A. G. PROKOPOVITSH.

INK WELL.

APPLICATION FILED JULY 19, 1904.

NO MODEL.



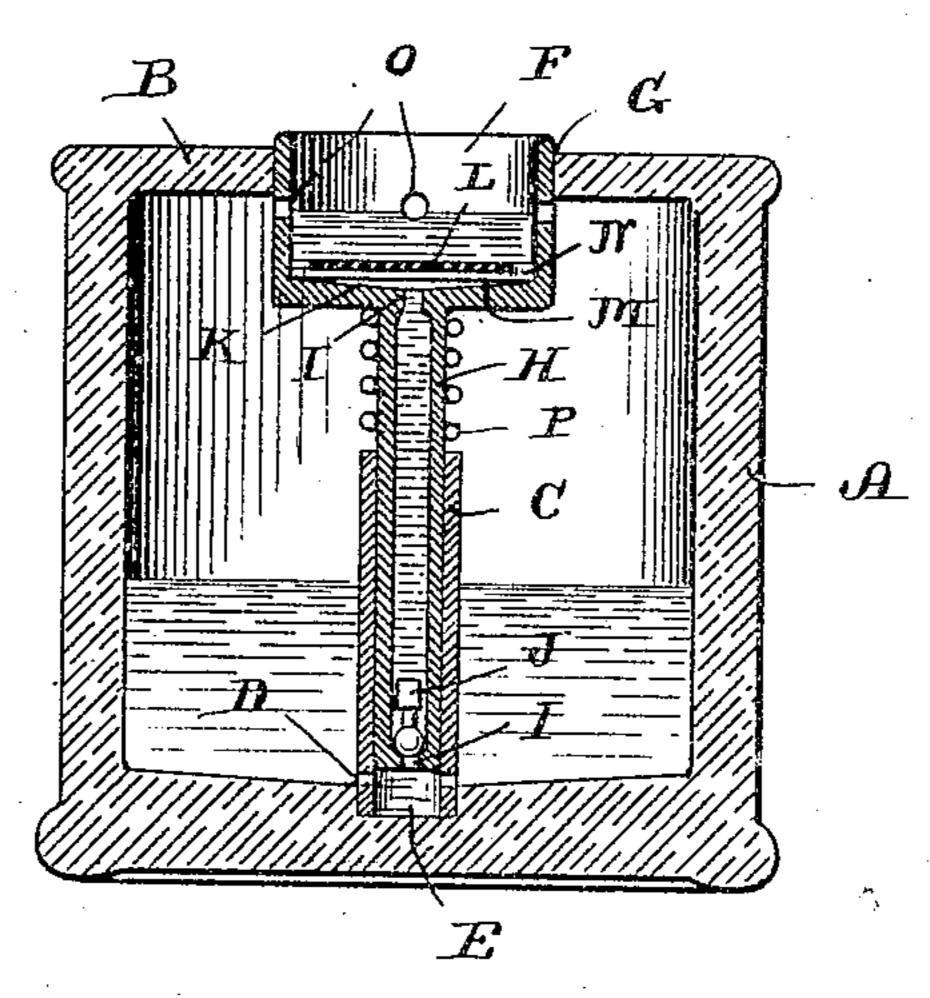


Fig. 1.

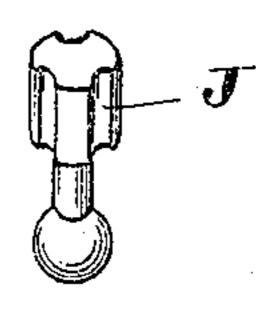


Fig. 2.

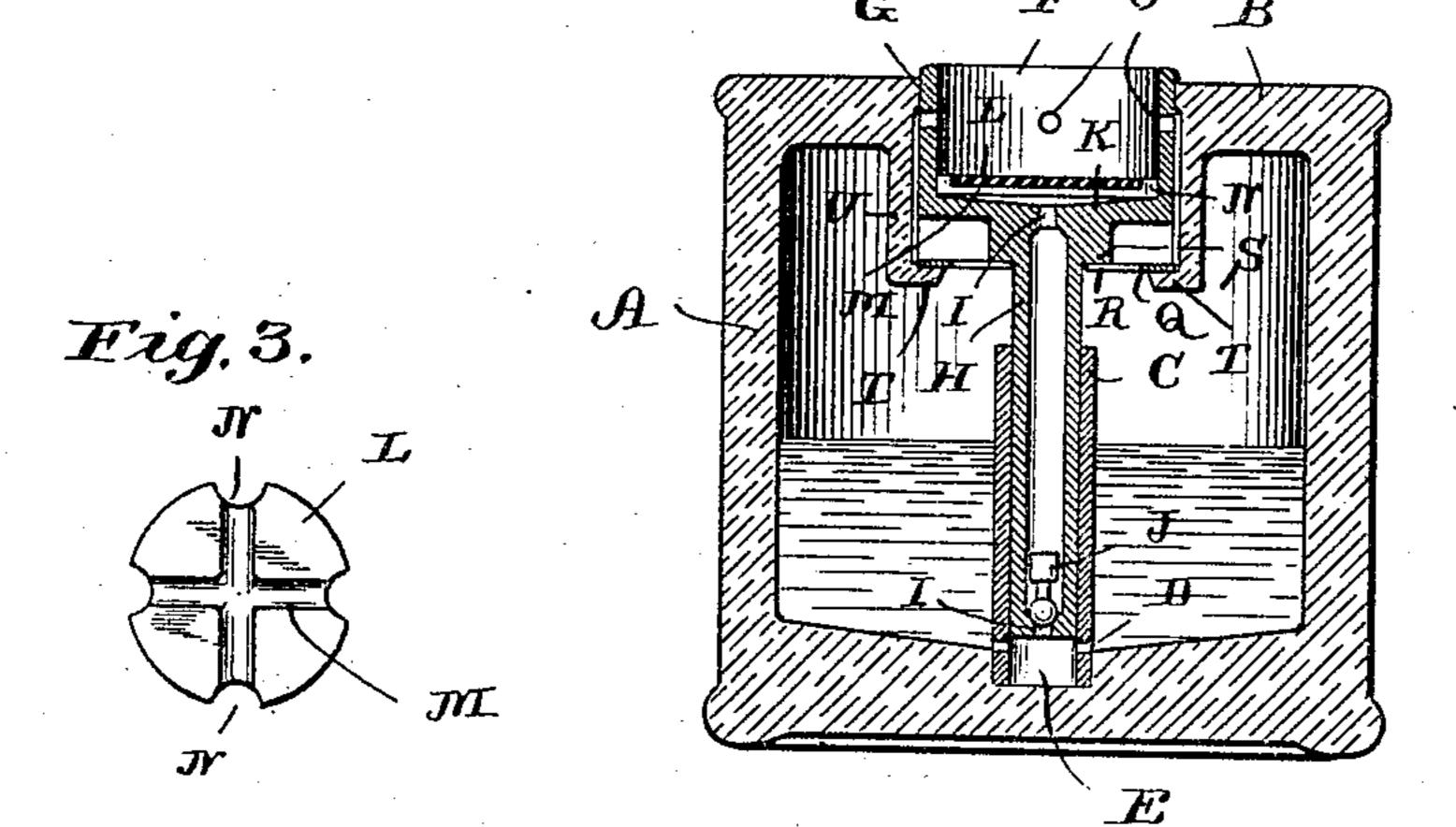
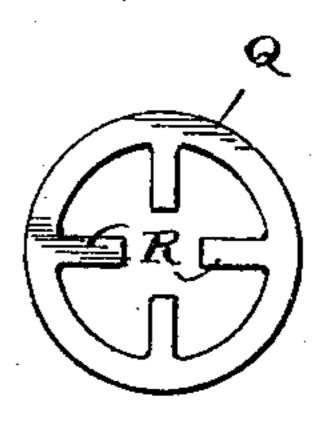


Fig.5.



Witnesses

Alex. L. DE Laney, Ruth Caymond, Andrew G. Prokopovitsh

Chamberlain + Newman

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United States Patent Office.

ANDREW G. PROKOPOVITSH, OF BRIDGEPORT, CONNECTICUT.

INK-WELL.

SPECIFICATION forming part of Letters Patent No. 773,892, dated November 1, 1904.

Application filed July 19, 1904. Serial No. 217,224. (No model.)

To all whom it may concern:

Be it known that I, Andrew G. Prokopovitsh, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Ink-Wells, of which the following is a specification.

My invention relates to a new and improved construction of ink-well and belongs to that class wherein the ink is automatically fed up into a receiver for use as required, affording a uniform quantity of ink available at all times.

It is the object of my invention to improve upon wells of this class by generally simplifying, cheapening, and bettering their construction, to provide a receiver having an automatic feed and means to insure an equal quantity of ink therein at all times, to afford a uniform depth of dip for the pen-point, to arrange it so that the ink will not evaporate from the well and will exclude the dust, and finally to provide a cushion-bottom in the ink-receiver to prevent injury to the point of the pen when dipped.

With the above and other minor objects in view my invention resides and consists in the novel construction and combination of parts shown upon the accompanying sheet of draw-ings, forming a part of this specification, upon which similar characters of reference denote like or corresponding parts throughout the several figures, and of which—

Figure 1 shows a central vertical cross-sec-35 tion through my improved ink-well complete, the operative receiver being in its normal or raised position. Fig. 2 is a similar vertical cross-section of a slightly-modified form of construction of my well, which modification 4° resides principally in the substitution of a different form of spring for actuating the receiver. Fig. 3 is an inverted plan view of a rubber cushion-disk, which I employ in the bottom of the receiver, against which the pen may contact when dipped. Fig. 4 is a detail perspective view of a movable valve-body, such as I use in the tubular stem of my receiver; and Fig. 5 is a plan view of the flat spring employed in the modified construction 50 shown in Fig. 2 for retaining the receiver in 1

its normal position, as will later be more fully explained.

Referring in detail to the characters of reference marked upon the drawings, A indicates the well or bottle as a whole, which is preferably formed of glass or porcelain, as shown. This bottle is shown having an integral cover B, it, however, might be formed separately, if desired. Within the well and central of its bottom is arranged a tubular guide C, 60 which in practice is cast into the glass when formed and is provided with ports D to permit the ink to pass from the well into the pocket E.

F represents the receiver, which is prefer- 65 ably constructed of metal and of a cup-like formation, loosely fitted in a suitable circular opening G through the top of the well. This receiver is provided with a central depending tubular stem H, having contracted 70 necks I at each end and a valve J resting on a seat of the lower end and finished to accommodate said valve, as shown in Figs. 1 and 2.

The inside of the bottom K of the receiver is slightly tapered, as shown, but may be flat, 75 if preferred. A specially-constructed disk L, as shown in Figs. 1, 2, and 3, is provided in the bottom of the receiver to form a cushion for the pen-point and also to prevent the ink spouting up through the tube should it be 80 pressed down violently. This disk is preferably formed of rubber or some similar soft material and is provided with radial grooves M and openings N to permit the ink to pass thereunder and up into the receiver. This 85 cushion-disk is made detachable to allow for repairs or substitution should it become worn or destroyed or should cleansing become necessary. A series of overflow-holes O are provided through the sides of the receiver to 90 allow the ink to flow back into the well should an excessive amount rise therein, thus insuring a uniform depth of ink in said receiver at all times, which of necessity gives a uniform depth of dip for the pen-point, as is highly 95 important in a practical well.

Around the depending tubular stem of the receiver and intermediate of the bottom of such receiver and the top of the tubular guide C, I arrange a spiral spring P, which is de-100

signed to hold the receiver up to the normal position (shown in Fig. 1) and to insure the return of such receiver to said position with

each stroke or contact of the pen.

In the modification shown in Fig. 2 I have shown a slightly-different form of spring from that illustrated in Fig. 1, which in some instances might be more desirable, and in Fig. 5 I have shown a detail of such modified spring and 10 designated it as Q. It consists of a ring-like member, having inwardly-disposed ends R, which engage a shoulder S of the tubular stem of the receiver. The ring part preferably rests upon inwardly-disposed lugs T of 15 depending arms U, formed integral with the top or cover.

From the foregoing construction it will be obvious that the receiver is provided with a uniform supply of ink through its manipula-20 tion by the writer, who, when dipping the pen into the receiver, forces the same down, more or less, in accordance with the weight or stroke of the pen, thus shoving the tubular stem of the receiver down into the pocket of 25 the guide past the ports and compressing the ink in such pocket in a way to compel it to rise up past the valve-body into the tube and thence up under the cushion into the receiver for use. If an excessive amount of ink accumulates in the receiver, it may overflow from time to time through the holes in the side of the compartment, as will be apparent. It will of course be understood that the amount of the feed from the well into the receiver 35 depends upon the force of the stroke and the length of the movement of the stem of the receiver. In practical operation it is not necessary that this receiver must be manipulated with each dip of the pen, for the reason that 4° the device feeds freely and will readily provide an ample supply with only an occasional operation of the receiver. It will be further apparent that this receiver is not necessarily operated by the point of the pen contacting 45 with the cushion-disk in the bottom, for in practice the end of the penholder could for convenience be made to engage the top rim or edge of the receiver with the dipping of the pen in a way to force the receiver down 5° sufficiently to effect the feed, as will be readily appreciated.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent. is—

1. In an ink-well of the class described, the combination with a bottle having a central vertical tubular guide with ports therethrough and a pocket in its lower end, of a vertical movable receiver provided with overflow-60 openings, guides for the receiver, a spring to

retain the receiver in a normal raised position, a tubular stem connected with and depending from the receiver and fitted into the tubular guide, a valve in said stem, and a flexible cushion-disk in the bottom of the receiver.

2. In an ink-well of the class described, the combination with a well, of guides therein, a receiver mounted in said guides provided with overflow-openings and having a depending tubular stem carrying a valve, a pocket be- 70 neath the stem, a guide adapted to receive such stem, a spring to normally retain the receiver and stem in their raised position, and a cushion-disk in the bottom of the receiver provided with radial grooves upon its under 75 side to permit the ink to feed thereunder to the receiver from the tubular stem.

3. In an ink-well of the class described, the combination with a suitable receptacle, of a tubular guide mounted in the bottom thereof 80 and forming a pocket below the level of the bottom of the receptacle with ports leading therein, a vertical movable spring-actuated receiver having a depending tubular stem fitted in said guide, a valve in its lower end ad- 85 jacent to the pocket before mentioned.

4. In an ink-well of the class described, the combination with a receptacle, of a tubular guide secured in its bottom with ports leading therethrough to allow the ink to flow into 9° its lower end, a tubular stem fitted in said guide provided with a valve and carrying an ink-receiver on its upper end into which the ink is fed through said tubular stem, a flexible disk in the bottom of the receiver over 95 the opening from said stem, and bearing ink-

passages to pass the ink into such receiver, and a spring to normally hold said receiver and tubular stem in their normal raised positions.

5. In an ink-well of the class described, the combination with a receptacle, of a tubular guide fitted therein bearing a pocket in its lower end and ports leading thereto, a receiver provided with overflow-openings and bearing 105 a depending tubular stem fitted in the guide before mentioned, a check-valve to admit the ink therethrough into the receiver, a spring to normally hold the receiver in an extended position, and a flexible disk in the bottom of 110 the receiver with suitable ink-passages to permit the ink to pass from the tube into the re-

ceiver. Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 15th day 115 of July, A. D. 1904.

ANDREW G. PROKOPOVITSH.

Witnesses:

C. M. NEWMAN, RUTH RAYMOND.

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