

No. 719,384.

PATENTED JAN. 27, 1903.

C. L. SMITH.
INKSTAND.

APPLICATION FILED FEB. 28, 1902.

NO MODEL.

Fig. 1.

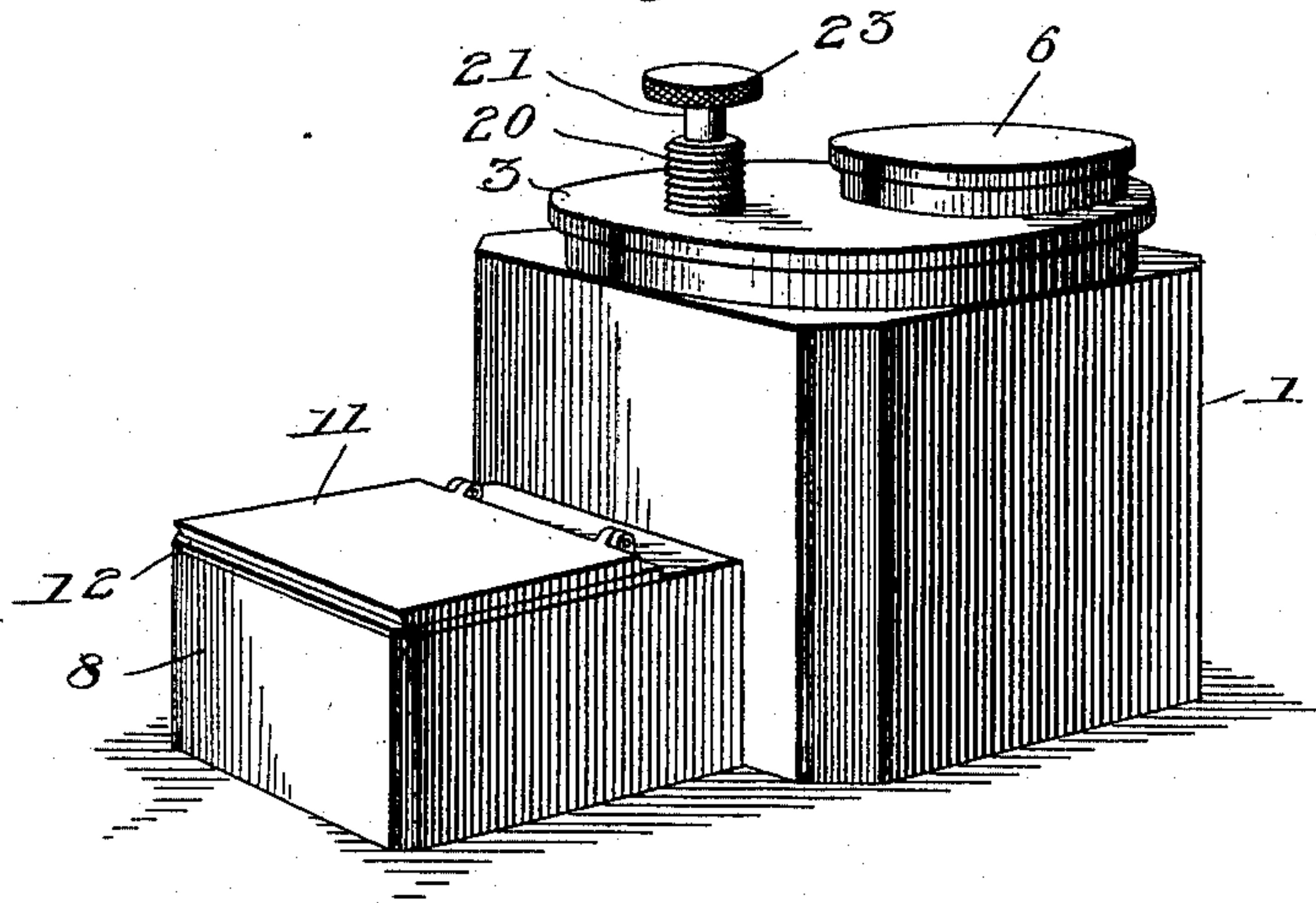


Fig. 2.

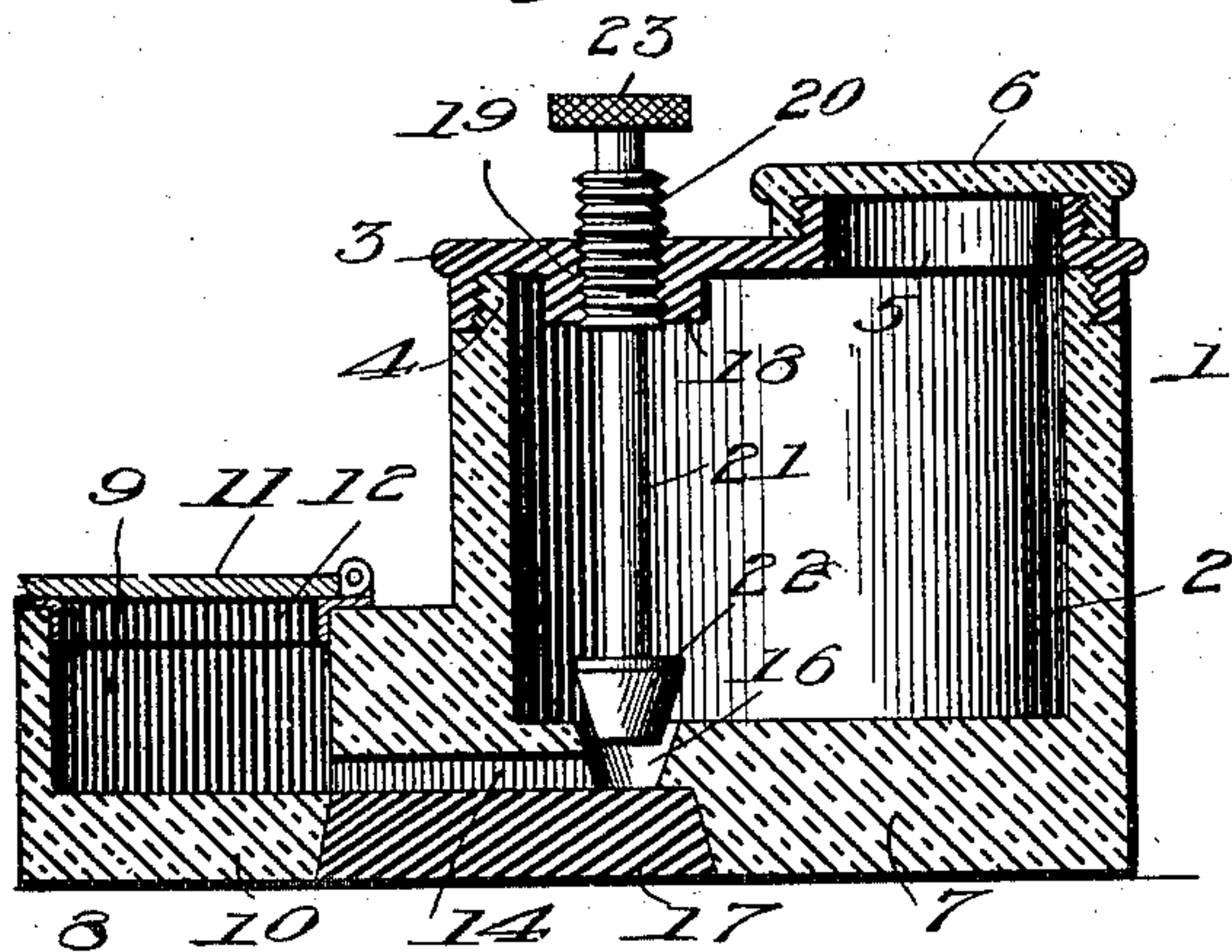


Fig. 3.

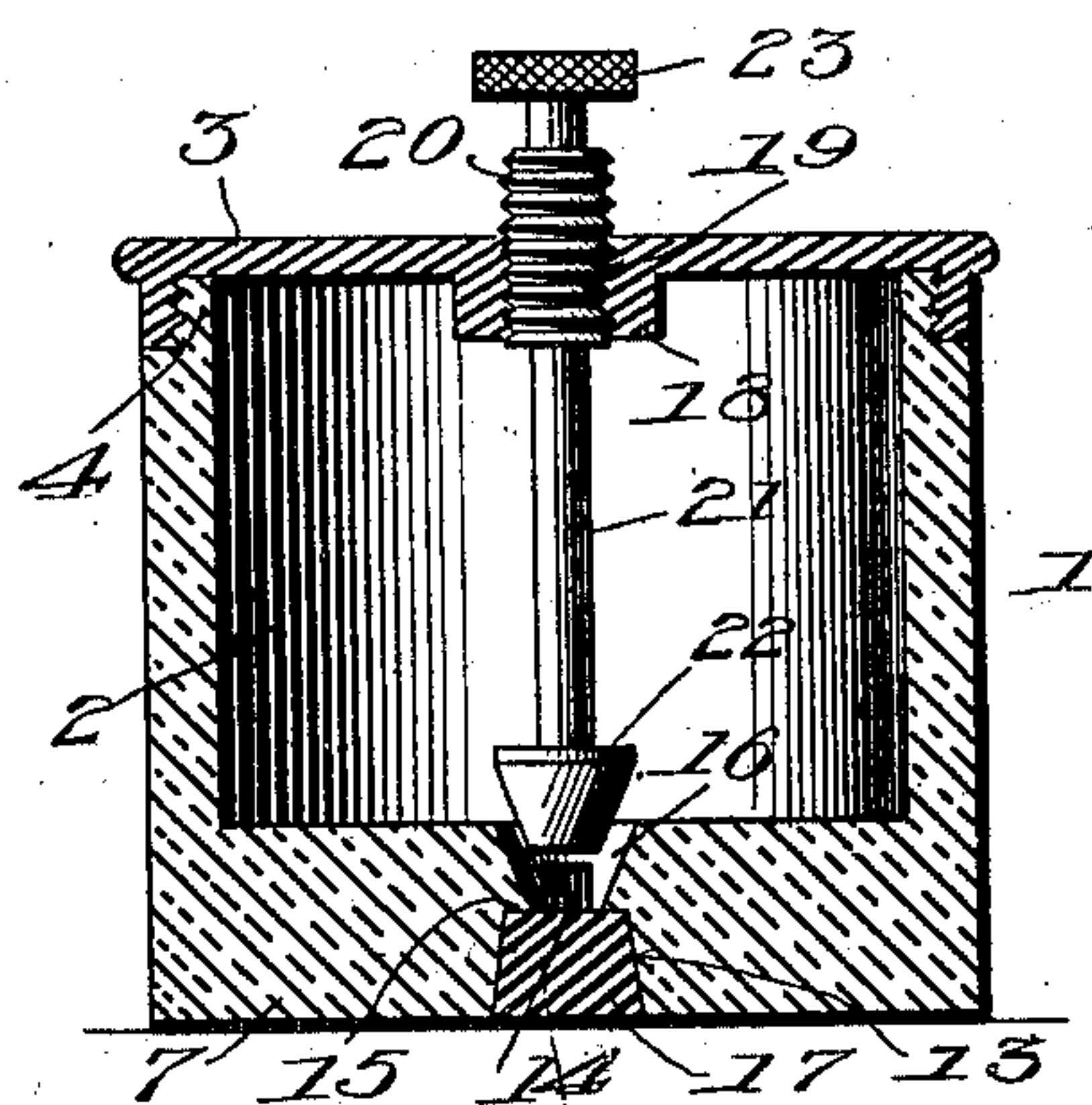
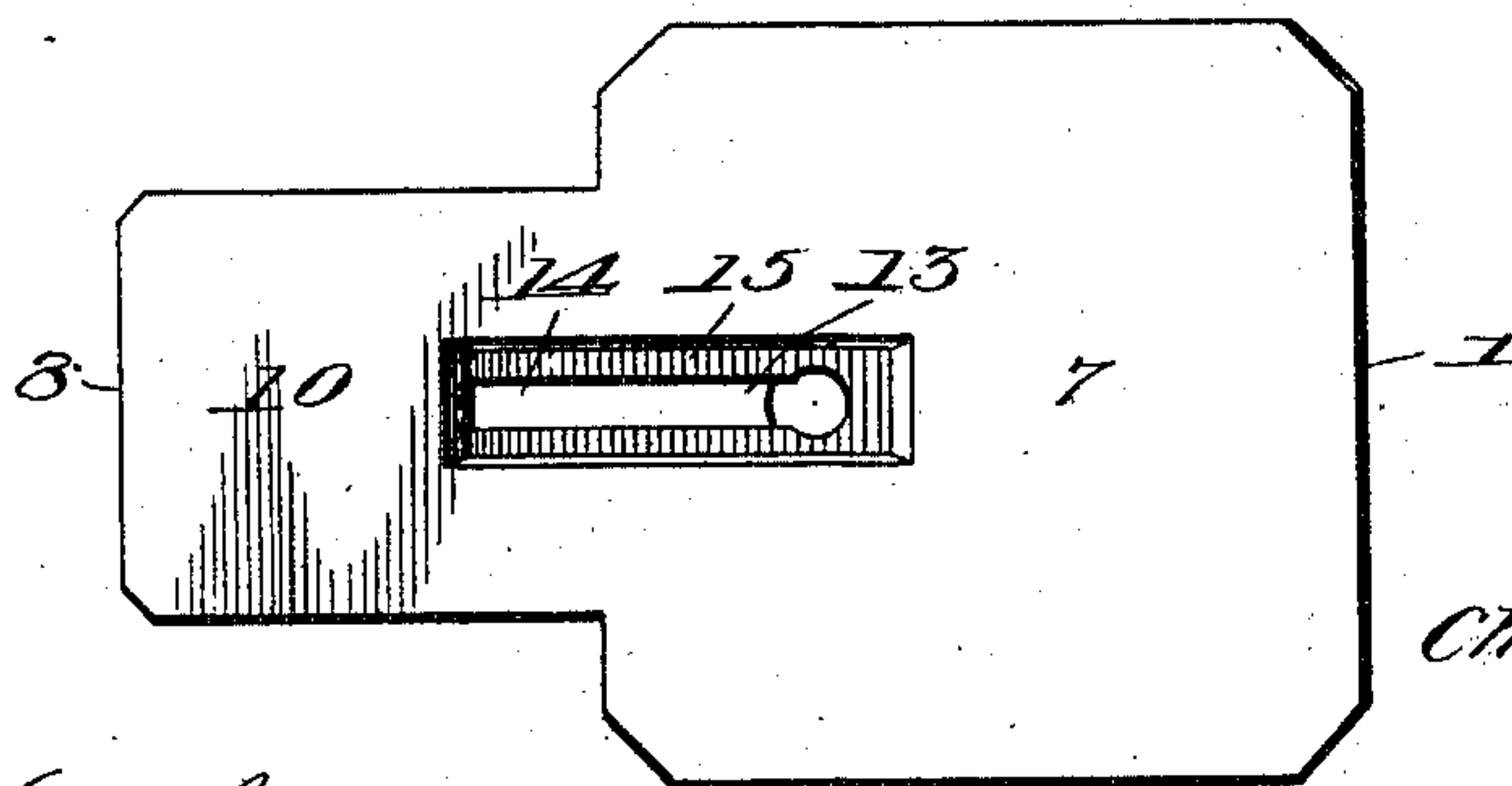


Fig. 4.



Witnesses

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INKSTAND.

SPECIFICATION forming part of Letters Patent No. 719,384, dated January 27, 1903.

Application filed February 28, 1902. Serial No. 96,141. (No model.)

To all whom it may concern:

Be it known that I, CHESTER L. SMITH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Inkstands, of which the following is a specification.

This invention refers to inkstands of the reservoir type; and the primary object of the same is to provide an inkstand of a simple and effective construction having structural features which will cause it to contain at the delivery-point such a depth of ink only as will supply the exact amount of ink needed on a pen when the point of the pen is inserted into the delivery means without liability common in ordinary inkstands of an excess of ink on the pen sometimes dropping from the pen and at other times smearing the penholder or the fingers of the writer.

The improved inkstand is preferably molded from glass and embodies a reservoir, an ink-delivering chamber connected to the reservoir by a conduit, and a positively-operating screw-stem carrying a valve controlling the flow of ink from the reservoir into the delivery-chamber by engaging a portion of the conduit, the latter being constructed in a particular manner to conform to the art of glass-molding, and all the parts of the inkstand are likewise shaped and disposed to render the use of a plunger practical, as in glasswork, and thereby permit the improved device to be practically and economically produced. Furthermore, the flow of the ink from the reservoir to the delivery-chamber may be conveniently controlled to maintain a uniform depth in the said chamber by a simple manipulation of the screw-stem and its valve.

In the drawings, Figure 1 is a perspective view of an inkstand embodying the features of the invention. Fig. 2 is a longitudinal vertical section thereof, showing the conduit between the reservoir and the delivery-chamber as open. Fig. 3 is a transverse vertical section through the stand, showing the conduit between the reservoir and delivery-chamber closed. Fig. 4 is a bottom plan view of the inkstand, showing the manner of forming the conduit between the reservoir and the delivery-chamber or dip-cup.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates the main body of the improved inkstand, in which is formed a reservoir 2, closed by a cover 3, engaging a top rim 4, the cover also having an upstanding rim 5 with a removable cap 6, by which the reservoir is made accessible for the purpose of replenishing the supply of ink therein. The bottom 7 of the body is thicker than the sides, and projecting from the front of the body at the bottom is an offset 8 of suitable dimensions, and therein is formed a delivery-chamber or dip-cup 9 of a depth approximately equal to that of a pen or the distance upwardly from the pen it is desired the ink shall be applied when the writer inserts the pen in the said chamber or dip-cup. The base 10 of the chamber or dip-cup is continuous with the base 7 of the main body 1, and the offset occupies such an angular position in relation to the side of the main body from which it extends as to render its formation practicable in the ordinary methods of glass-molding and without obstructing the operation of the plungers ordinarily employed in pressing glass into shape in accordance with certain patterns. The chamber or dip-cup 9 is adapted to be covered by a hinged lid 11, suitably connected at its rear edge and located at such distance in advance of the adjacent side of the main body that when it is raised it will fall back against said side and remain in open position. To render the application of the lid 2 successful, a flanged sleeve or collar 12, of metal or other suitable material, is inserted in the upper portion of the delivery-chamber or dip-cup, and the flange thereof bears on the top of the offset adjacent to the entrance to said chamber or cup. To the flange of the sleeve or collar 12 the lid 11 is secured, these features being applied by any of the well-known methods after the main inkstand structure has been completed.

In pressing or molding the main features of the improved inkstand, including the body 1 and the offset 8, a slot 13 is simultaneously formed in the bottom 7 and a portion of the bottom 10 of the said offset, the said slot having upwardly and inwardly beveled side and

end walls. Continuing upwardly from the center of the top wall of the said slot is a recess 14 of less width than the slot, so that a shoulder 15 is formed along the lower portion of the side walls of said recess and at the one end, the said shoulder being of considerable width and affording a reliable bearing-surface for a purpose which will be presently set forth. Simultaneously with the formation of the slot 13 and recess 14 a vertical inverted conical-shaped opening 16 is constructed in the lower portion of the reservoir close to the front wall thereof and extends through the rear part of the recess 14, the said opening forming a seat and extending downwardly fully to the lower termination of the recess. After the main structure of the inkstand has been molded and pressed into shape the slot 13 is closed by inserting therein a glass, rubber, or other strip 17, or a thin piece of glass may be placed against the shoulder 15 and a filling of cement applied thereover. The purpose of this strip 17 or filling, as the case may be, is to form a conduit through the use of the recess 14 and establish means of communication between the reservoir 2 and the delivery-chamber or dip-cup 9, the rear end of the said conduit opening into the seat 16, as clearly shown by Fig. 2.

The cover 3 is constructed with a depending boss 18, and therethrough and through the portion of the cover immediately above an opening is formed and screw-threaded, as at 19, to adjustably receive the enlarged screw-threaded member 20 of a stem 21, having a plug or valve 22 on its lower end, which is constructed of rubber or other suitable material and of approximately the same dimensions and shape as the seat 16, into which it is adapted to be adjusted to close communication between the reservoir 2 and the chamber or dip-cup 9 or elevated to any suitable or desired degree to permit the ink to flow from the said reservoir into the chamber or dip-cup. The stem 21, together with its screw-threaded member 20, will be constructed of any material best adapted for the purpose, and above the screw-threaded member is a milled or roughened head 23, whereby the stem of the plug or valve at the lower end thereof may be adjusted from the exterior. It will be seen that this stem is positively moved either to open or close the plug or valve 22 and the use of springs is entirely dispensed with, in view of the fact that such devices become weak and lose their resilient force, and hence valves held down by springs, owing to the inconstant character of the latter, are permitted to move and leakage ensue, which in the present case would be detrimental to the operation of the inkstand and permit ink to pass from the reservoir into the delivery-chamber or dip-cup at times when it was not necessary. Moreover, it will be seen that the plug or valve 22 is operated from above the plane of the conduit and moves downwardly into and upwardly from its seat

and is thereby not affected by the weight of the ink within the reservoir.

In the operation of the device the reservoir 2 is first supplied with a charge of ink by removing the cap 6, and afterward the latter is replaced. The plug or valve 22 is then elevated to establish communication between the reservoir and the delivery-chamber or dip-cup and the ink is permitted to flow into the latter until a proper level is reached, when the plug or valve 22 is immediately moved into its seat to shut off communication between the reservoir and the delivery-chamber or dip-cup. When the ink in the delivery-chamber or dip-cup gradually diminishes by use and other causes, it can be replenished to keep the quantity uniform therein by slightly opening the plug or valve 22 and permitting a few drops or a small portion of the ink to pass from the reservoir into the delivery-chamber or dip-cup.

As before explained, the several structural features of the improved inkstand are such as to make it practicable to form the main portions of the device from glass and permit the use of the bearing-plungers and analogous devices commonly employed in the art of glass manufacture. The structure of the improved inkstand is also such as to render the use of the same exceptionally convenient, and, furthermore, the reservoir-conduit and delivery-chamber or dip-cup can be easily cleaned when found necessary to remove sediment or other deposits. The use of ink in the improved device is also economical, in view of the fact that a comparatively small portion of the ink is permitted to pass into the delivery-chamber or dip-cup, and the disadvantages arising from accidental evaporation are materially overcome. A further advantage is that the conduit formed by the recess 14 in the manner explained enters the bottom portion of the delivery-chamber or dip-cup and causes the latter to be gradually filled when the plug or valve 22 is open, and the numerous inconveniences present in ordinary atmospheric inkstands are absent in the present structure.

Having thus fully described the invention, what is claimed as new is—

An inkstand comprising a body and an offset formed of a single piece of material and having a reservoir and a delivery-chamber therein, the body being formed at the base with a slot communicating with a recess and a seat, the slot being closed by a filling inserted therein to form a recess into a conduit, and a screw-stem having a closing device to engage the said seat and control communication between the reservoir and delivery-chamber.

In testimony whereof I affix my signature in presence of two witnesses.

CHESTER L. SMITH.

Witnesses:

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BLANCHE CHADWELL.