters Patent No. 235,237, dated December 7, 1880.

Application filed March 8, 1880. (No model.)

To all whom it may concern:

Be it known that I, GEORGE T. HEDRICK, of Weaverton, in the county of Wayne and State of Kentucky, have invented a new and Improved Nozzle and Stopper for Grain-Sacks; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention is a device adapted for attachment to the mouth of a grain-bag to close the same or to serve as a nozzle, as required.

The invention relates to the relative construction of the two parts of the device, as hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a top-plan view of the device complete. Fig. 2 is a like view of the flanged annulus. Fig. 3 is a plan view of the detachable disk or cover inserted. Fig. 4 is a cross-section of Fig. 1. Fig. 5 is a like section of Fig. 2, showing the annulus attached to a bag. Fig. 6 is an edge view of the disk or cover, and Fig. 7 is a bottom-plan view of the device or complete stopper.

The annulus A is provided with two lateral flanges, *a a'*, and the mouth of the bag is attached to it by a draw-string, which is tied firmly in the groove between said flanges, Fig. 5, or it may be riveted to the lower flange, *a'*, if a permanent connection is desired. The annulus is also provided with an internal flange, *b*, having notches on opposite sides.

The disk or plate B, which closes the aperture of the annulus A, rests on said inner flange, and is secured in place by catches *c* and spring-lock *d*, Figs. 1 and 4.

The catches *c* are attached to the under side of the disk B, and the spring lock or catch *d* to the upper side thereof.

In applying the disk or stopper B to the annulus A the former is so placed that its catches *c* will pass through the notches in the flange *b*. The disk is then rotated one-quarter round, so that the catches pass under the flanges *b*, Fig. 4, and the spring enters the notch or socket *e* in the annulus, thus locking the parts together, so that the contents of the bag cannot escape.

To remove the stopper B the free end of the spring *d* is raised out of the notch *e* and the former turned a quarter round, when the catches will coincide with the notches and allow the desired detachment.

The annulus and stopper may be constructed of any suitable kind of metal. The annulus is preferably constructed in one piece for sake of strength, durability, and cheapness; but one or both flanges may be united to the tubular portion by means of a screw-joint, so as to admit of convenient separation. I may also substitute a clamp-screw or other fastening in place of the spring *d*, although I prefer the latter as being automatic in its operation when the stopper is being attached.

My improved device enables a bag to receive a larger quantity of grain or other material than if tied in the usual way, and expedites the operation of filling and closing it. For filling, a funnel or tapered spout is employed.

I do not claim, broadly, a flanged nozzle for a grain or other bag; and I am also aware that a fruit-can has been provided with an annular top having cams and internal interrupted flanges, and a disk for closing the opening in the same, having catches or lugs to engage said cams and thus secure the disk in place.

Having thus fully described my invention, what I claim is—

The disk B, having the spring-catch *d* attached to and projecting laterally from its upper side, and the fixed catches *c* on its under side, in combination with the annulus A, having the recess in its upper side to receive said spring-catch, and the internal interrupted flanges, and external groove to receive the mouth of the grain-bag, as shown and described.

GEORGE THOMAS HEDRICK.

Witnesses:

JOSHUA BERRY,

J. W. CASTILLO.