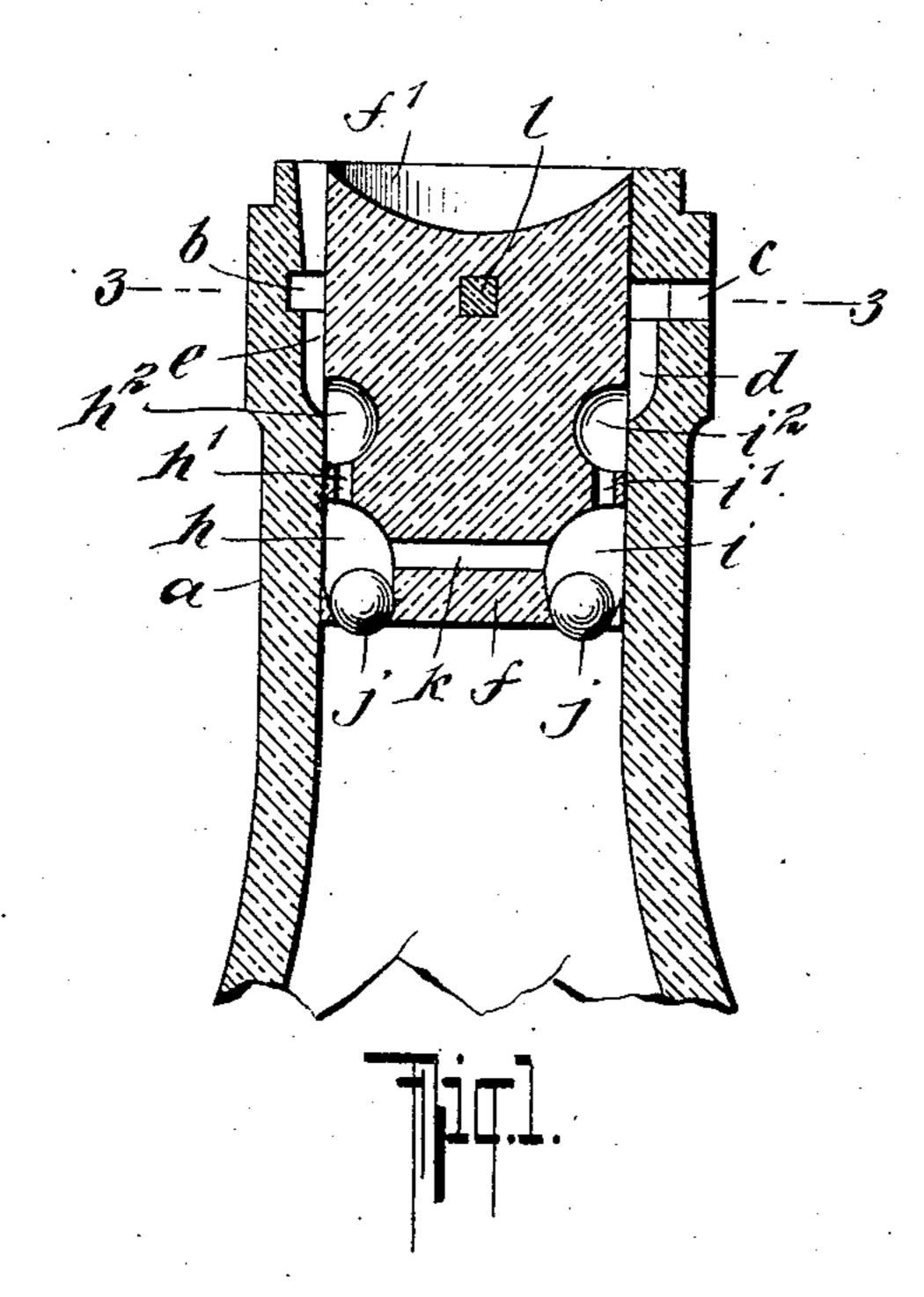
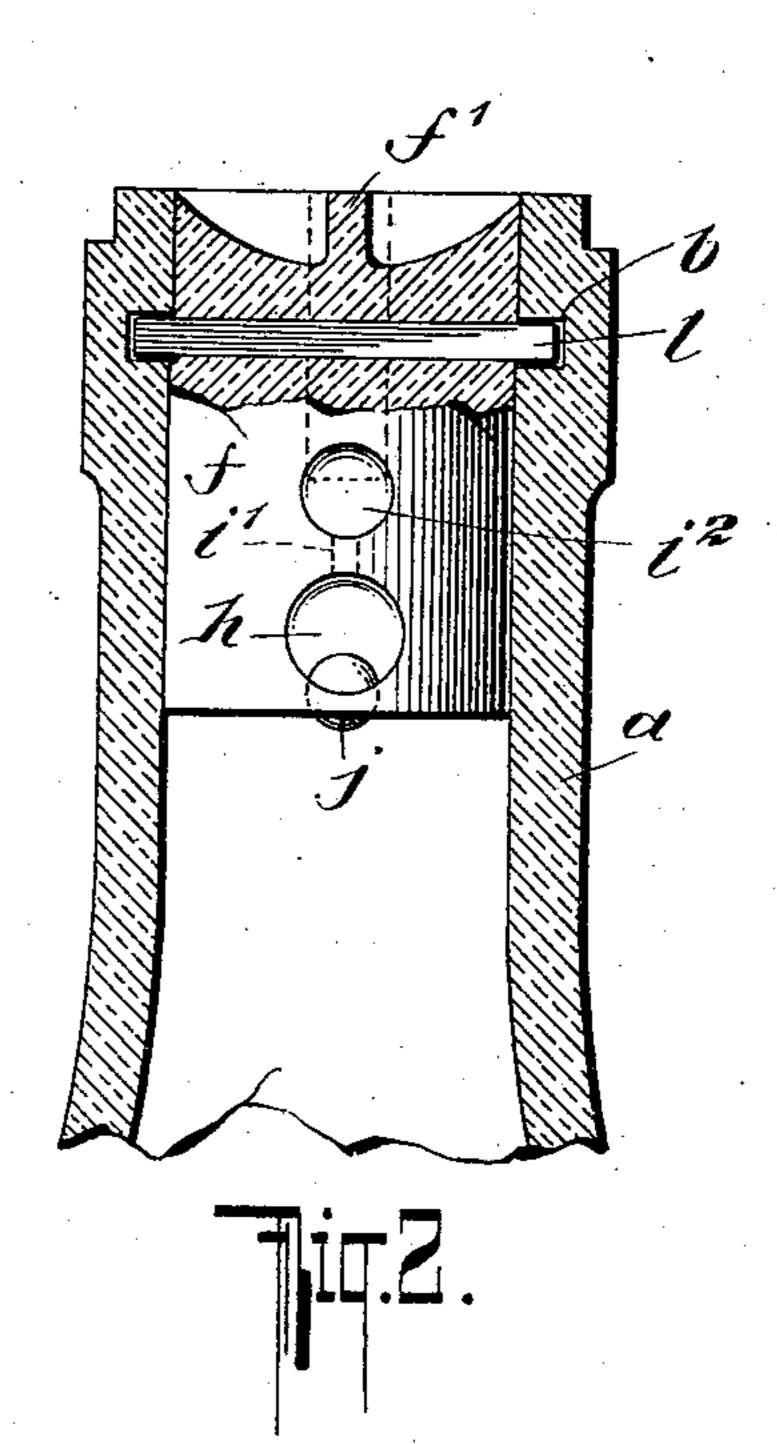
No. 855,294.

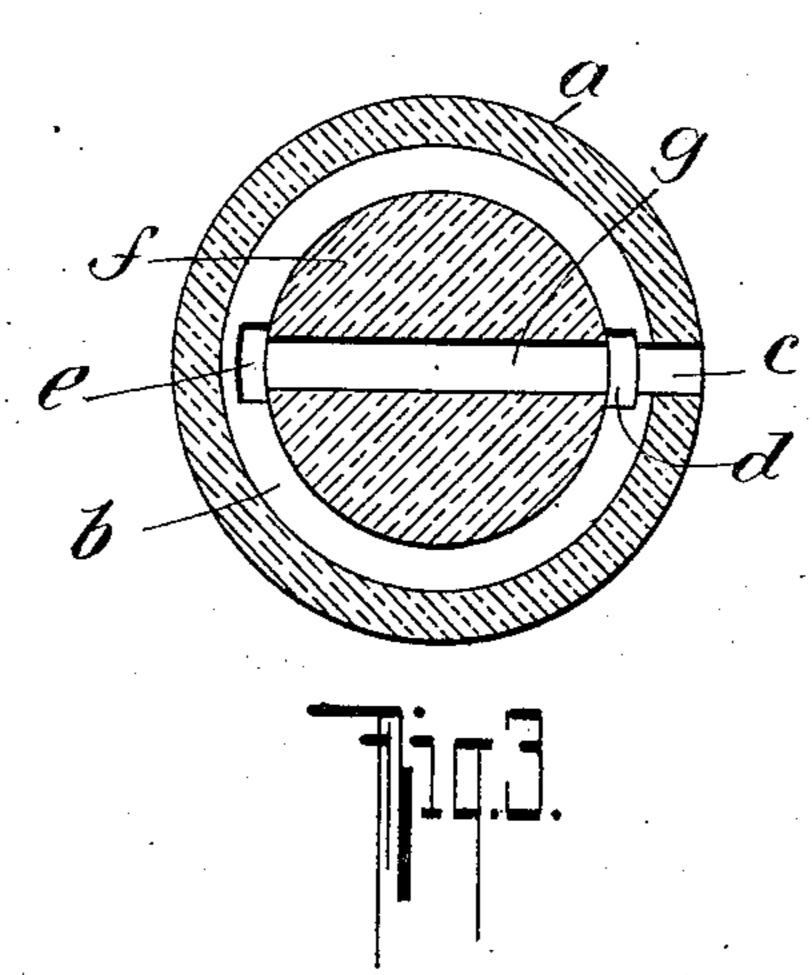
PATENTED MAY 28, 1907.

P. FEITU & J. REBEYROLLE.
BOTTLE.

APPLICATION FILED JUNE 29, 1906.







Julius Hohus John Lotka

Presen Thurshing

UNITED STATES PATENT OFFICE.

PIERRE FEITU AND JULES REBEYROLLE, OF NEW YORK, N. Y.

BOTTLE.

No. 855,294.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed June 29, 1906. Serial No. 323,982.

To all whom it may concern:

Be it known that we, Pierre Feitu and Jules Rebeyrolle, both citizens of the French Republic, and residing in the city, county, and State of New York, have invented certain new and useful Improvements in Bottles, of which the following is a specification, reference being had to the accompanying drawings.

The object of the invention is a bottle provided with a stopper which, when once secured in position, cannot be removed without

breaking the bottle.

In the accompanying drawings Figure 1 is a vertical section through the center of the bottle neck; Fig. 2 a vertical section at right angles to that of Fig. 1; and Fig. 3 is a section on the line 3—3 of Fig. 1, with the

retaining pin omitted.

In the drawings, a is the neck of a bottle, provided with a groove b, extending entirely around the interior of the neck, some distance below the mouth. An aperture c, extending entirely through one wall of the neck, communicates with the groove b. A short channel d extends downwardly from the opening c at the point where the latter meets the groove b. Another channel e, opposite to channel d, extends from the mouth of the bottle, across the groove b and a distance below the same.

The stopper f is provided with a transverse hole g, and two oppositely-located pocket-like recesses h, i, provided with seats for 35 ball valves j j. These recesses communicate by ducts h' i' with upper recesses h^2 i^2 adapted to register with the channels e, d, respectively. The recesses h, h^2 , with the duct h', form a channel, and another channel is formed in the stopper by the recesses i, i^2 and the duct i'. These two channels may be connected by a cross passage k, but

such passage may be omitted.

When the bottle has been filled with the liquid, the stopper f, which is preferably made of ground glass, is provided with the ball valves, and inserted in the neck of the bottle in such a manner that the hole g registers with the aperture c. Then a pin l, preferably made of ground glass or of other suitable material covered with cement or other adhesive material, is inserted into the hole g by means of the aperture c. This pin is of a length slightly less than the largest diameter of the circular groove g, so that, when pushed into place, it assumes the position shown in

Fig. 2. The pin *l* being firmly held in place by its ground surface or by the cement or in any other suitable way, cannot be removed from the aperture, and, while it permits a 60 turning of the stopper, prevents its removal from the bottle. By means of the hand piece f' on the stopper f, the latter is then turned in an arc of ninety degrees, so that the channels of the stopper register with the channels 65 e, d respectively of the bottle neck. The stopper may then be subjected to a slight downward pressure, in order to cause the same to obtain a tight seat in the neck. The parts are then in the position shown in Fig. 1. 70 By tilting the bottle so that the channel e is downward, the ball valves roll away from the valve seats, and permit air to enter by aperture c, and channels d, i^2 , i', i, and liquid to pass out by channels h, h', h^2 , e. Seating 75 surfaces may be provided in the upper portions of the recesses h, i, as shown, to form temporary resting places for the ball valves while the liquid is being poured.

It will be seen that the stopper f is free 80 to be rotated so that the valved stopper channels may be brought out of registry with the neck channels e, d, thus sealing the bottle and enabling it to be laid down flat without any danger of the liquid's escaping. 85

We claim,—

1. The combination, in a bottle, of a neck provided with an internal groove, a stopper fitting said neck, said stopper being provided with a transverse hole, and a pin inserted in 90 said hole, and projecting beyond the body of the stopper, adapted to move in said groove, as and for the purpose specified.

2. The combination, in a bottle, of a neck provided with an internal groove and with an 95 aperture in one wall of said neck communicating with said groove, a stopper fitting said neck, said stopper being provided with a transverse hole, and a pin adapted to be inserted through said aperture into said hole, 100 while the stopper is in position to close the bottle, so arranged as to project beyond the body of the stopper and to move in said groove, as and for the purpose specified.

3. The combination, in a bottle, of a neck 105 provided with an internal groove and with an aperture in one wall of said neck communicating with said groove, and being further provided with a channel connecting said aperture with the interior of the bottle, and 110 with a second channel connecting the interior of the bottle with the exterior thereof, a

stopper fitting said neck, said stopper being provided with a transverse hole, and a pin adapted to be inserted through said aperture into said hole while the stopper is in position to close the bottle, so arranged as to project beyond the body of the stopper and to move in said groove, as and for the pur-

4. The combination in a bottle of a neck provided with an internal groove and with an aperture in one wall of said neck communicating with said groove, a stopper fitting said neck, said stopper being provided with a transverse hole and with two channels provided with ball valve seats and ball valves, and a pin adapted to be inserted through said aperture into said hole, while the stopper is in position to close the bottle, so arranged as to project beyond the body of the stopper and to move in said groove, the neck being further provided with a channel connecting said aperture with one of the channels in the stopper, and a second channel in

the neck connecting the second channel in the stopper with the exterior of the bottle, as 25

and for the purpose specified.

5. The combination in a bottle of a neck having channels, one for the entrance of air and the other for the escape of the liquid, a stopper mounted to turn within the neck 30 and provided with two valved channels which in one position of the stopper register with the channels of the neck and in other positions are closed by the walls of the neck, and means for preventing a withdrawal of 35 the stopper from the bottle while allowing it to turn.

In testimony whereof, we have hereunto signed our names in the presence of two sub-

scribing witnesses.

PIERRE FEITU.
JULES REBEYROLLE.

Witnesses:

John Lotka,

John A. Kehlenbeck.