No. 644,088. Patented Feb. 27, 1900.

C. MORGAN.

CORK PULLER.

(Application filed July 29, 1899.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

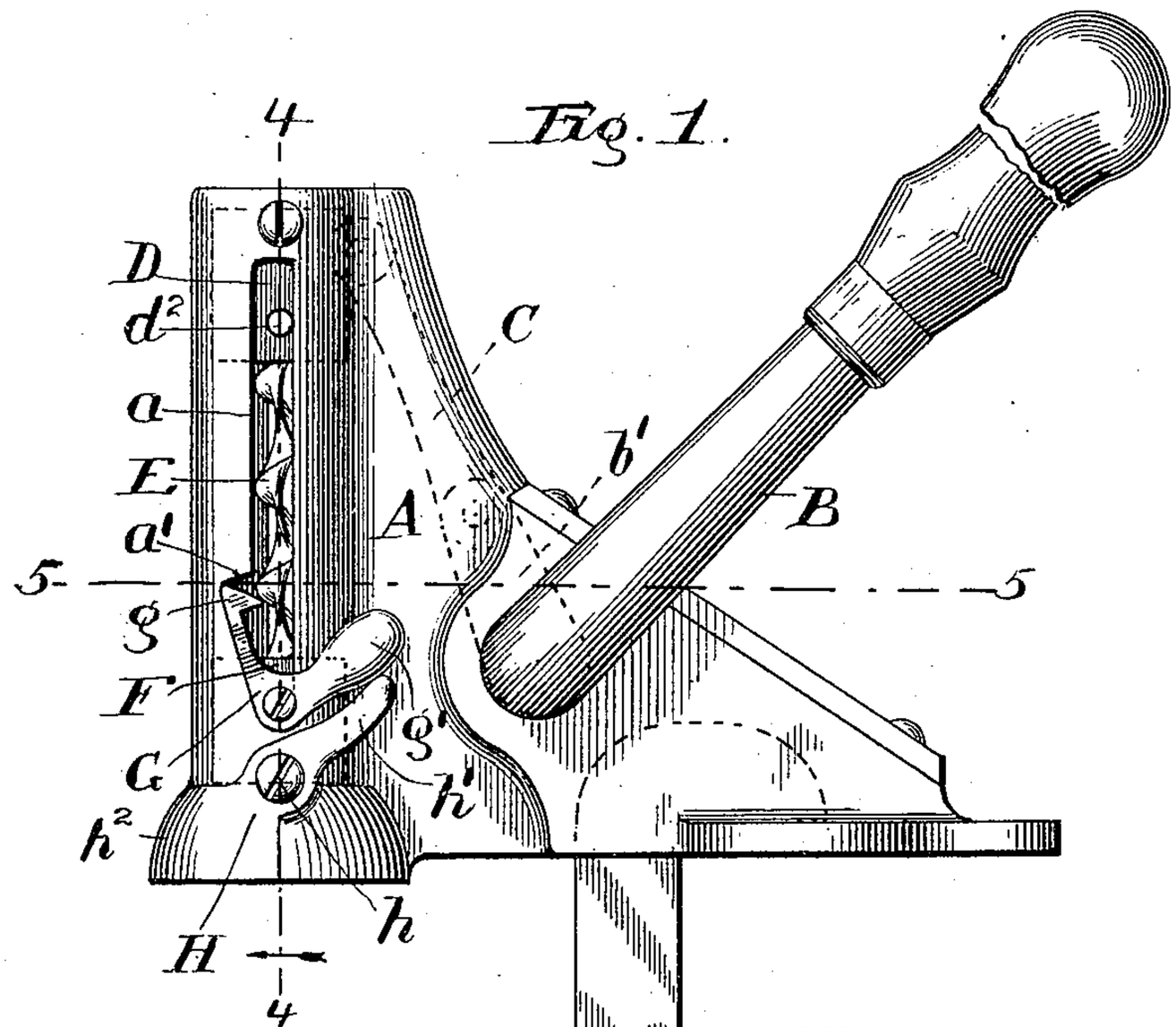
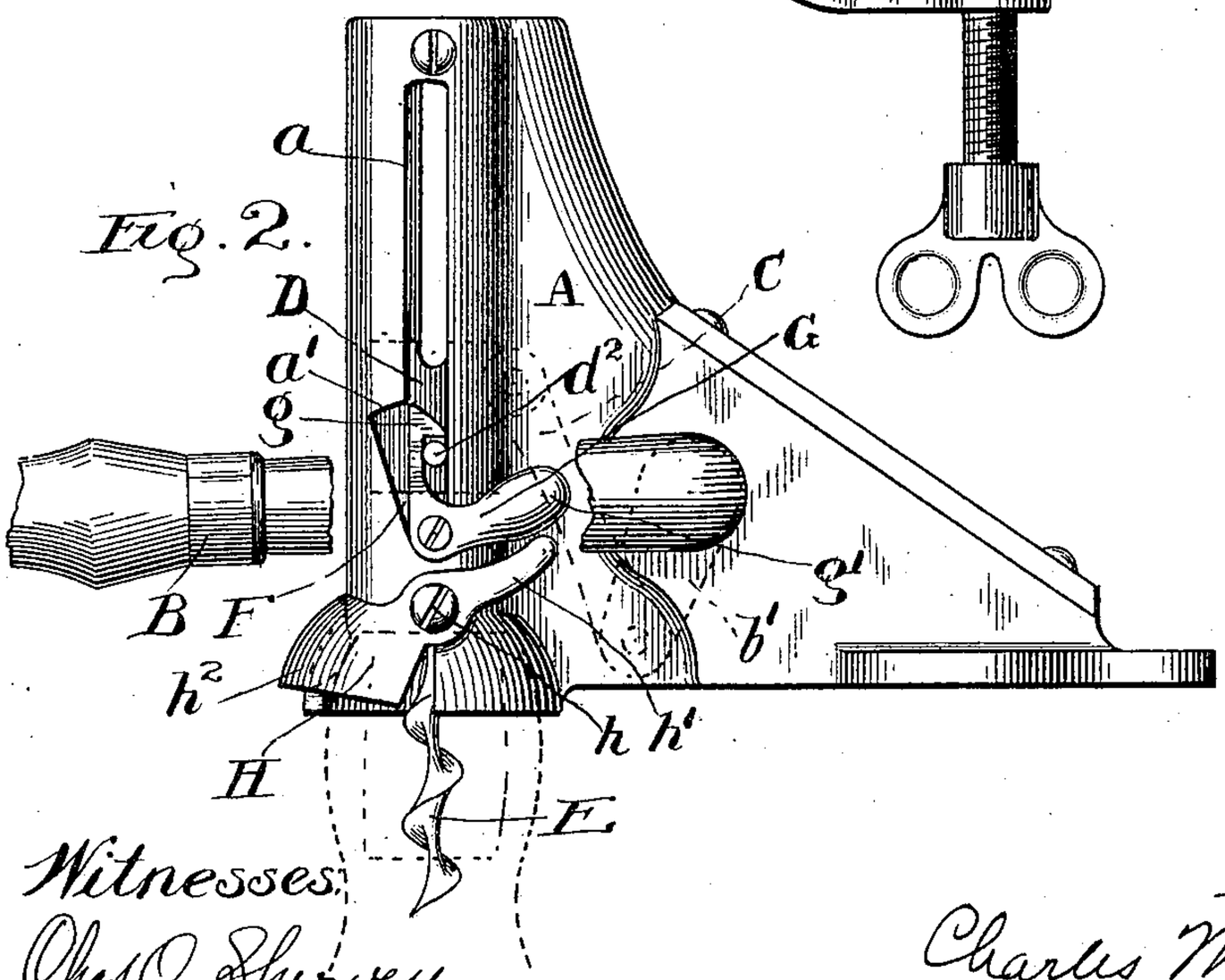


Fig. 2.



Witnesses:
Chas. O. Shervey.
S. Bliss.

Inventor:
Charles Morgan
by Wilkinson & Bitner.
Attys

No. 644,088. Patented Feb. 27, 1900.

C. MORGAN.

CORK PULLER.

(Application filed July 29, 1899.)

(No Model.) 2 Sheets—Sheet 2.

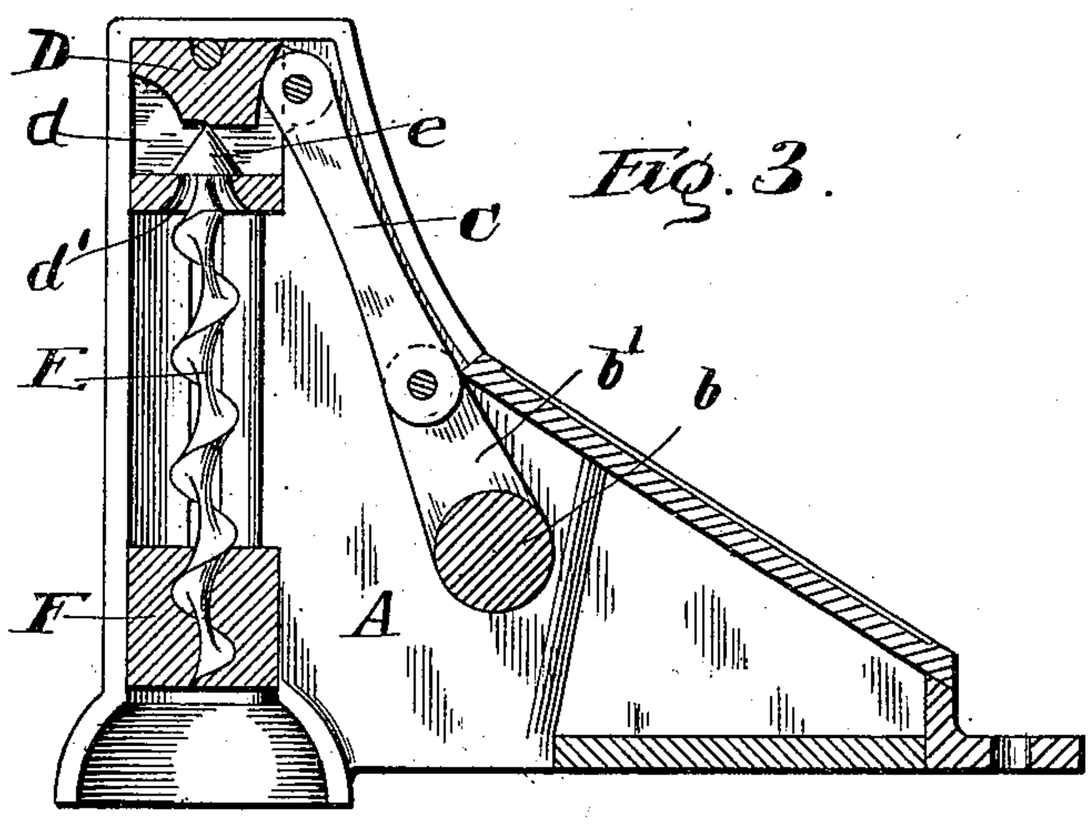


Fig. 3.

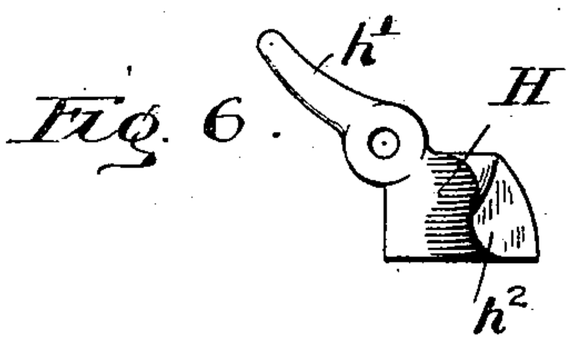


Fig. 6.

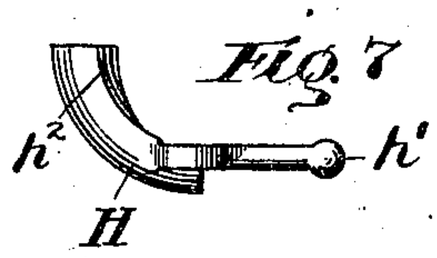


Fig. 7

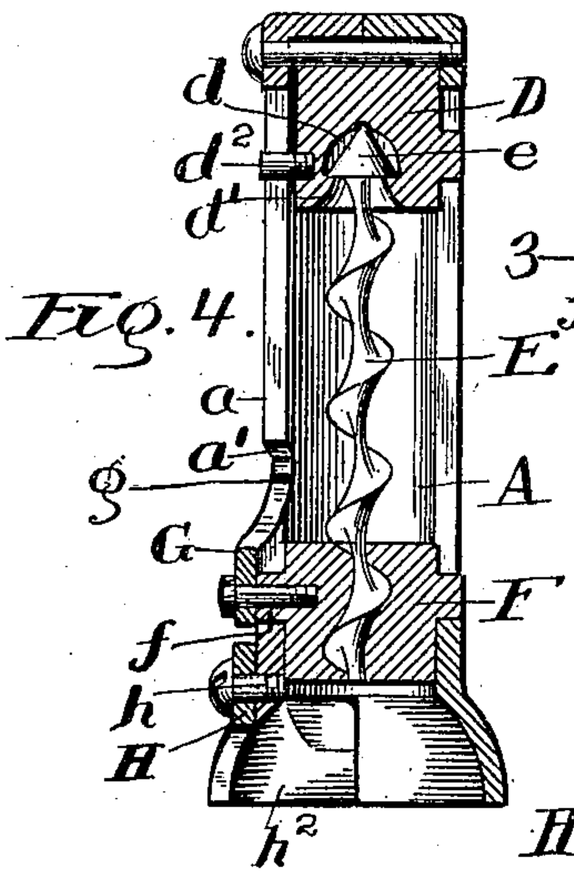


Fig. 4.

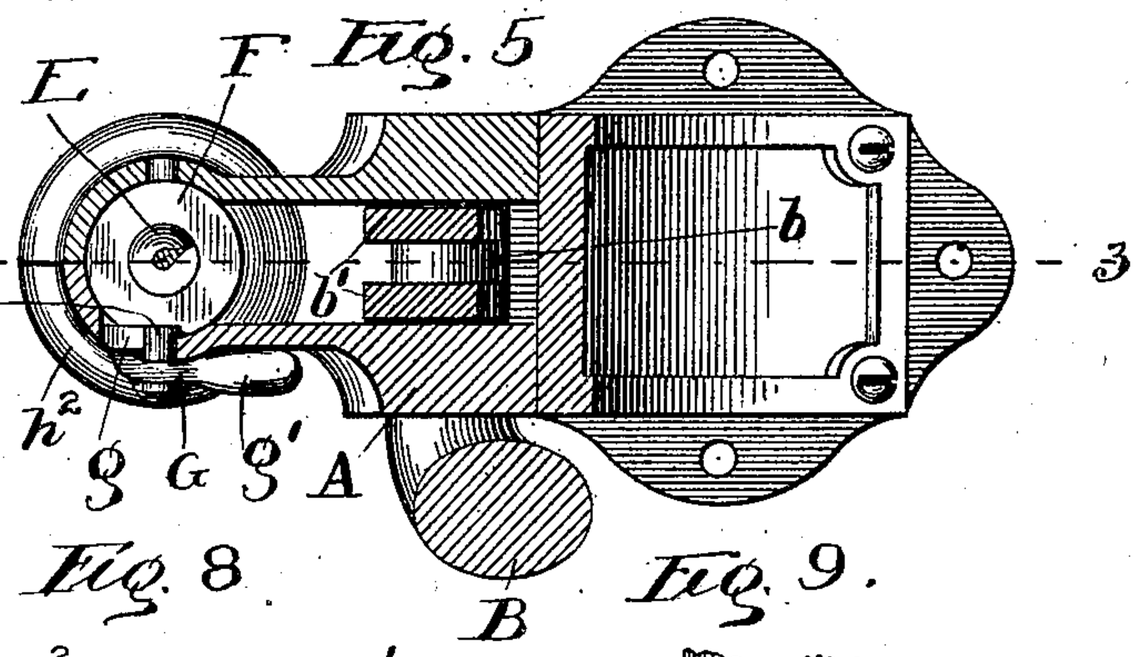


Fig. 5

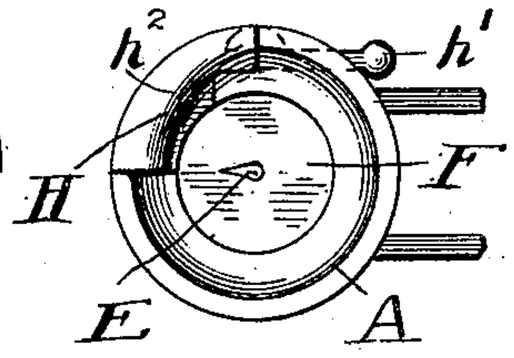


Fig. 8

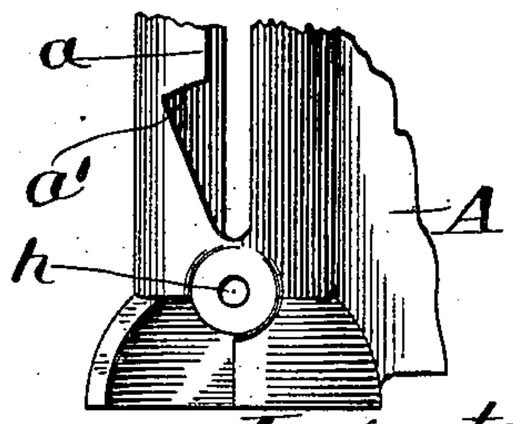


Fig. 9.

Witnesses:
Chas. O. Sherwey
S. Bliss.

Inventor:
Charles Morgan
by Mitchell & Bitner.
Attys.

UNITED STATES PATENT OFFICE.

CHARLES MORGAN, OF FREEPORT, ILLINOIS.

CORK-PULLER.

SPECIFICATION forming part of Letters Patent No. 644,088, dated February 27, 1900.

Application filed July 29, 1899. Serial No. 725,460. (No model.)

To all whom it may concern:

Be it known that I, CHARLES MORGAN, a citizen of the United States of America, residing at Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Cork-Pullers, of which the following is a specification.

My invention relates to certain improvements in cork-pullers, the purpose of which is to improve the operation of the same with reference to the extraction of the cork from the bottle and the removal of the same from the corkscrew; and to such end it consists in certain novel characteristics below described and claimed.

In the drawings illustrating the invention, Figure 1 is a side elevation of the complete cork-puller. Fig. 2 is a similar elevation of the same in a different position, showing the neck of the bottle in dotted lines. Fig. 3 is a vertical section in line 3 3 of Fig. 5, showing the interior of the case and the working parts therein. Fig. 4 is a transverse section in line 4 4 of Fig. 1. Fig. 5 is a horizontal section in line 5 5 of Fig. 1. Fig. 6 is a detail side elevation of a trigger operated by the neck of the bottle. Fig. 7 is a detail plan of the same. Fig. 8 is an under plan of the portion of the case which receives the neck of the bottle; and Fig. 9 is a broken elevation of a part of the case, similar to Fig. 1, with the working parts removed.

A is the case, preferably adapted to contain and guide the working parts. An operating-handle B has a horizontal bent portion b, journaled in the case and bearing a crank-arm b'. A link C is pivoted at one end to the outer end of this crank-arm and at its other end to a corkscrew-carrier D, vertically and longitudinally guided in the case. This carrier is provided with a transverse chamber d, from which extends downward a perforation d'. A corkscrew E extends at its upper end through this perforation and has a head e confined longitudinally in the chamber d. In the lower portion of the case is a nut F, threaded to the corkscrew and longitudinally guided in the case, the nut being adapted to rotate the corkscrew when either of said parts is moved with regard to the other. The case is provided with a longitudinal slot a, and the nut F bears a gudgeon f, working in the slot to prevent the rotation of the nut in the case. Upon this gudgeon is pivoted a pawl G, having a hooked arm g, extending upward, and a weighted arm g', extending laterally. The case is provided with a notch a', with which the hooked arm of the pawl engages when in the position seen in Fig. 1, and the carrier has a pin d^2, with which the hook of said arm engages when the latter is in the position seen in Fig. 2. The weighted arm of the pawl tends to hold the latter in engagement with the carrier. A trigger H is pivoted to the case at h and is provided with two arms extending upon opposite sides of said pivot, one of which, h', engages the weighted arm of the pawl to raise it and throw the pawl into the position seen in Fig. 1 and the other of which, h^2, is weighted and extends into the path of the neck of the bottle, so that in the absence of the bottle the weighted end of the trigger overcomes the weighted arm of the pawl and holds the latter in engagement with the case; but when the bottle is inserted the trigger is tilted sufficiently to allow the pawl to disengage from the case and engage the carrier.

The operation of the parts is as follows: With the operating-handle in the position seen in Fig. 1 the neck of the bottle is inserted in the lower part of the puller, tilting the trigger so as to release the weighted pawl. The handle is brought forward, lowering the corkscrew-carrier, the corkscrew as it comes down being rotated by the nut and thus screwed into the cork. The downward movement of the carrier forces the pin d^2 past the pointed end of the pawl G, after which the pawl automatically engages the carrier. The reverse movement of the handle raises the corkscrew-carrier and also the nut, thus preventing the rotation of the corkscrew and drawing the cork upward into the case. The open bottle is now removed and the handle brought forward, forcing the cork downward out of the casing and bringing the weighted arm of the pawl down upon the weighted trigger. This unlocks the nut from the carrier and locks it to the case, so that the reverse movement of the handle rotates the corkscrew and withdraws it from the cork.

I do not confine my invention to the specific details of construction, as I believe the latter to be immaterial thereto.

I claim as new and desire to secure by Letters Patent—

1. The combination with the case of a cork-puller, of a corkscrew-carrier moved longitudinally therein, a corkscrew rotatably mounted in the carrier and reciprocated thereby, a nut threaded to the corkscrew and guided in the case and means operated by the bottle to lock the nut to the carrier; substantially as described.

2. In a cork-puller, the combination with a suitable case, of a corkscrew-carrier guided in the case, a handle connected with the carrier for moving the latter in the case, a corkscrew rotatably mounted in the carrier and reciprocated thereby, a nut threaded to the corkscrew and guided in the case, a device for automatically locking the nut to the case and a device actuated by the bottle to release the nut from the case and lock it to the carrier; substantially as described.

3. The combination with the case of a cork-puller, of a corkscrew-carrier provided with means for moving it longitudinally therein, a corkscrew mounted in the carrier and reciprocating therewith, a nut guided in the case and threaded to the corkscrew and mechanism extending into the path of the bottle for automatically locking the nut to the carrier; substantially as described.

4. The combination with a suitable case and operating-handle of a corkscrew-carrier guided longitudinally in the case and connected with the handle so as to be reciprocated thereby, a corkscrew rotatably mounted in the carrier and moving therewith, a nut guided in the case and threaded to the corkscrew, a device for automatically locking the nut to the case, a device for locking the nut to the carrier and a device extending into the path of the bottle, operating when forced from said path, to unlock the nut from the case and lock it to the carrier; substantially as described.

In witness whereof I have hereunto set my hand, at Freeport, in the county of Stephenson and State of Illinois, this 25th day of July, A. D. 1899.

CHARLES MORGAN.

Witnesses:
F. E. BOEDEKER,
HENRY TSCHEMING.