

Feb. 5, 1952

W. O. POOLE

2,584,497

BAG FILLER HAVING AN ADJUSTABLY MOUNTED PIVOT FOR
BAG ENGAGING PLATE MEMBER

Filed Aug. 7, 1950

2 SHEETS—SHEET 1

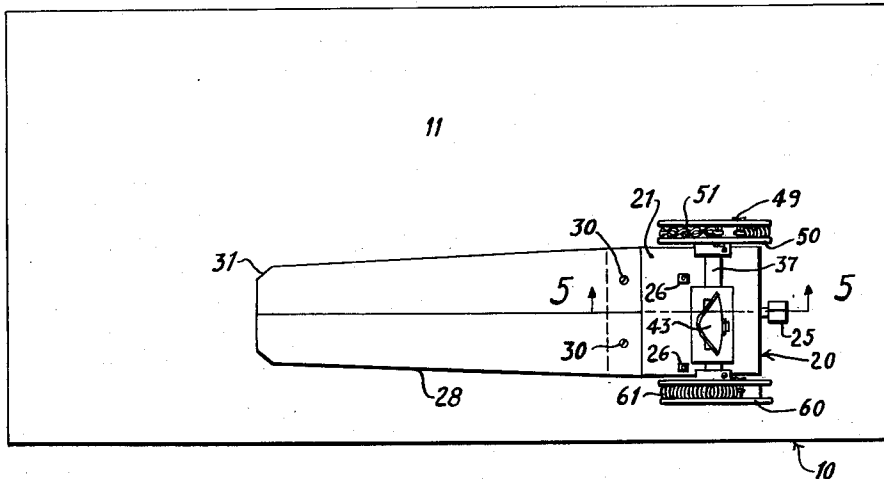


FIG- 2

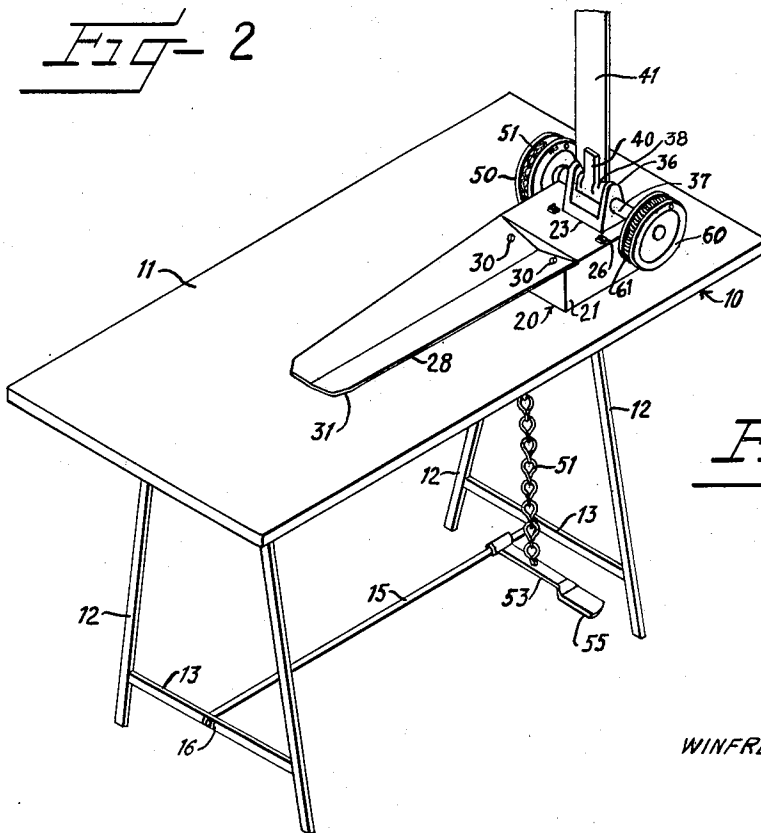


FIG- 1

WINFRED O. POOLE,
INVENTOR.

BY

Eaton & Bell

ATTORNEYS

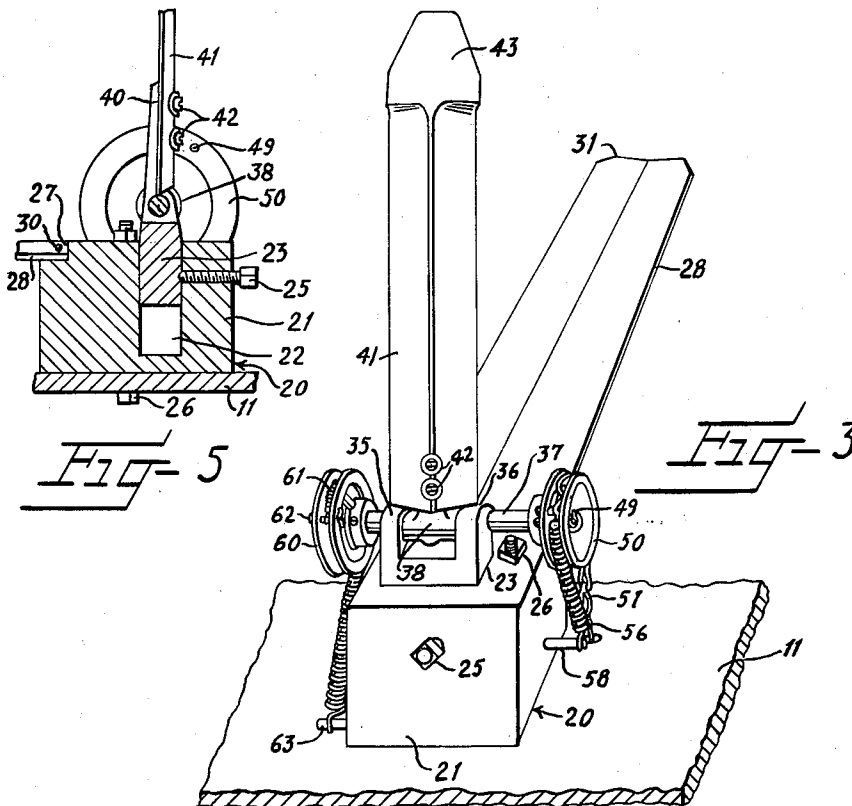
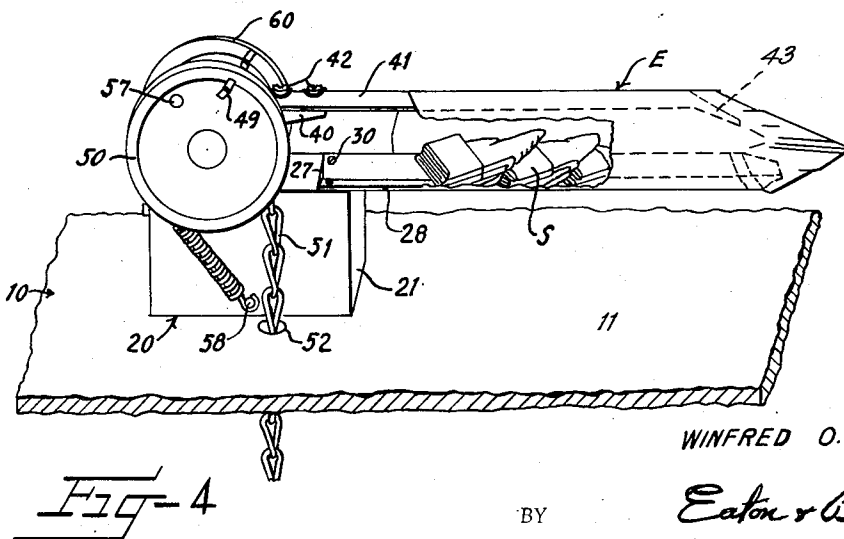
Feb. 5, 1952

W. O. POOLE
BAG FILLER HAVING AN ADJUSTABLY MOUNTED PIVOT FOR
BAG ENGAGING PLATE MEMBER

2,584,497

Filed Aug. 7, 1950

2 SHEETS—SHEET 2



INVENTOR:

WINFRED O. POOLE .

BY

Eaton & Bell

ATTORNEYS

UNITED STATES PATENT OFFICE

2,584,497

BAG FILLER HAVING AN ADJUSTABLY
MOUNTED PIVOT FOR BAG ENGAGING
PLATE MEMBERSWinfred O. Poole, Thomasville, N. C., assignor
of fifty per cent to Wilbur H. Scales, High
Point, N. C.

Application August 7, 1950, Serial No. 178,117

4 Claims. (Cl. 226—18)

1

This invention relates to a device for filling containers such as bags, envelopes and the like and more especially to a bagging machine to facilitate the insertion of a plurality of articles into a bag, envelope and the like.

It is an object of this invention to provide a device for filling bags, envelopes and the like wherein a plurality of articles may be compressed by said device and the envelope or bag may be placed around said articles in compressed state and then remove from the device with the articles therein.

It is another object of this invention to provide a device having a lower trough member adapted to receive a plurality of articles and having an upper trough member pivotally mounted on said device and adapted to be moved to parallel relation with said lower trough member and means for moving said upper trough member into parallel relation with said lower trough member and counter-balancing means automatically moving said upper trough member out of said parallel relation with said lower trough member upon release of said first-named means whereby a plurality of articles such as socks or the like may be placed on the lower trough member and the upper trough member may be moved by an operator into parallel relation with the lower trough member, to compress said articles if so desired, and an envelope or bag may be positioned about both of said trough members and encircling the articles on the lower trough member and the bag or envelope may then be gripped by an operator and moved manually from the trough member simultaneously moving the goods therewith so that the goods will be on the inside of the bag.

This invention is particularly adapted to be used in hosiery mills and the like where a plurality of stockings must be inserted in small bags or envelopes and it is therefore another object of this invention to provide a device of the type described having a foot controlled lever for actuating movement of the upper trough member to permit an operator to use this device and have both hands free for handling the stockings and the like and placing the envelopes over the trough members and removing the envelopes with the stockings therein for maximum efficiency of operation.

Some of the objects of the invention having been stated, other objects will appear as the description proceeds, when taken in connection with the accompanying drawings, in which—

Figure 1 is an isometric view of the device with

2

a portion of the upper trough member broken away;

Figure 2 is a top plan view of the device showing the upper trough member in vertical position;

Figure 3 is an isometric view looking at the opposite end thereof from that shown in Figure 1 and omitting portions of the support table;

Figure 4 is an isometric view looking at the side of the device with the top trough member in partially closed or horizontal position and omitting a portion of the table support;

Figure 5 is a vertical-sectional view through the base of the device and taken substantially along the line 5—5 in Figure 2.

Referring more specifically to the drawings, the numeral 10 designates a support member illustrated in the form of a table having a planar top 11 and a plurality of legs 12 suitably secured thereto in any desired manner and provided with transverse braces 13 having their opposed ends secured to the adjacent legs 12 and a lower support rod 15 extends between the transverse support members 13 and has its opposed ends secured to the medial portions thereof as by bolts 16.

A bagging device broadly designated at 20 is suitably secured to the upper surface of the planar top 11 of the support 10 in any desired manner, as by bolts 26 it being understood that the support member 10 is shown for purposes of illustration only and that the bagging device 20 may be associated with any suitable table or other support. The bagging device 20 comprises a base member 21 which is preferably cubical in shape and may be of solid or hollow construction and is provided with a cavity 22 in which a bearing block 23 is slidably mounted. A set screw 25 penetrates a suitably threaded bore in the base 21 and bears against one surface of the bearing block 23 to hold the bearing block 23 in desired vertical position, vertical adjustment being had by loosening the set screw 25.

The upper surface of the base member 21 is cut away as at 27 to form a trough which is preferably convex or V-shaped and into which one end of a plate forming a lower or first trough member 28 is secured as by screws 30, the trough member 28 preferably being rectangular in plan and convex or V-shaped in cross-section and having its free end portions cut away or rounded as at 31. The lower trough member 28 is adapted to receive a plurality of articles such as stockings to be inserted into bags or envelopes.

The bearing block 23 has two spaced bearing portions 35 and 36 extending upwardly therefrom

3

and a shaft 37 is rotatably mounted therein and extends on each side thereof. A boss 38 is fixedly mounted on the shaft 37 between the bearings 35 and 36 and the boss 38 has an arm 40 extending outwardly therefrom to which a plate forming an upper or second trough member 41 is fixedly secured as by screws 42. The upper trough member 41 is also preferably rectangular in plan and concave or of an inverted V-shape in cross-section and is also provided with a tip portion 43 which has rounded or cut away edges and which is bent downwardly as may be observed in Figures 2 and 4. The upper trough member 41 is preferably of a slightly smaller dimension than the lower trough member 28.

It will thus be seen that the upper trough member 41 is secured in fixed relation to the shaft 37 so that partial rotation of the shaft 37 will cause the upper trough member 41 to move into vertical position or from a vertical position to a horizontal position in substantially parallel relation to the lower trough member 28.

Now, in order to effect this movement, there is provided a sheave 50 fixedly secured to one end of the shaft 37 and a line such as a chain 51 has one end thereof fixedly secured to said sheave 50, as by a cotter pin 49, and the line 51 extends through an opening 52 in the support top 11 and has the lower end thereof suitably connected to a foot lever 53 oscillatably mounted on the rod 15 and having a pedal portion 55. It is thus seen that moving the pedal portion 55 of the foot lever 53 downwardly the line 51 will move downwardly causing the sheave 50 to rotate in a clockwise direction in Figures 3 and 4, causing the trough member 41 to be moved from a vertical position to a horizontal position substantially parallel to the trough member 28. In order to give a more positive control to this movement and to cause the trough member 41 to automatically return to vertical position upon pressure being released from the foot pedal 55, there is provided a tension spring 56 having one end thereof suitably connected to the sheave 50 as by a pin 57 and the spring 56 extends around the opposite side of the sheave 50 from the line 51 and has one other end thereof suitably connected to a spring anchor 58 fixed in the base 21 of the bagging device 20. The spring 56 will urge the sheave 50 in a counter-clockwise direction in Figures 3 and 4 to cause the upper trough member 41 to be returned to a vertical position upon the foot pedal 55 being released.

A second sheave 60 is fixedly mounted on the opposed end of the shaft 37 and has one end of a tension spring 61 suitably secured thereto, as by a cotter pin 62, and the tension spring 61 extends around the sheave 60 in a counter-clockwise direction in Figure 3 or in a direction opposite to the direction the spring 56 extends around the sheave 60 and the lower end of the spring 61 is suitably connected to a spring anchor 63 fixedly mounted in the base 21 of the bagging device 20. The tension spring 61 is provided to offer resistance against the tension spring 56 to permit the trough member 41 to be raised only to a vertical position by the tension of the spring 56 and to prevent the trough member from moving more than approximately 90 degrees, or beyond vertical position. The use of the two contacting springs 61 and 56 give a stability of control to movement of the upper trough member 41.

It will thus be observed that there is provided a device wherein a plurality of articles such as stockings S may be placed on the lower trough

4

member 28 and the upper trough member 41 may be moved to substantially parallel relation to the lower trough member 28 by means of an operator depressing the foot pedal 55 and an envelope or bag indicated at E may be placed around said trough members with the trough members 41 and 28 extending into the envelope E and an operator may then grasp the sides of the envelope E and the stockings S and pull the same away from the base 21 so that they will simultaneously be removed from the trough members 28 and 41 and the stockings S will thus be inserted into the envelope E.

The vertically adjustable bearing block 23 is provided to permit the bearing block 23 and associated parts to be adjusted vertically so that, if desired, the upper trough member may be moved into very close parallel relation with the lower trough member 28 to thus compress the articles such as stockings disposed on the lower trough member 28 to permit the same to be inserted in a relatively small or tight envelope or bag and also permitting this device to be used to insert a single article or to insert a plurality of articles by varying the vertical height of the bearing block 23 so that any number of articles or articles of different sizes may be accommodated between the lower trough member 28 and the upper trough member 41. The trough members 28 and 41 also serve to hold the bag or envelope in open position.

In the drawings and specification, there has been set forth a preferred embodiment of the invention and although specific terms are employed, they are used in a descriptive and generic sense only, and not for purposes of limitation, the scope of the invention being defined in the claims.

I claim:

1. A device for bagging articles comprising a support, a base member secured to said support, a bearing block slidably and adjustably mounted in said base member, a shaft rotatably mounted in said bearing block, said base member having a first plate fixedly secured thereto, said shaft having a second plate fixedly secured thereto, means for rotating said shaft to position said second plate in parallel relation to said first plate or to raise the second plate to vertical or perpendicular position, whereby articles may be placed on said first plate and the second plate moved to a position parallel to the first plate and an envelope may be disposed about the said parallel plates and surrounding said articles disposed on said first plate to permit the envelope to be slidably removed therefrom with the articles therein.

2. A device for bagging articles comprising a support, a base member secured to said support, a bearing block slidably and adjustably mounted in said base member, a shaft rotatably mounted in said bearing block, said base member having a first plate fixedly secured thereto, said shaft having a second plate fixedly secured thereto, means for rotating said shaft to position said second plate in parallel relation to said first plate or to move the second plate to a position disposed at a right angle to the first plate, whereby articles may be placed on said first plate and the second plate moved to a position parallel to the first plate and a bag may be disposed about the said parallel plates and surrounding the articles disposed between the plates to permit the bag to be removed from the plates with the articles therein, and means for automatically moving said second plate out of parallel relation

5

with said first plate upon release of the means for rotating said shaft.

3. A foot operated device for filling bags comprising a support member, a base carried by said support member, said base having a vertically movable bearing block therein, a shaft rotatably mounted in said bearing block, first and second plate members, said first plate member being secured to and extending from said base and said second plate member being secured to and extending from said shaft, said shaft extending from said bearing block and having a first sheave on one end thereof, said sheave having first spring means secured thereto for normally urging said shaft in a direction to cause the second plate member associated therewith to be urged away from the first plate member, a foot lever pivotally mounted on said support, a line secured to said sheave and extending through said support and being connected at its lower end to said foot lever, whereby actuation of said foot lever will cause said shaft to partially rotate to position the second plate member in substantially parallel relation to said first plate member, a second sheave having second spring means secured thereto for urging the shaft to rotate in a direction opposite to the direction urged by the first spring means.

4. A foot operated device for filling bags comprising a support member, a base carried by said support member, said base having a vertically movable bearing block therein, a shaft rotatably mounted in said bearing block, first and second plate members, said first plate member being secured to and extending from said base and said second plate member being secured to and extending from said shaft, said shaft extending on each side of said bearing block and having a

6

first sheave on one end thereof, said sheave having spring means secured thereto for normally urging said shaft in a direction to cause the second plate member associated therewith to be urged away from the first plate member, a foot lever pivotally mounted on said support, a line secured to said sheave and extending through said support and connected at its lower end to said foot lever, whereby actuation of said foot lever will cause said shaft to partially rotate to position the second plate member in substantially parallel relation to said first plate member, and said shaft having a second sheave on the opposed end thereof, spring means connected to said second sheave and acting in a direction opposite to said first-named spring means to cause said shaft to be positioned with the second trough member in a vertical position upon release of said foot lever.

WINFRED O. POOLE.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
192,301	Spencer	June 19, 1877
614,246	Gilbert	Nov. 15, 1898
2,192,982	Meendsen	Mar. 12, 1940
2,317,292	Nash	Apr. 20, 1943
2,393,102	Gribner	Jan. 15, 1946
2,402,869	Buchanan et al.	June 25, 1946

FOREIGN PATENTS

Number	Country	Date
675,952	Germany	May 22, 1939