No. 755,549. PATENTED MAR. 22, 1904.

K. RETTIG.

DROPPING STOPPER.

APPLICATION FILED AUG. 18, 1903.

NO MODEL.

Fig. 1

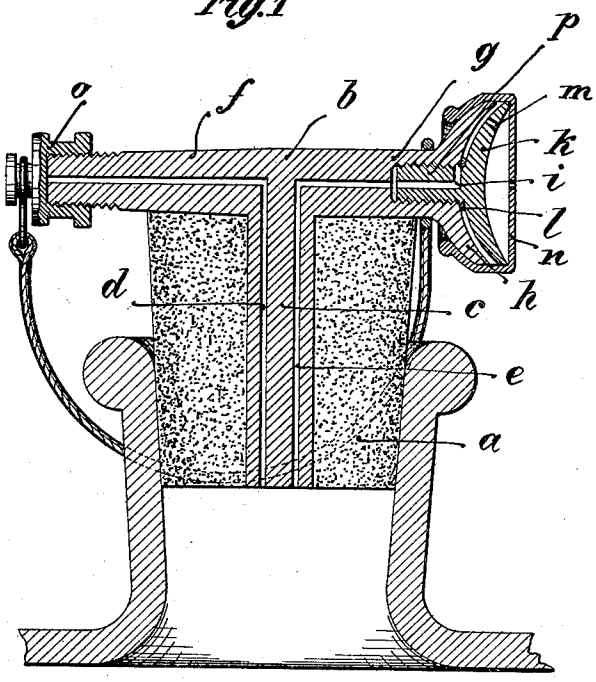
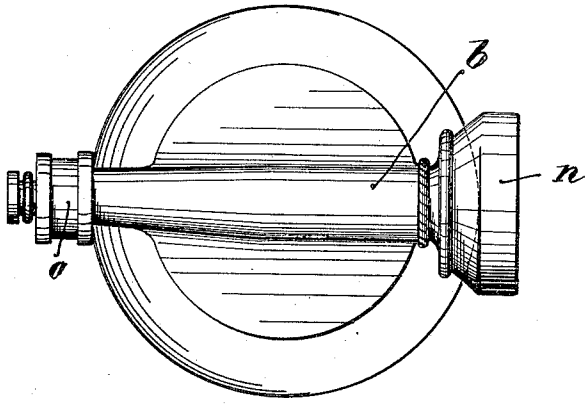


Fig. 2



Witnesses.
Wilhelm Brase.
Willi Kasper

Inventor.
Karl Rettig,
per Jesse & Sachs
Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

No. 755,549. Patented March 22, 1904.

UNITED STATES PATENT OFFICE.

KARL RETTIG, OF SPANDAU, GERMANY.

DROPPING-STOPPER.

SPECIFICATION forming part of Letters Patent No. 755,549, dated March 22, 1904.

Application filed August 18, 1903. Serial No. 169,879. (No model.)

To all whom it may concern:

Be it known that I, KARL RETTIG, a subject of the Emperor of Germany, residing at 25 Falkenhagenerstrasse, Spandau, Germany, have invented a new and useful Dropping-Stopper, of which the following is a specification.

By using my new dropping-stopper the drops are formed by atmospheric pressure produced by finger-pressure, securing thereby a most accurate counting out of the single drops by people of weak sight and trembling hands.

In order to better explain the object of my invention, the dropping-stopper is shown on the accompanying drawings, in which—

Figure 1 is a longitudinal section, and Fig. 2 is a plan.

The dropping-stopper consists of the cork *a*, having a central perforation into which is inserted a T-shaped body *b*. The body *b* has a shank *c* and the arms *f* and *g* and is traversed by two channels *d* and *e*, the one passing at right angles through the arm *f*, the other at right angles through the arm *g*. Channel *d* is the liquid-channel, which may be closed by the threaded cap *o*, screwed upon the arm *f*. The other channel, *e*, is the air-channel and is enlarged at its end in the arm *g*. The enlarged part is threaded within for receiving a threaded stopper *p*, ending in a flange *k*, concave on its outer side and convex on the opposite side. The flange is provided with a small perforation *m* near its edge. The arm *g* of the body *b* has an integral flange *h* on its end, concave at its free end. A channel *i* extends partially across the stopper *p*, ending near the flange *k*. A packing-ring *l* is arranged between the mouth of channel *i* and the flange *k* for tightening the channel *i* when the flange *k* is screwed against the flange *h*.

An india-rubber cap *n*, having a small perforation in its center, incloses the flanges *k* and *h*, leaving a small cavity between the flange *k* and the cap.

The cork *a* may be put into the neck of a bottle.

Having now described the construction of my invention, I now describe its operation. The bottle is held horizontally, then the threaded cap *o* is unscrewed, and the threaded stopper *p* is moved back a little from the flange *h* by unscrewing. Now the bottle is ready for use. By pressing a finger against the india-rubber cap *n* the perforation therein is closed, and the air between the cap and the flange *k* is pressed through the perforation *m* in the said flange *k* into the channel *i* and from channel *i* through the channel *e* of the body *b* into the bottle. The atmospheric pressure presses the liquid inclosed in the bottle through the channel *d* and forms the drops.

What I claim as my invention is—

1. In a dropping-stopper the combination with a cork which may be put into the neck of a bottle, a T-shaped body inserted therein, two channels passing through the shank and the arms of the body, a flange arranged at the end of one arm, being concave on its outer side, an india-rubber cap having a central perforation inclosing the said flange and leaving a small cavity between the flange and the cap as set forth.

2. In a dropping-stopper the combination with a cork, which may be put into the neck of a bottle, a T-shaped body inserted therein, two channels passing through the shank and the arms of the body, a flange being arranged at the end of one arm, the channel ending in the said arm being enlarged and an india-rubber cap, having a small central perforation, inclosing the said flange and leaving a small cavity between the flange and the cap, as set forth.

3. In a dropping-stopper the combination with a cork, which may be put into the neck of a bottle, a T-shaped body inserted therein, two channels passing through the shank and the arms of the body, a flange being arranged at the end of one arm, the channel ending in the said arm, being enlarged and threaded within, a threaded stopper screwed into the enlarged channel, said stopper ending in a flange, shaped concave on its outer side and convex on the opposite side, an angular channel extending partially across the threaded part of the said stopper and ending near the flange of the stopper, an india-rubber cap,

having a small central perforation, inclosing the flange of the arm of the body and the flange of the threaded stopper, as set forth.

4. In a dropping-stopper the combination with a cork, which may be put into the neck of a bottle, a T-shaped body inserted therein, two channels passing through the shank and the arms of the body, the channel of one arm adapted to be closed by a threaded cap, a flange being arranged at the end of the other arm, the channel ending in the latter arm being enlarged and threaded within, a threaded stopper screwed into the enlarged channel, a flange arranged at the free end of the stopper, shaped concave on its outer side, and convex on the opposite side, an angular channel extending partially across the threaded part of the stopper and ending near the flange thereof, a packing-ring arranged between the mouth of the channel and the flange, and an india-rubber cap, having a small central perforation, inclosing the flange of the arm of the T-shaped body and the flange of the threaded stopper, as set forth.

KARL RETTIG.

Witnesses:
WOLDEMAR HAUPT,
HENRY HASPER.