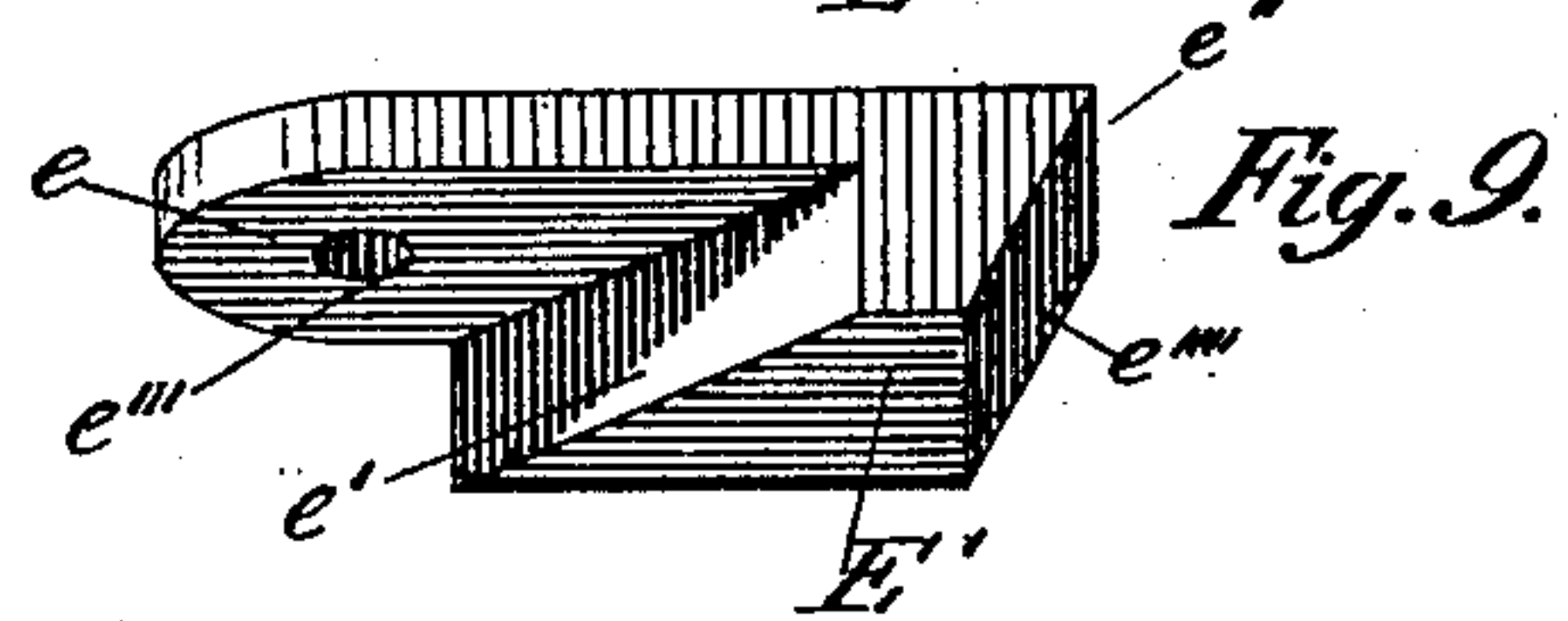
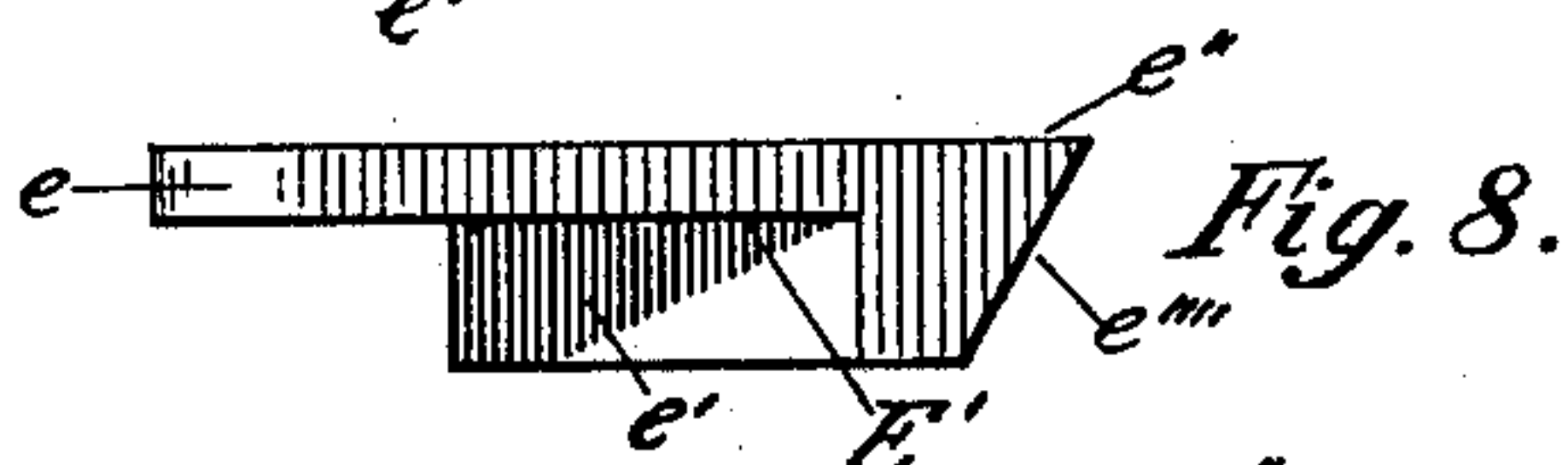
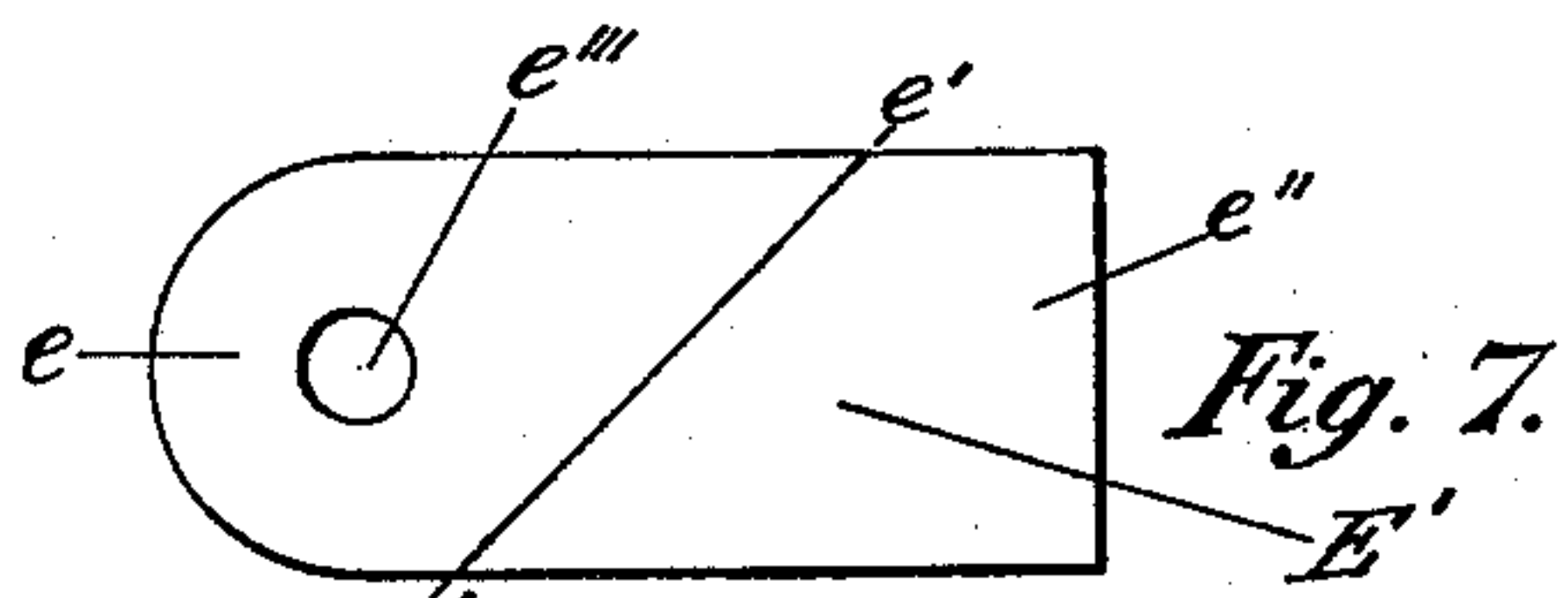
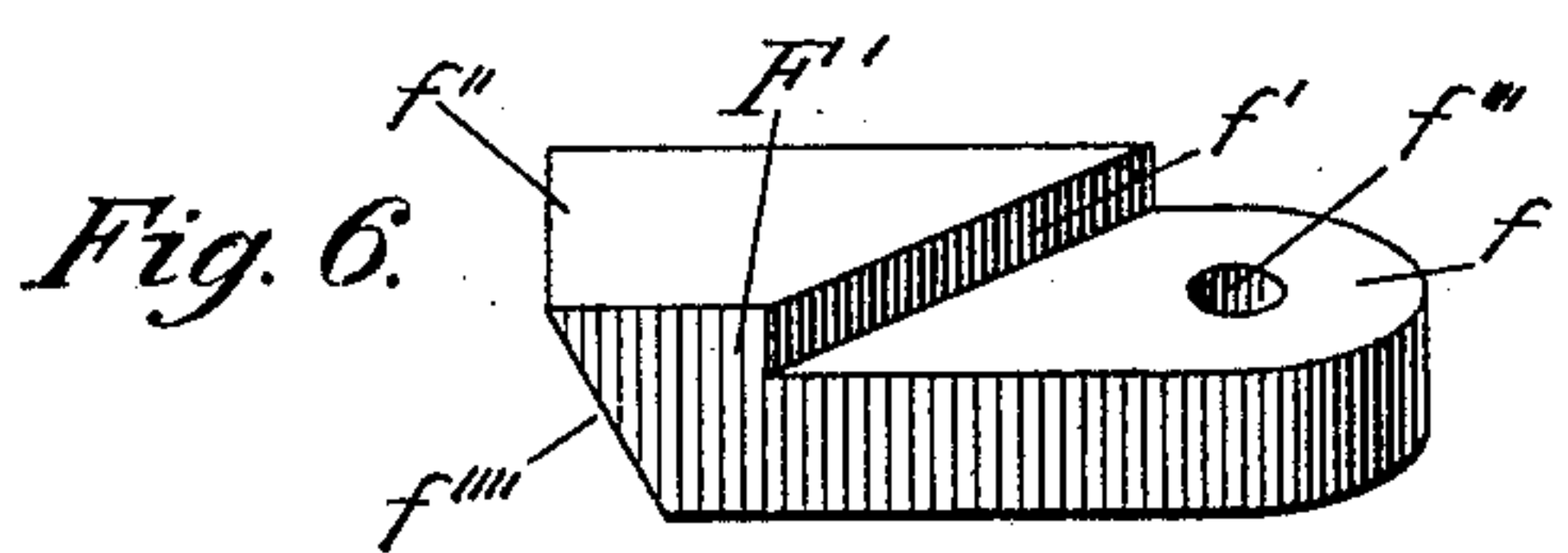
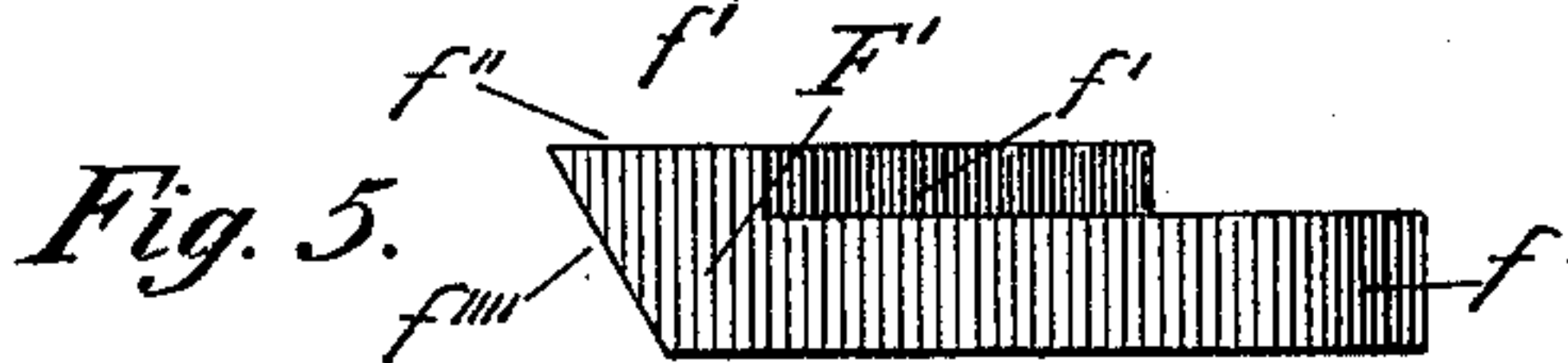
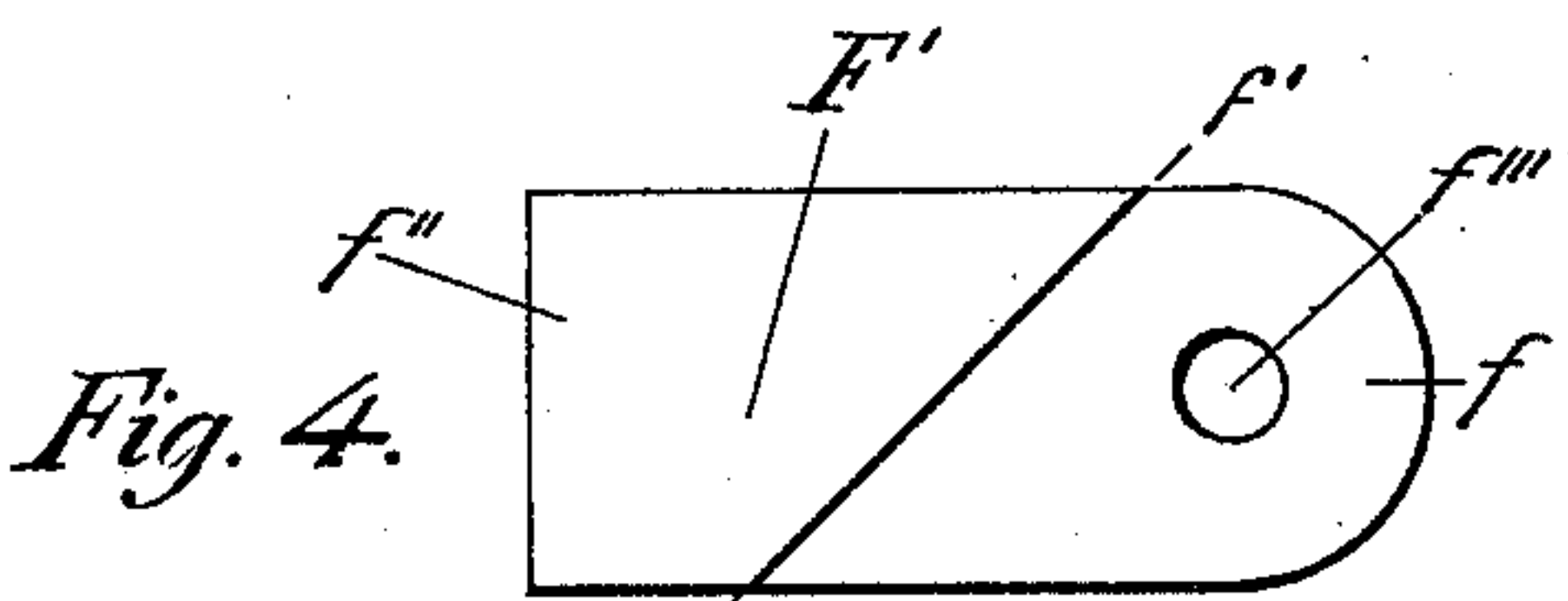
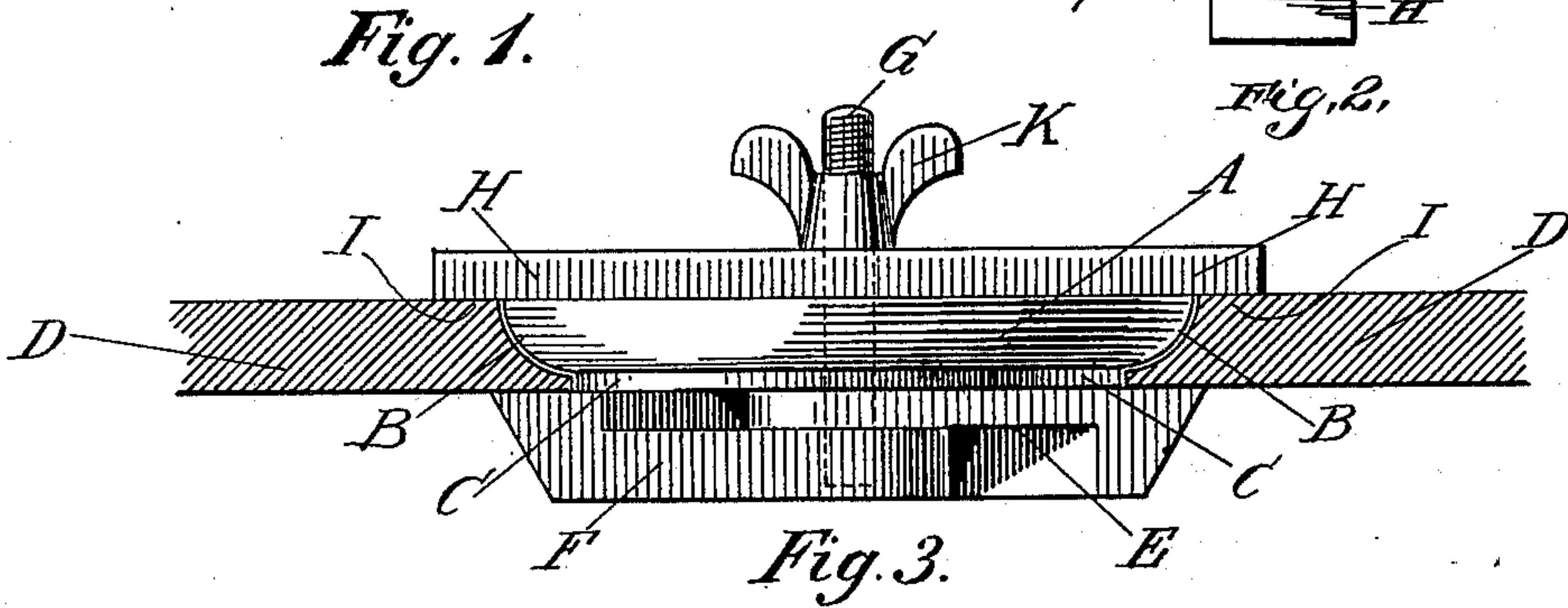
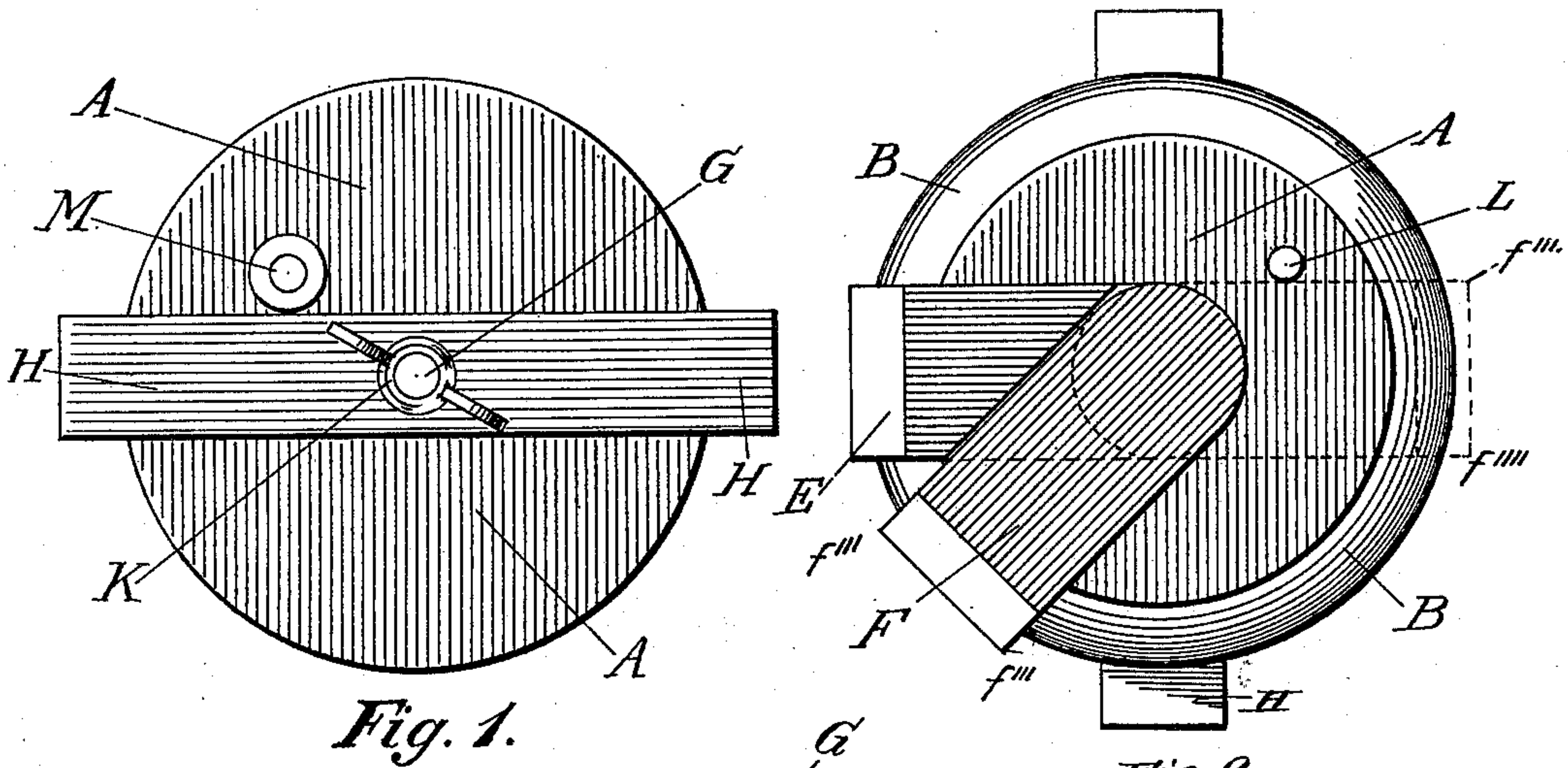


(No Model.)

F. W. FORSTER.
AIR TIGHT PACKAGE.

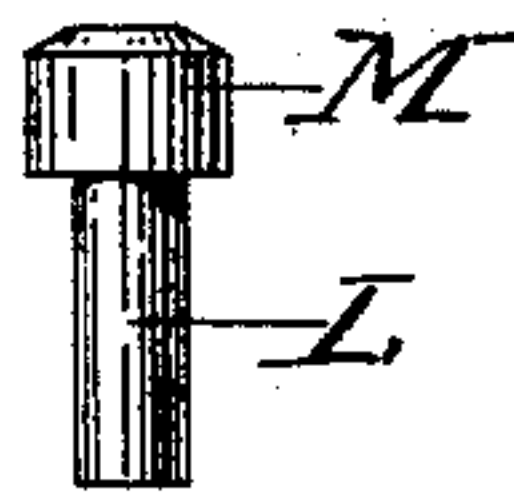
No. 596,677.

Patented Jan. 4, 1898.



WITNESSES

Edwin S. Boyer.
Louis C. Schmidt Fig. 10.



INVENTOR.
Fred. W. Forster

BY
R. Godfrey
ATTORNEY.

UNITED STATES PATENT OFFICE.

FREDERICK W. FORSTER, OF PHILADELPHIA, PENNSYLVANIA.

AIR-TIGHT PACKAGE.

SPECIFICATION forming part of Letters Patent No. 596,677, dated January 4, 1898.

Application filed February 23, 1897. Serial No. 624,666. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. FORSTER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Air-Tight Packages; and I do 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 of reference marked thereon, which form a part of this specification.

My invention relates to improvements in air-tight packages, especially for preserved meat, fruit, &c.

The object of this improvement is to furnish an air-tight lid which can easily be opened without destroying any part of the package, allows easy cleaning of the latter, and consequently allows it to be repeatedly used over again. Kegs, which are mostly used for preserves sold in quantities above one quart, generally get destroyed by having one head knocked in to get at the contents, and after this the latter are exposed to the air and subject to being spoiled, while on the other side the regular expense for repairing these kegs is a considerable one. All these drawbacks are done away with by my contrivance for closing kegs and similar packages.

The exact construction of my contrivance is as follows, and I refer to the accompanying drawings, in which—

Figure 1 is a top view of the lid; Fig. 2, an inverted view of the same; Fig. 3, a section through the head of a keg or similar package, showing a side view of the lid and the manner of fastening the same. Fig. 4 is a top view of the movable clutch; Fig. 5, a side view; Fig. 6, a perspective view of the same, while Fig. 7 is an inverted view of the stationary clutch; Fig. 8, a side view, and Fig. 9 a perspective view, of the same. Fig. 10 shows the stop-pin.

Similar letters refer to similar parts throughout the several views.

The lid A is turned in a manner that its edge forms a quarter-round B and offset C, which fit into a symmetrically-formed groove in the head D, leaving a small space between

them, which is intended for a filler to effect an air-tight closing of the lid A in the head D. This filler may be a rubber ring, a string dipped in fat, a coating of suet between the groove and the quarter-round B, or some similar contrivance. The lid A is provided with a hole in the center to allow the screw G to pass through and a hole to receive the stop-pin L M, as shown in Figs. 1 and 2.

The lower side of the lid is provided with two clutches E and F, shaped as shown separately in Figs. 4 to 9. The clutch E is firmly secured to the lid, while F can turn around the screw G as a pivot, for which purpose the lower end of this screw G is securely fastened into the plate *f* of the movable clutch F. The stationary clutch E, of wood, metal, paper, or any other suitable material, consists of the plate *e*, about one-third of the total thickness of the head E', with the offset *e'*, forming an angle of about forty-five degrees with the side of the plate, the shoulder *e''*, and the slanting end *e'''*. The end of the plate is rounded off in a semicircle and is provided with a hole *e'''* to allow the screw G to pass through. The movable clutch F, of the same material as the stationary clutch E, consists of a plate *f* about two-thirds of the total thickness of the head F', the latter, with the offset *f'*, forming an angle of about forty-five degrees with the side of the plate, the shoulder *f''*, and the slanting end *f'''*. The end of the plate is rounded off in a semicircle and is provided with a hole in the center, in which the lower end of the screw G is firmly secured.

A flat bar H, which may be of metal or wood, lies across the top of the lid and with the ends bears on the edge I of the head D. It has a hole in the center to allow the screw G to pass through. A thumb-nut K has the purpose of holding the parts together and fastening the lid A, with its other appurtenances, to the head D. The peg or stop-pin, Fig. 10, fits a hole in the lid A. Its shank L projects on the lower side of the lid A and forms a stop for the movable clutch F, while the head M of the same forms a stop for the bar H.

The whole contrivance is operated as follows: For setting the lid into the head the two clutches E and F must be close together, as shown in Fig. 2—viz., the side of the plate *f* of the movable clutch F must bear against

the offset e' of the stationary clutch E at the same time the offset f' of the movable clutch F will bear against the side of the plate e of the stationary clutch E. When the thumb-nut K is loose, the bar H may be turned, and when the latter is at a right angle with the dividing-line of the two clutches in the position of Fig. 2 the lid can easily be inserted in the opening of the head D, the groove in the head D having previously been provided with the filler. Then turn the bar H until it bears against the head M of the stop-pin, which brings the bar in line with the stationary clutch E. Then take hold of the top end of the screw G and turn the same until the movable clutch F, which is firmly secured to the lower end of the screw G, and therefore must turn with the latter, bears against the shank L of the stop-pin, which brings the clutch F in line with the stationary clutch E, as indicated with dotted lines in Fig. 2, the corners f''' of the movable clutch F being now at f'''' . Now tighten the thumb-nut K and the shoulder f'' of the movable clutch F and e'' of the stationary clutch E and the ends of the bar H will firmly grip the upper and lower edge of the opening in the head D, press the quarter-round B against the filler and the groove in the head, and thus close the opening in the head D thoroughly air-tight.

The lid can be used for kegs, jars, or other packages, provided that their heads are suitably shaped with a projection and groove to

receive the lid and give sufficient bearing to the shoulders of the clutches E and F and the ends of the bar H. 35

Having thus explained my improvement in air-tight packages, what I claim as new and my invention, and what I desire to secure by Letters Patent, is the following: 40

1. The combination of a package-head with a turned groove, a lid turned to fit this groove, a stationary clutch and a movable clutch on the lower side of the lid, a bar on the upper side of the lid, a screw firmly secured to the movable clutch and forming a pivot for the same to turn, this screw penetrating through the stationary clutch, the lid and the bar, a thumb-nut fitting this screw, and a stop-pin penetrating the lid, all substantially as set forth and described. 45 50

2. A pair of clutches in connection with a turned lid for a package-head, one clutch firmly secured to the lid, the other firmly secured to a screw penetrating the other clutch, the lid and a bar above the lid, and turning with this screw, each clutch consisting of a plate rounded off at one end, provided with a head at the other end, the heads each having an offset against the plate. 55 60

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

FRED. W. FORSTER.

Witnesses:

HOWARD HESS,
EDWIN S. BOYER.