(No Model.)

J. R. BALSLEY.

INK WELL.

No. 569,162. Patented Oct. 13, 1896.

Fig. 1.

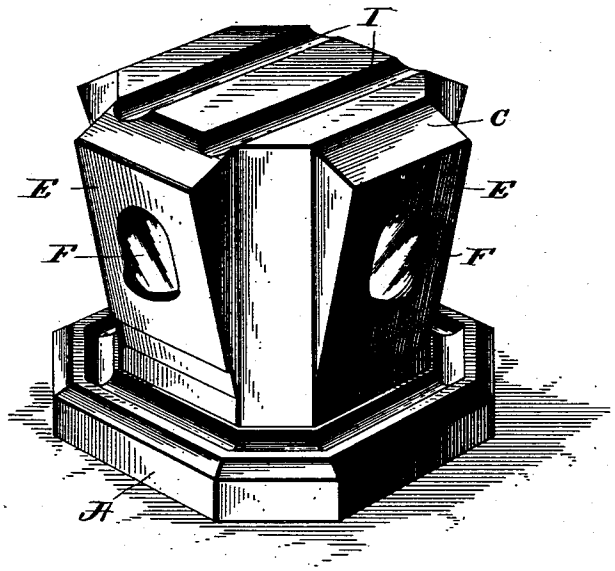
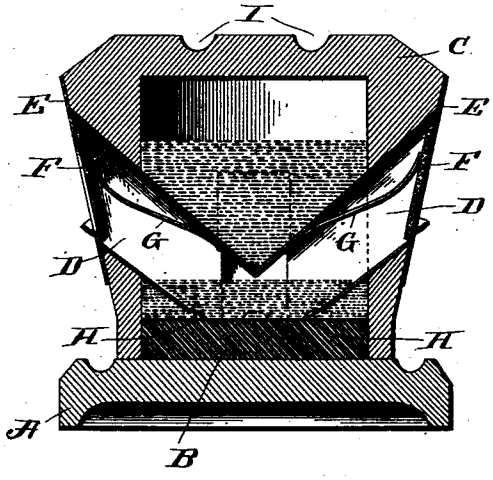


Fig. 2.



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JAMES R. BALSLEY, OF CONNELLSVILLE, PENNSYLVANIA.

INK-WELL.

SPECIFICATION forming part of Letters Patent No. 569,162, dated October 13, 1896.

Application filed January 29, 1896. Serial No. 577,287. (No model.)

To all whom it may concern:

Be it known that I, JAMES R. BALSLEY, a citizen of the United States, residing at Connellsville, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Ink-Wells, of which the following is a specification.

My invention relates to a new and useful improvement in ink-wells, and has for its object to provide such a device which will be air-tight and consequently prevent evaporation of the ink when not in use and also prevent the accumulation of dust in the well, and its further object is to maintain a given depth of ink in the pen-tubes.

With these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by letters to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a perspective of my improved well, and Fig. 2 a central vertical section thereof.

Similar letters denote like parts in both views of the drawings.

Referring to the drawings, A is the base of the well, having formed or placed thereon a boss B, preferably of rubber or cork, outside of which the casing C is adapted to fit snug enough to prevent the passage of ink between said boss and the open end of the casing.

Formed in the sides of the casing, which is preferably approximately rectangular in shape, are suitable openings in which the outer ends of the tubes D are secured. These tubes are inclined downward and conveyed to a given center, where they are preferably united, as shown in Fig. 2, so that the pen may be inserted within the well from either side thereof and immersed in the ink, which stands at a given level in the bottom of the tubes at their junction. The outer ends of the tubes are covered by the escutcheons E, through which are openings of sufficient size to readily insert a pen, and these openings are closed by hinged doors F, normally held in place by the plate-springs G, each having one of its ends secured to its tube and the other end adapted to bear against the door. Thus it will be seen that normally the well is closed against the access of either air or dust and therefore no evaporation can take place, but when it is desired to gain access thereto with a pen it is only necessary to thrust said pen against the outer surface of one of the doors, by which the latter will be forced back against the action of its spring and the pen given free access to the ink.

As soon as the pen is withdrawn from the tube the door immediately closes against the escutcheon, thereby again excluding air or dust from the interior of the well. The advantage of this arrangement will be well understood, since the open well readily accumulates dust and at the same time evaporation is constantly going on, so that it must be cleansed and refilled once in forty-eight hours to be of service, whereas by the use of my improvement, unless withdrawn by a pen, the ink will remain indefinitely in the well without deterioration; and another advantage of my improvement is that should the well be turned upside down by accident the ink cannot flow therefrom, which is not the case with the ordinary open well. The level of the ink within the tubes is maintained by atmospheric pressure on account of the air being permitted to enter only through the tubes and therefore bearing upon the upper surface of the ink within the tubes, so as to hold it back against inflow from the well proper, as is well understood.

The ink is admitted from the well to the tubes through the openings H, which are below the normal surface of the ink within these tubes, and therefore when enough ink has been withdrawn from the tubes to reduce its level sufficient to permit the air to gain access through these openings more ink will be supplied to said tubes.

In filling the well it is turned upside down, the base removed, and a new supply of ink poured therein, when the base is refitted to the open end of the casing by forcing the boss therein. The well then is turned right side up, when it is ready for use.

I do not wish to be limited to the exact con-

struction as shown and described, as this may be varied without departing from the spirit of my invention. For instance, a single tube may be used instead of the four shown, thus producing a well with but one pen-compartment, which for some purposes is preferable to a multiple well, and instead of making the casing and base separate they may be made in one and an opening formed at the bottom and provided with a suitable cover or cork for closing the same after the well has been filled therethrough.

In designing the well provisions may be made for supporting one or more pens by providing the grooves I.

In the drawings I have shown a groove J, which extends around the outer edge of the base and serves to catch and retain any ink which may fall from the pen, so as to prevent soiling the desk upon which the well stands.

It may also be found desirable when the base and casing are formed of one piece to make an opening in the bottom, through which the well is filled, and this opening would be closed by a cork or other stopper and would obviate the necessity of having to remove the base from the well when it was to be filled.

Having thus fully described my invention, what I claim as new and useful is—

1. In an ink-well, a casing, tubes leading into said casing, a base, a boss on said base adapted to fit in the casing and close the ends of the tubes, as and for the purpose described.

2. An ink-well consisting of a casing and a base, the latter having a boss projecting upward therefrom adapted to fit the open end of the former, one or more tubes projecting through the casing into the reservoir at an angle and terminating in contact with the boss, escutcheons secured to the casing over the ends of the tubes, doors hinged to said escutcheons and adapted to normally hold said doors in a closed position and permit them being forced open by a pen substantially as and for the purposes set forth.

3. In an ink-well, a casing, tubes leading into said casing, a boss adapted to fit within the casing and close the ends of the tubes and notches in the lower ends of the tubes forming inlets with the boss, as and for the purpose described.

4. The herein-described combination of a base A and casing C having a reservoir formed therein, boss B, adapted to close the lower end of the casing and form a bottom for the reservoir, tubes G, projecting through said casing and into the reservoir terminating in contact with the boss, openings H, formed in the lower end of the tubes whereby ink is fed from the reservoir to the tubes and a given level maintained, escutcheons E, secured to the outer surfaces of the casing having openings formed therethrough which register with the tubes, doors F, pivoted to said escutcheons and adapted to close the openings therein, and springs G adapted to close and hold the doors in their closed position and permit them being opened when sufficient pressure is brought thereon substantially as and for the purposes set forth.

5. In an ink-well, an air-tight reservoir, one or more tubes leading into said reservoir at an angle and having their inner ends sealed by bearing against the bottom of the reservoir and an inlet formed in each tube between the edge of the tube and the bottom of the reservoir, as and for the purpose described.

6. In an ink-well, an air-tight reservoir, a number of tubes leading into said reservoir, said tubes having their inner ends joined together and sealed by bearing on the bottom of the reservoir and an inlet formed in each tube between the edge of the tube and the bottom of the reservoir, as and for the purpose described.

7. In an ink-well, a reservoir, tubes leading into the reservoir a boss composed of elastic material adapted to fit in the bottom of the reservoir and seal the lower ends of the tubes and inlets in said tubes, as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

JAMES R. BALSLEY.

Witnesses:
S. S. WILLIAMSON,
M. PIERCE.