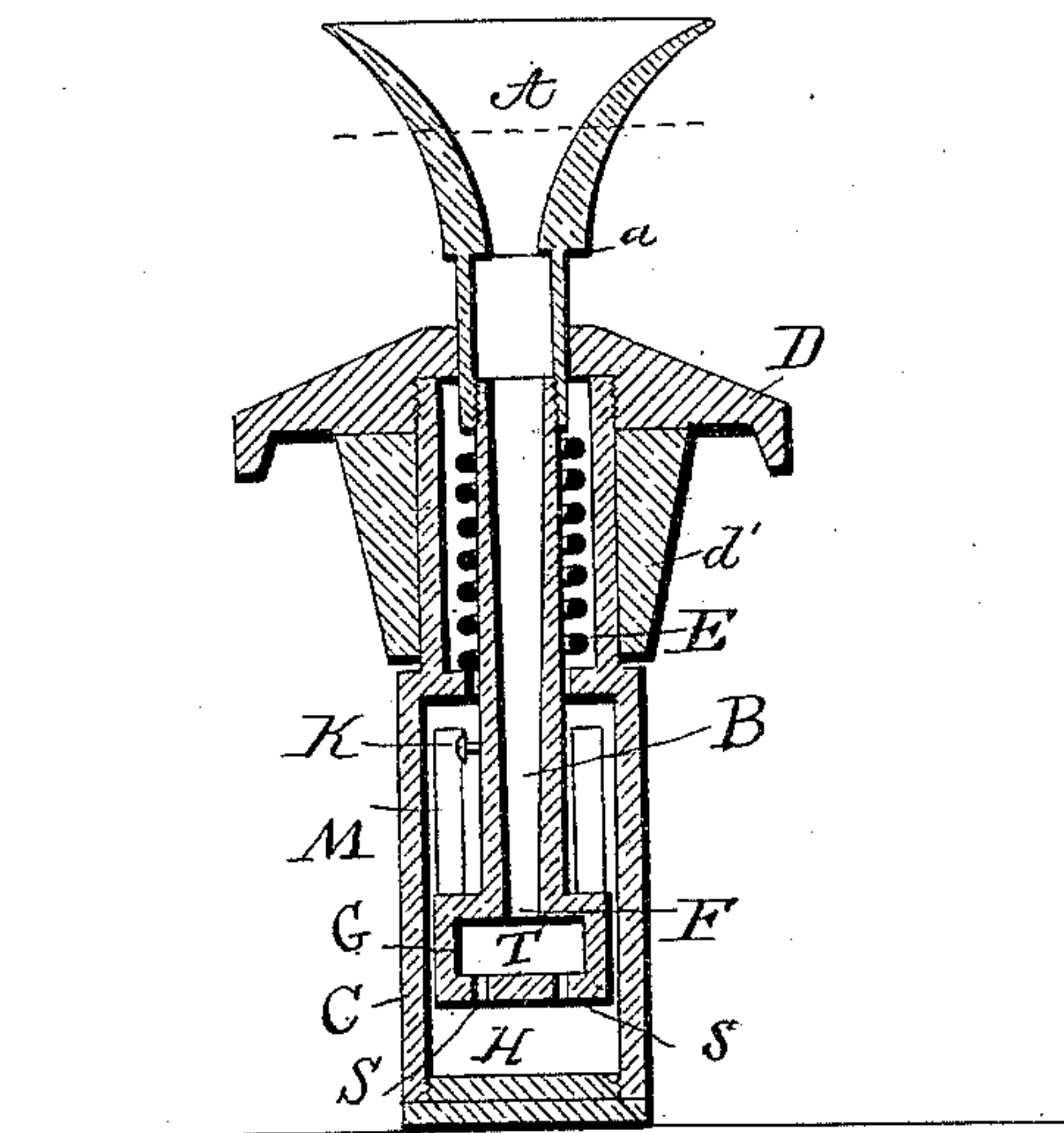


(No Model.)

J. D. BROODER & A. B. THOMAS.
STOPPLE FOR INKSTANDS.

No. 432,015.

Patented July 15, 1890.



Witnesses.

Arthur Ashley
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UNITED STATES PATENT OFFICE.

JOHN D. BROODER AND ALBERT B. THOMAS, OF KANE, PENNSYLVANIA.

STOPPLE FOR INKSTANDS.

SPECIFICATION forming part of Letters Patent No. 432,015, dated July 15, 1890.

Original application filed November 29, 1889, Serial No. 331,847. Divided and this application filed January 6, 1890. Serial No. 336,014. (No model.)

To all whom it may concern:

Be it known that we, JOHN D. BROODER and ALBERT B. THOMAS, citizens of the United States, residing at Kane, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Stopples for Inkstands, (being a division of our application of November 29, 1889, Serial No. 331,847, for an improvement in inkstands,) of which the following is a specification.

Our invention relates to that class of inkstands wherein sufficient ink to fill the pen once is pumped into a suitable dip-tube, any surplus running back into the ink-well, where it is protected from dirt and evaporation.

We prefer to embody our invention in the form shown in the accompanying drawing, which is hereby attached to and made a part of this specification, and which represents a section of our improved stopple for inkstands.

Referring to the drawing in detail, A is the opening or funnel in which the pen is to be dipped, which is flared, as hereinafter referred to.

B is the tube or tunnel in which the ink rises, which is made to taper from bottom to top. This is also provided with a piston G, which is a working fit in the chamber H.

C is the second tube, which is provided with ports M M, situated somewhat above its bottom, so that the lower part of the tube forms a chamber H.

D is the top of the tube C. Immediately beneath this top is the tapered washer *d'*, of any suitable size and formed of cork, wood, compressed paper, or other proper material.

E is a spring, preferably of aluminum wire or of other wire plated with aluminum for the purpose of resisting corrosion.

F is a port in the piston G, giving access to the tube B.

G is the piston working in the chamber H. This piston is made with a chambered head T, having ports S S on its lower side, giving access to the chamber H.

K is a set-screw, which, in combination with the lugs *a a* on the funnel A, limits the play of tube B.

By chambering the head of the piston G and making the tube B taper on its inside

any accumulation of pressure is avoided and a spurt of ink from sudden motion is prevented.

On removing the cork from any small bottle of ink of commercial size this device may be inserted in its place and will operate as follows: On dipping the pen in the funnel A and pressing it slightly the tube B moves downward, causing the piston G to enter the chamber H. The ink in this chamber is forced up into the tube, filling it and the funnel up to the dotted line. On removing the pen the tube is raised by the spring E until stopped by the set-screw K, and the surplus ink runs back to the well.

The piston hereinbefore described has been found useful by us in many ways. We therefore do not claim it in this application; but reserve the right to file another application therefor, and do not abandon it to the public by reason of not claiming it herein. We also do not limit ourselves to this particular form of piston, but may employ any other suitable form.

Having thus described our invention, what we claim, and desire to protect by Letters Patent of the United States, is—

1. In a stopple for inkstands, the tube or cylinder C, having ports M M and provided at its top with a washer or stopple of cork or similar material, substantially as described.

2. In a stopple for inkstands, the combination of the tube carrying the piston G, with the second tube C, having ports M M a short distance above its bottom adapted to admit ink to the chamber H, formed by the bottom of the tube C, substantially as described.

3. In a stopple for inkstands, the combination of the tube B, the second tube C, having ports M M, a cork or other washer *d'*, and a chamber H, with the piston G and spring E, all adapted to be placed in an ordinary ink-bottle, substantially as described.

In witness whereof we have hereunto set our hands in the presence of two witnesses.

JOHN D. BROODER.

ALBERT B. THOMAS.

Witnesses:

F. A. VAN ORSDALL,

J. T. GRIFFITH.