UNITED STATES PATENT OFFICE.

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MAGAZINE BEAN-SHOOTER.


Application filed February 18, 1899. Serial No. 706,038. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. HERVEY, a citizen of the United States of America, residing at Homestead, in the county of Allegheny, and State of Pennsylvania, have invented certain new and useful improvements in Magazine Bean-Shooters, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to certain new and useful improvements in magazine bean-shooters. The object of my invention is to construct a bean-shooter of this character, whereby the beans will be fed automatically to the bean-tube.

A further object of my invention is to construct a bean-shooter of this character with a stop to arrest the movement of the bean and prevent the same from entering the mouth of the operator.

A further object of my invention is to construct a bean-shooter of this character with means to prevent the dislodgment of the magazine carrying the bean when the tube is elevated.

My invention finally consists in the novel combination and arrangement of parts hereinafter more fully described, and particularly pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, wherein like numerals of reference indicate corresponding parts throughout the several views thereof, and in which—

Figure 1 is a perspective view of my improved bean-shooter. Fig. 2 is a perspective view of the shooter with the magazine removed. Fig. 3 is a longitudinal sectional view of the magazine. Fig. 4 is a perspective view of the carriage for the magazine. Fig. 5 is an inverted perspective view of the magazine. Fig. 6 is a perspective view of the operating means for the magazine. Fig. 7 is a cross-sectional view of my improved bean-shooter.

Referring to the drawings by reference-numerals, 1 indicates a bean-tube, which may be of any desirable length and which is provided with a stop 2, arranged in the end thereof, which is inserted in the mouth to prevent the bean from leaving the tube when blowing.

Suitably connected to the bean-tube on its upper face by any suitable means, as at 3, is an elongated strip of material which I term the "magazine-carriage" 4, having the edges bent upon themselves, as at 5, forming guides. This carriage is provided with a discharge-opening 6 and a pair of friction clutches or springs 7, which press against the bottom of the magazine and secure the same in the guides 5.

The magazine consists of an oblong casing 9, divided by partitions 10 into a series of bean-holding cells 11. The magazine at its bottom is provided with an outwardly-extending flange 12 on each side thereof, which is inserted between the turned-over edges of the carriage, or which is inserted between the guide 5 and the bottom of the carriage. This securely holds the same, in connection with the friction clutches or springs, in position.

Mounted on the bean-tube between the carriage and the tube, at the center thereof, is the operating means for the magazine, which consists of a small cylindrical tube 13, having a feed-opening 14, arranged in the upper portion thereof, and an extending arm 15, which is bent upon itself, as at 15, forming a clutch for operating the magazine. The tube 13 is provided with a downwardly-extending handle 16 to allow of its operation.

16 indicates a stop mounted on the periphery of the bean-tube to arrest the movement of the operating means for the magazine when it is desired to feed a bean to the bean-tube. 17 indicates the beams or balls, shot, or other equivalent thereto, which are placed within the bean-cells.

The operation of my improved bean-shooter is as follows: Assuming all parts to be in position, as shown in Figs. 1 and 3, the magazine having been loaded by inverting the same and placing it in the inverted position, the feeding-ports 6 and 14 are closed when the tube 13 is in the position shown in full lines, Fig. 3, and as this tube is moved forward by its operating-handle 16′ (to the position shown in dotted lines, Fig. 3) the clutch 16, coming in contact with one of the partitions 10, moves the magazine forward, bringing the feed-opening 14 into registering engagement with the feed-opening in the tube 1 and permitting the bean or other object in the cell or compartment over the said openings to drop into
the tube. The tube 13 is then preferably moved back to its original position, (that shown in full lines, Fig. 3,) so as to close the feeding-ports and prevent the passage of the air therethrough when expelling the bean. This operation is continued until all the cells or compartments in the magazine have been emptied, when the magazine is removed from the carriage, inverted and filled, and again placed in position.

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

1. In combination, a bean-tube, an elongated strip of material suitably connected thereto and forming a carriage, guides arranged on each side of said carriage, a magazine mounted in said guides, friction clutches or springs formed integral with said carriage and engaging the magazine to hold the same normally against movement, and means for operating the said magazine, substantially as described.

2. In combination, a bean-tube, a carriage suitably connected thereto, guides arranged on each side of said carriage, a magazine mounted in said guides and having a series of independent cells or compartments, said carriage being provided with a discharge-opening, and means connected to said bean-tube and engaging the carriage for operating the latter to bring one of said cells into registering engagement with the discharge-opening in the carriage to allow the feeding of the bean or other object to the bean-tube, substantially as described.

3. In a magazine bean-shooter a bean-tube, a carriage suitably secured thereto, a magazine connected to the said carriage, a cylindrical tube surrounding the said bean-tube, a clutch carried by the said tube for operating the said magazine, and a handle carried by the said tube to allow of its operating, substantially as set forth.

4. In a device of the character described a bean-tube, a stop arranged in one end thereof to arrest the movement of the bean or other object, a carriage suitably secured to the said tube, a magazine operating in the said carriage, said magazine provided with a series of cells adapted to receive the beans or other objects, the said carriage provided with a discharge-opening, a cylindrical tube surrounding the said bean-tube provided with a feed-opening adapted to register with the said discharge-opening of the carriage, and means formed integral with the said tube when operated to operate the said magazine to discharge the bean or other object through the said bean-tube, substantially as set forth.

5. In combination a bean-tube having a suitable inlet for the bean or other object, a carriage suitably secured to the said tube, a magazine operating on the said carriage, and means for operating the said magazine to feed the beans or other objects to the said tube and seal the inlet-opening in the tube after the objects have been fed thereto, substantially as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

WILLIAM M. HERVEY.

Witnesses:

JOHN NOLAND,
E. W. ARTHUR.