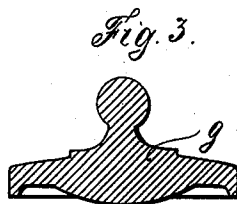
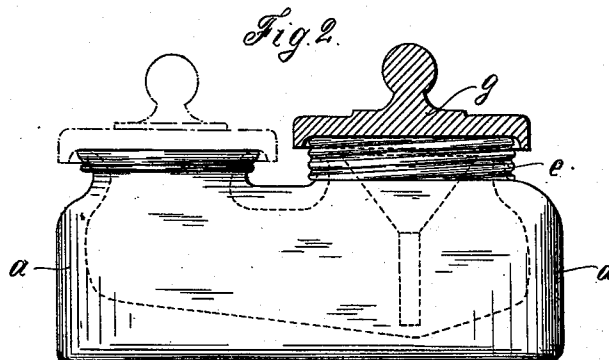
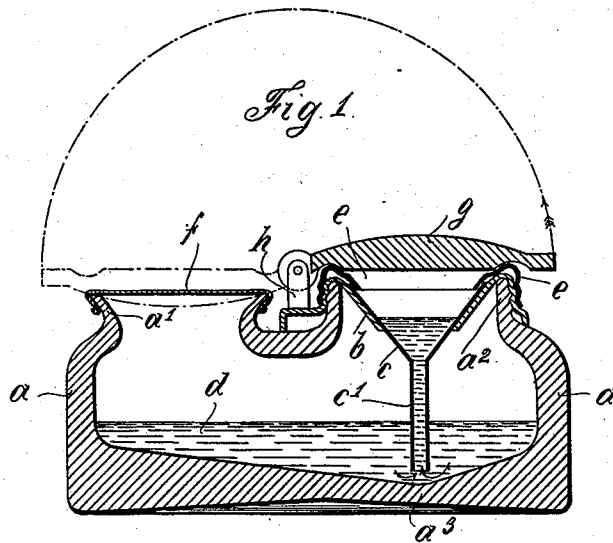


(No Model.)

E. RUDOLPH.
INK WELL.

No. 570,959.

Patented Nov. 10, 1896.



Witnesses:
Arthur Wallner
Emil Kasper

Inventor:
Emil Rudolph
by *W. S. Ditzler*
Attorney.

UNITED STATES PATENT OFFICE.

EMIL RUDOLPH, OF BERLIN, GERMANY, ASSIGNOR OF ONE-HALF TO HERMANN HURWITZ & CO., OF SAME PLACE.

INK-WELL.

SPECIFICATION forming part of Letters Patent No. 570,959, dated November 10, 1896.

Application filed June 10, 1895. Serial No. 552,328. (No model.)

To all whom it may concern:

Be it known that I, EMIL RUDOLPH, a subject of the King of Prussia, German Emperor, and a resident of Berlin, Kingdom of Prussia, German Empire, have invented an Improved Ink-Well, of which the following is an exact specification.

This invention refers to ink-wells in which a small portion of the ink may be transferred into a special dipping-cup that may be emptied after use. My improvements in ink-wells of said kind relate to the use of a diaphragm arranged upon a special opening of the ink vessel and adapted to compress the air within said vessel, so as to cause said air to force a part of the ink into the dipping-cup. The purpose of my improvements is to avoid any stirring of the ink or of the sediments of the same, respectively, on the transfer of the same and to prevent the ink from being evaporated as well as covered with dust.

In order to make my invention more clear, I refer to the accompanying drawings, in which similar letters denote similar parts throughout the different views, and in which—

Figure 1 is a vertical longitudinal section through my improved ink-well. Fig. 2 is a side view of a slightly-modified form of construction, partly in section. Fig. 3 is a vertical section through a detail of Fig. 2.

Referring to Fig. 1, *a* designates the ink vessel, which is provided with two necks *a'* *a*². The opening of the latter contains the funnel *c*, which is supported by a hopper *b*, the bent rim of which takes over the neck *a*². The funnel *c* is provided with a tube *c'*, reaching down into the ink *d*. Said tube *c'* terminates shortly above the bottom *a*³ of the vessel *a*. Said bottom is sloping, and the deepest portion of the same is situated exactly below the opening of the neck *a*² or below the lower end of funnel-tube *c'*, respectively.

The funnel *c*, which forms the dipping-cup of the ink-well, is held upon the hopper *b* by means of a screw-cap *e*, which at the same time serves as a support for the lid or cover *g*. The latter is hinged to the projection *h*.

The opening of neck *a'* is closed by means of the diaphragm *f*, which may consist of any

suitable elastic material, preferably india-rubber. If a pressure is exerted upon said diaphragm *f*, the air contained within the vessel *a* will be compressed, and will thus cause a part of the ink to enter the tube *c'* and the funnel or dipping-cup *c*. The pressure exerted upon the diaphragm *f* is, as a matter of course, to continue as long as the ink is used, and I therefore prefer to produce said pressure by means of the lid or cover *g*, which for this purpose is made as a rather heavy body and with a suitable configuration.

When the inkstand is to be used, the lid or cover *g* needs simply to be turned upon the hinge *h*, so as to get upon the diaphragm *f*. The upper surface of the heavy part *g* is of convex shape, and is thus adapted to press the diaphragm down into the interior of the vessel *a*, so as to compress the air within said vessel and to force part of the ink up through tube *c'* into the funnel *c*.

The heavy cover need not be fastened to the vessel *a* by means of a hinge or the like, but may be perfectly detachable, as shown in Fig. 2. The convex portion of the cover is in this case arranged upon the lower side of the same, as shown in Fig. 3.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

In an ink-well having a special dipping-cup inserted into an opening of the ink vessel, and a diaphragm placed over another opening of said vessel, the combination with the said two parts, of a heavy cover or lid arranged to be put over from said dipping-cup to said diaphragm, and having a projecting portion adapted to press the said diaphragm down into the respective opening under the weight of said cover or lid, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EMIL RUDOLPH.

Witnesses:

THERESE HERPICH,
CL. BROCKHAUS.