

J. W. JACOBUS.
FILLER FOR INK WELLS, &c.
APPLICATION FILED MAY 31, 1912.

1,061,748.

Patented May 13, 1913.

Fig- 1 -

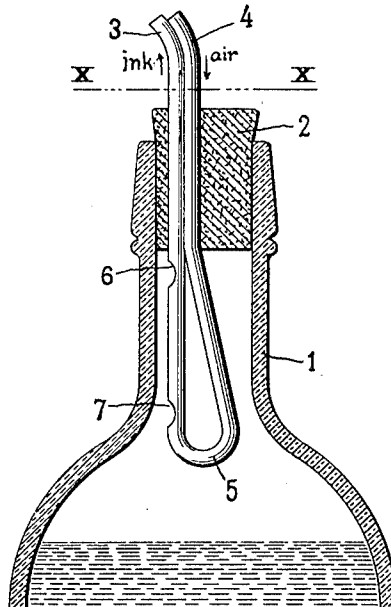


Fig- 2 -

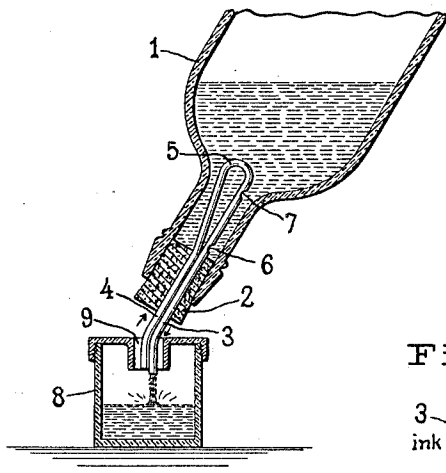


Fig- 3 -



WITNESSES
J. A. de la Cruz
E. Bradford

INVENTOR
James W. Jacobus,
[Signature]
ATTORNEY

UNITED STATES PATENT OFFICE.

JAMES W. JACOBUS, OF GREAT NECK, NEW YORK.

FILLER FOR INK-WELLS, &c.

1,061,748.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed May 31, 1912. Serial No. 700,580.

To all whom it may concern:

Be it known that I, JAMES W. JACOBUS, a citizen of the United States, and resident of Great Neck, in the county of Nassau and State of New York, have invented certain new and useful Improvements in Fillers for Ink-Wells, &c., of which the following is a specification.

My invention relates to a device particularly intended to facilitate the filling of small inkwells from a larger receptacle such as a bottle.

Devices for this general purpose have been proposed and used heretofore but so far as I am aware they all have disadvantages such for instance, as squirting or bubbling or leaking either in filling or when turning the bottle back to its normal position.

My object is to provide a simple and inexpensive device which may be attached to any ordinary ink-bottle to enable one to pour out ink into a smaller receptacle such as an inkwell without over-filling the well and without spattering or spilling the ink and which will permit the bottle to be turned back to its normal vertical position without spattering or spilling the ink.

Briefly considered the invention consists in a stopper for a bottle having a continuous tube with two branches. One branch has two openings and when using the device the ink flows out through one opening and the air follows through the other branch and the second opening. Preferably the outer end of the air branch is somewhat shorter than the outer end of the ink branch so that in pouring, the stream of out-flowing ink is less likely to be drawn into the air branch. The outer ends of the tube are preferably curved to facilitate pouring and the inner end is curved or looped like a siphon bend so that ink held in the tube will start a sort of siphonic action when pouring.

While the invention is particularly intended for filling inkwells with ink and while I have described the invention with particular reference to such use it will be understood that the device may be used for filling any sort of a receptacle from a bottle containing any liquid.

Figure 1, is a vertical section of the upper part of a bottle showing a stopper with my invention. Fig. 2, is a sectional view showing the device in the act of filling a well. Fig. 3, is a sectional view of the tube on the plane of the line X X of Fig. 1.

The upper part only of a bottle 1 is illustrated and with a cork or stopper 2 of any suitable construction and material.

In the preferred form a tube is formed by a single length of tubing of suitable material which may be of any suitable cross section such for instance as half-round as shown in Fig. 3. This tube is bent so as to have the two branches 3 and 4 connected by the loop 5 at the inner end of the device. The branch 3 may be termed the ink branch and projects beyond the end of the branch 4 which may be termed the air branch. Two openings 6 and 7 are provided, the opening 6 being adjacent the inner end of the stopper 2 and the opening 7 is just above the lower end.

When the bottle with the device is tilted up the ink flows into the tube through the opening 6 and out the branch 3 while air passes into the branch 4 and into the bottle through the opening 7. The relative position in the act of pouring is shown in Fig. 2 where the well 8 is shown having a small opening 9 at the top. As the ink flows out the branch 3 and the well is filled, the level of the ink in the well approaches the lower end of the air branch 4. As soon as the level of ink reaches the end of the air branch 4 it seals this branch and preventing the flow of air into the bottle instantly stops the action and shuts off the ink supply. On account of the location of the opening 7 it is practically impossible for any ink to work its way into the air branch when the device is in operation. When the bottle is turned back to its normal position after filling a well the ink in the branch 3 flows down into the bottom 5 of the tube and thus seals the air branch. When the bottle is again used and is tilted up quickly, the ink in the bottom 5 shoots down the branch 3 and thus starts the flow of air in through the branch 4.

While I have referred for convenience to the device as a "bottle stopper" it should be understood that I do not consider the invention as limited to use with what may be known commercially as "bottles" for the invention can be used for instance in filling lamps or other receptacles from an oil can etc.

What I claim is:—

1. A filling device comprising a stopper and a double tube extending through the stopper and having two open ends adja-

cent each other above the stopper and a U-shaped loop portion below said stopper with an air entrance opening and a liquid exit opening, the two branches of the loop portion being integrally connected by a curved bend at the bottom, and the sides of the loop portion being spaced apart just above the bend.

2. A filler comprising a stopper and a double tube secured to the stopper and having its two outer ends open and arranged adjacent each other, one branch of the tube being substantially straight through the

stopper and below the stopper and having two openings below the stopper, the outer end of the other branch lying alongside of the outer end of the first branch and the inner portion of the said second branch being spaced apart from the inner portion of the first branch and united to the first branch by a curved bend.

JAMES W. JACOBUS.

Witnesses:

ROBT. S. ALLYN,
E. BRADFORD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."