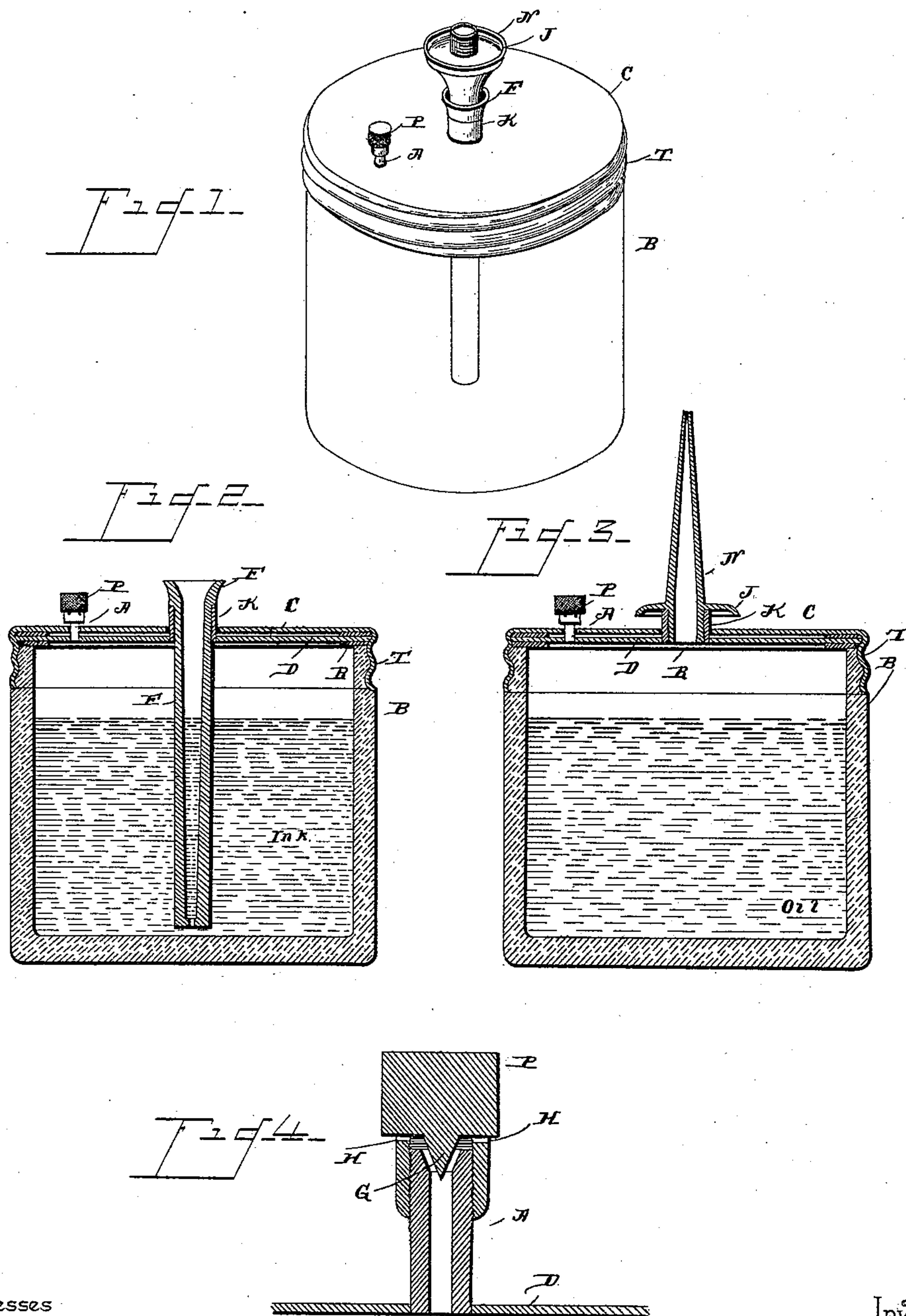


(No Model.)

G. P. YULE.
EJECTING BOTTLE CAP.

No. 446,314.

Patented Feb. 10, 1891.



Witnesses

Geo. O. French.

W. Hollamer.

By his Attorneys,

C. Knowlton.

Inventor
George P Yule

UNITED STATES PATENT OFFICE.

GEORGE P. YULE, OF CLINTON, IOWA, ASSIGNOR OF ONE-HALF TO REED F. STRONG, OF SAME PLACE.

EJECTING BOTTLE-CAP.

SPECIFICATION forming part of Letters Patent No. 446,314, dated February 10, 1891.

Application filed June 5, 1890. Serial No. 354,361. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. YULE, a citizen of the United States, residing at Clinton, in the county of Clinton and State of Iowa, have invented a new and useful Vessel for Liquids, of which the following is a specification.

This invention relates to packing and storing vessels of glass, and the object thereof is to provide a receptacle adapted to be sold filled with ink, and which, after the ink has been used therefrom, may be used as an oil-can.

To this end the invention consists of a body having a perforated cover, below which is a diaphragm, a socket and an air-inlet tube extending from said diaphragm through holes in the cover, a cap for the air-tube, and a funnel and oil-nozzle adapted to be interchangeably inserted in said socket, the whole operating as hereinafter more fully described, and as illustrated in the drawings, in which—

Figure 1 is a perspective view of this device as it is sold. Fig. 2 is a central transverse section of the same when used as an ink-well. Fig. 3 is a similar section when used as an oil-can. Fig. 4 is a considerably-enlarged section of the air-tube and its closing-cap, showing the latter in position to admit air through the tube.

Referring to the said drawings, the letter B designates the body, which is preferably cylindrical and of glass, and C is the cover for the same, which is preferably of metal, secured upon the body by threads T around the upper edge of the latter, as shown in the sectional views. At the center of the cover and at one side thereof are holes, for a purpose to appear presently.

D is a diaphragm made of any resilient material and having a rubber flange R secured around its edge. This flange rests upon the upper edge of the body when the parts are in place, and the diaphragm is secured beneath the cover C, as shown. At the center of the diaphragm is a socket K therethrough, and near one side is an air-tube A, each of which projects through the corresponding holes in the cover. The upper end of the air-tube is threaded, as shown, and screwed

upon said end is a cap P, provided with a number of fine holes H through its sides, and in its upper end inside with a plug G, which fits into the upper end of the air-tube when the cap is screwed down tightly. When the cap is partly unscrewed, this plug is withdrawn and the air can pass in through the holes H and down the tube, as seen in Fig. 4. Into the socket K is screwed a discharge-tube, which is either a funnel or an oil-nozzle, as described below.

F is a funnel, preferably of gutta-percha, and while its interior is funnel-shaped its exterior is preferably cylindrical, as shown. This funnel fits within the socket K and is of sufficient length to extend nearly to the bottom of the body when in place, as seen in Fig. 2. The body being filled with ink, (as the device is sold,) if the tip of the pen be inserted in the open upper end of the funnel and pressed downward lightly the diaphragm will spring and a small quantity of ink will be forced up the funnel and onto the pen, provided the air-tube is closed and no air can escape therefrom. The pen may then be used in the usual manner, and it can also be left in the funnel after using, when the ink thereon will flow back into the body. If the cap P be turned to the left, (unscrewed,) air will be permitted to pass from the body, and the ink that may be standing within the mouth of the funnel will flow back into the body. In this position of parts no dust can get at the ink, and the latter will not evaporate or become dirty and thick. The exterior of the funnel is provided with threads, which take into threads on the interior of the socket, and after the device has been used as an inkstand and all the ink has been exhausted the funnel may be unscrewed and removed. The body can then be refilled or the following use be made of the device.

N is an oil-nozzle having a threaded larger end adapted to take into the threads within the socket K, and if the body be filled with oil and this nozzle applied it will be obvious that the device may be used as an oil-can in a manner similar to its use as an ink-well, except, of course, that it must be inverted when used. Here another advantage of the

construction manifests itself, and that is that when the nozzle N or its surrounding flange J is pressed inwardly toward the body the oil will be ejected therefrom through the nozzle, provided the cap P be closed, and said cap can be loosened to permit the oil within the nozzle to flow back into the body after using in the same manner as above.

The device is put upon the market with the body filled with ink and the funnel and nozzle both in place, as seen in Fig. 1, full instructions accompanying each bottle in order that the many advantages possessed by the invention may all be understood.

I claim as the salient features of this invention—

1. In a vessel for liquids, the combination, with the body and the cover closing the same and provided with two holes, of the diaphragm inserted between said body and cover, a threaded socket and an air-tube through said diaphragm projecting loosely through said holes, a cap screwed on said tube and having a number of holes through it, a plug for closing the upper end of the air-inlet, and a discharge-tube screwed into said socket, substantially as described.

2. In a vessel for liquids, the combination, with the body and the cover closing the same and provided with two holes, of a diaphragm inserted between said body and cover, a threaded socket and an air-tube through said diaphragm projecting loosely through said holes, a cap screwed on said tube for closing the upper end of the air-inlet, and a discharge-tube screwed into said socket and depending into the liquid, substantially as described.

3. In a vessel for liquids, the combination, with the body and the cover closing the same and provided with two holes, of a diaphragm inserted between said body and cover, a threaded socket and an air-tube through said diaphragm projecting loosely through said holes, and a downwardly-extending funnel screwed into said socket and depending into the liquid, the interior of said funnel being tapered, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

GEORGE P. YULE.

Witnesses:

HARRY OATES,
JOHN S. MURRAY.