

No. 659,762.

Patented Oct. 16, 1900.

G. PELLINGER.
INKSTAND.

(Application filed May 5, 1900.)

(No Model.)

FIG. 1.

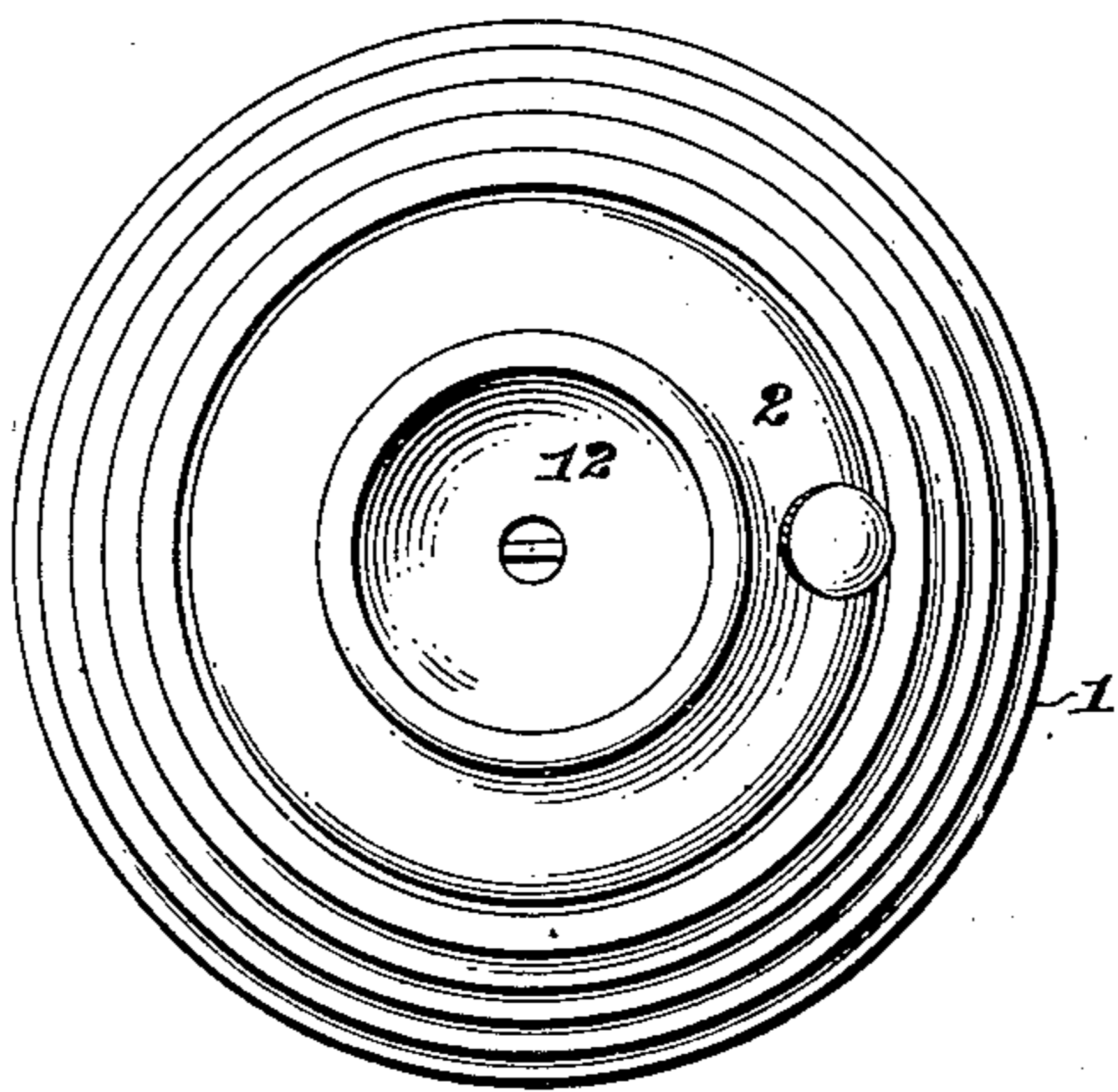


FIG. 3.

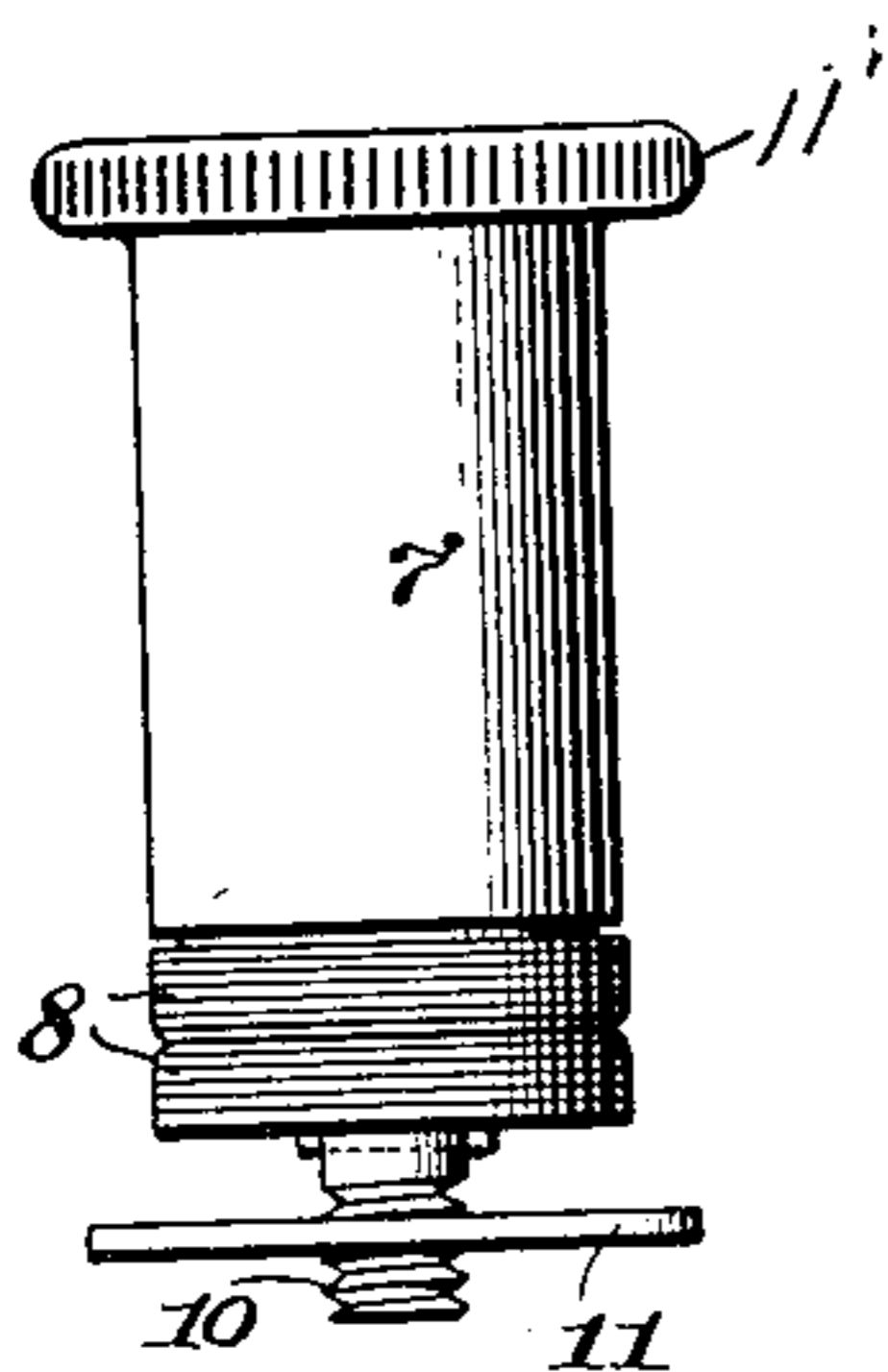


FIG. 2.

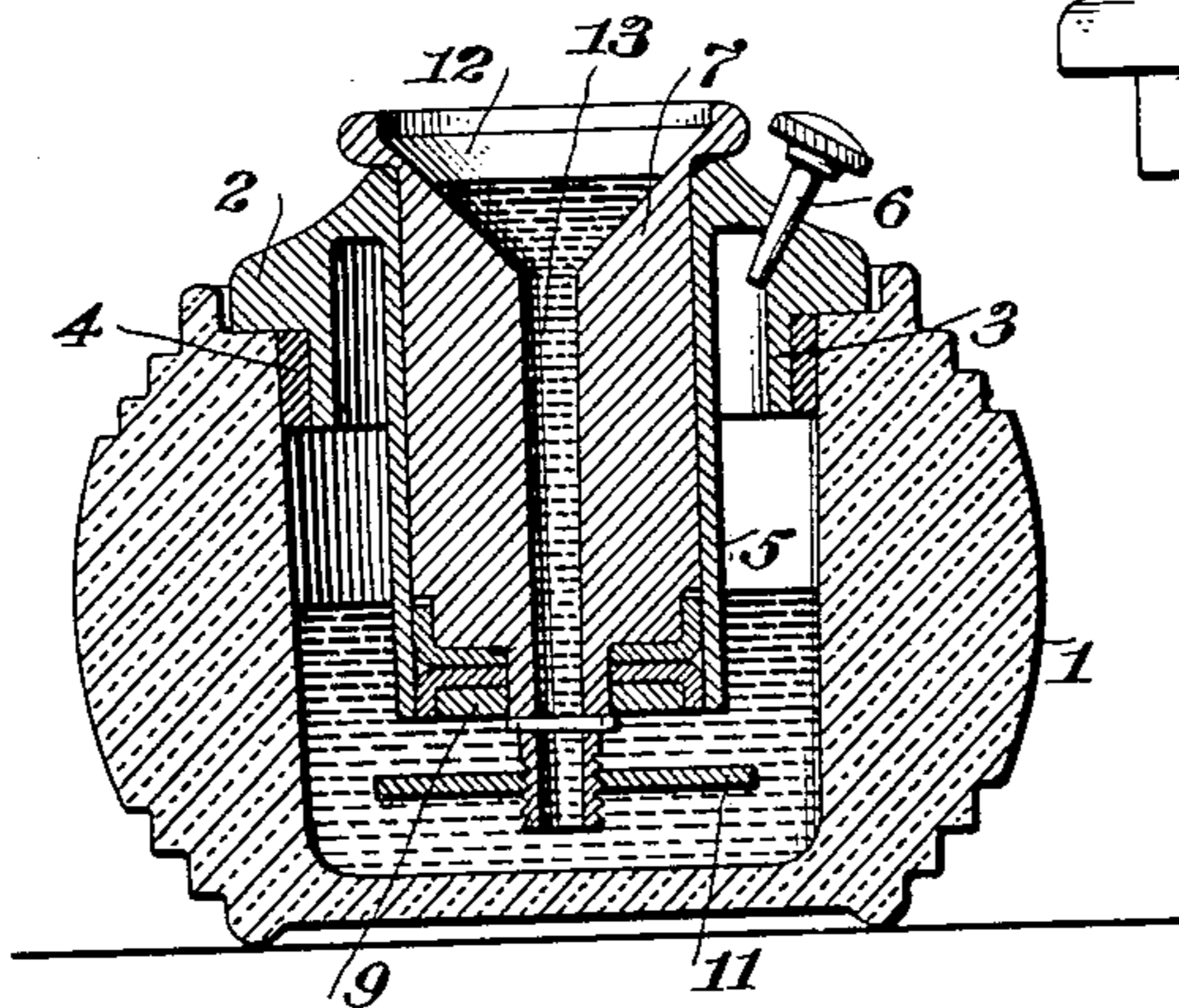


FIG. 4.

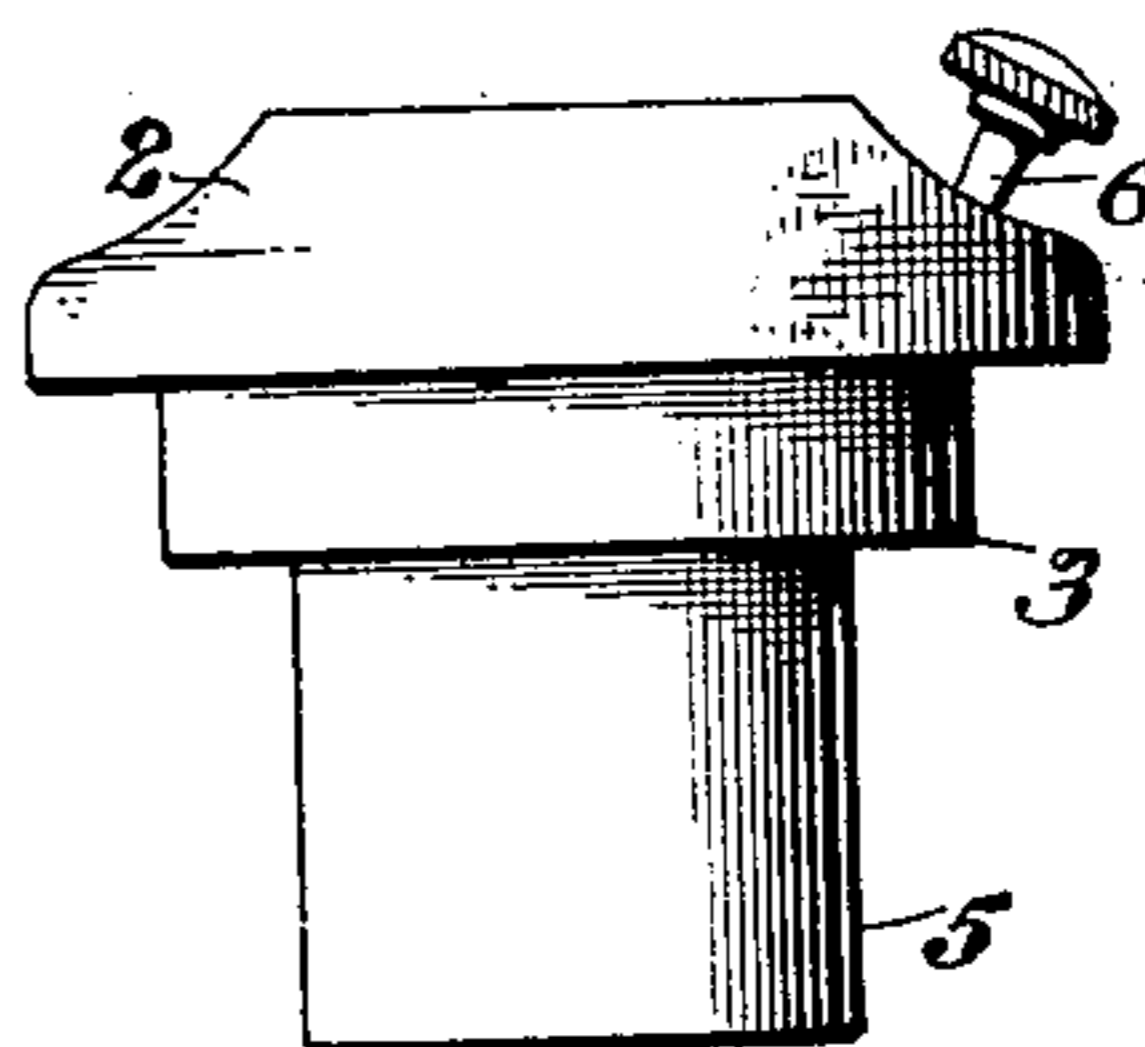


FIG. 5.



•WITNESSES•

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UNITED STATES PATENT OFFICE.

GEORGE PELLINGER, OF WEEHAWKEN, NEW JERSEY.

INKSTAND.

SPECIFICATION forming part of Letters Patent No. 659,762, dated October 16, 1900.

Application filed May 5, 1900. Serial No. 15,582. (No model.)

To all whom it may concern:

Be it known that I, GEORGE PELLINGER, residing at Weehawken, in the county of Hudson and State of New Jersey, have invented an Improvement in Inkstands, of which the following is a specification.

This invention relates to an improved inkstand by means of which a determinable quantity of fluid can be automatically transferred from the well and retained in the dipping-cup until exhausted by use or during the operation of writing, while the cup can be automatically emptied when desired with the return of the fluid to the well, the improvement affording a non-spillable inkstand of simple construction and operation which avoids the spurting, variable, and uncertain action common to automatic constructions heretofore employed.

In the accompanying drawings, Figure 1 is a top plan view of an inkstand embodying my invention. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a side elevation of the cup and piston employed therein. Fig. 4 is a side elevation of the cap and cylinder therefor. Fig. 5 is a plan view showing the bar for regulating and limiting the rise of the piston within the cylinder in which it operates.

As shown in the drawings, the well 1 receives the cap 2, which forms an air-tight closure for the mouth thereof, the cap being preferably provided with a ring 3 and a gasket 4. A cylinder 5, preferably integral with the cap, extends into the well, and a normally-closed air-vent 6 affords means for the communication of outside air to the well. A piston 7, provided with a packing 8, made of any suitable material, as leather, and held in place by a disk 9, fits within the cylinder and forms a constant closure therefor. An extension 10 of the piston is screw-threaded and receives a cross-bar 11, which, being adjustable, regulates and limits the upward movement of the piston within the cylinder, the downward movement being limited by a flange 11' at the top of the piston. A dipping-cup 12 is formed in the top of the piston and communicates with the interior of the well through the bore or aperture 13.

In operation the parts being in place, as illustrated in Fig. 2, the ink-well may be filled by opening the vent 6 and pouring into the

cup 12. When the well has been filled, the vent is closed. The dipping-cup 12 may then be emptied and filled at will by the respective operations of lifting and depressing the piston 7 within the cylinder 5. The rise of the piston increases the space that may be occupied within the well or creates a partial vacuum which is replaced by the downflow of the ink in the cup and bore, the atmospheric pressure upon the surface of the ink contained therein returning the same to the body of ink in the well and maintaining the equilibrium thereof. Upon pressing down the piston ink rises through the bore into the cup, where it is maintained as long as desired, thus affording a limited but constant quantity of ink for dipping the pen. By this means all the ink contained in the well may be lifted into the cup for use, excepting that there must be sufficient within the well to form a seal for the aperture or bore of the piston, the extension of which may be carried to the bottom of the well. The reduction of the volume of ink by use or otherwise is compensated by access of air to the volume contained within the well when the piston is lifted, the fall of ink within the bore being accompanied by sufficient admission of air therethrough to effect the compensation. As the joints at the mouth of the well are fluid-tight and as the small quantity of ink maintained in the cup when the piston is depressed is returned to the well and equilibrium maintained by atmospheric pressure upon raising the piston, it is thus rendered impossible to spill the ink, there is practically no loss from evaporation, and there is little opportunity for collecting dust and coagulating the ink, while the quantity desired for inking the pen may readily be provided and maintained in the cup.

Having thus described my invention, I claim—

1. In combination with an ink-well, a cylinder extending into said well and having free communication with the cavity thereof, and a piston having a dip-aperture therethrough movable within said cylinder, said piston being fitted fluid-tight within said cylinder and held by frictional contact in operative or inoperative position, substantially as specified.

2. In combination with an ink-well, a cyl-

inder extending into said well and having free communication with the cavity thereof, a piston having a dip-aperture therethrough movable within said cylinder, said piston being fitted fluid-tight within said cylinder and held by frictional contact in operative or in-operative position, and means for limiting the movements of said piston, substantially as specified.

10 3. In combination with an ink-well, a cylinder extending into said well and having free communication with the cavity thereof, a piston having a dip-aperture therethrough movable within said cylinder, said piston being provided with a packing for forming a fluid-tight connection with said cylinder and by frictional contact holding said piston in depressed or elevated position, substantially as specified.

20 4. In an inkstand, a well, a cap for closing the mouth thereof, a cylinder extending into

said well, a vent through said cap, in combination with a piston having a dipping-cup and an aperture leading therefrom to said well, and means for regulating and limiting the extent of the movement of said piston within said cylinder, substantially as specified. 25

5. In an inkstand, a well, a cap for closing the mouth thereof, a cylinder extending into said well, in combination with a piston having a dipping-cup therein and an aperture leading therefrom to said well, a screw-threaded projection depending from said piston, and a cross-bar thereon, substantially as specified. 30

In testimony whereof I have hereunto signed my name, in the presence of the subscribing witnesses, this 3rd day of May, 1900. 35
GEO. PELLINGER.

Witnesses:

M. DITTENHOEFER,
THEO. G. SHMITZ.