

1,083,861.

Patented Jan. 6, 1914.  
 2 SHEETS—SHEET 1.

Fig. 1.

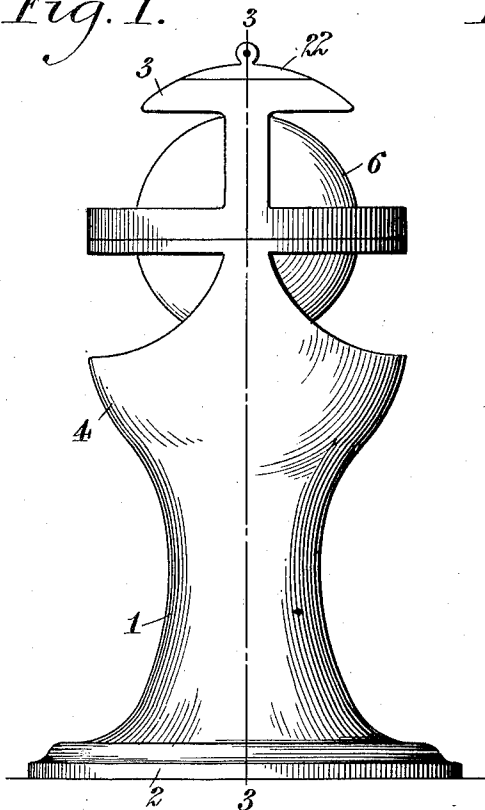


Fig. 3.

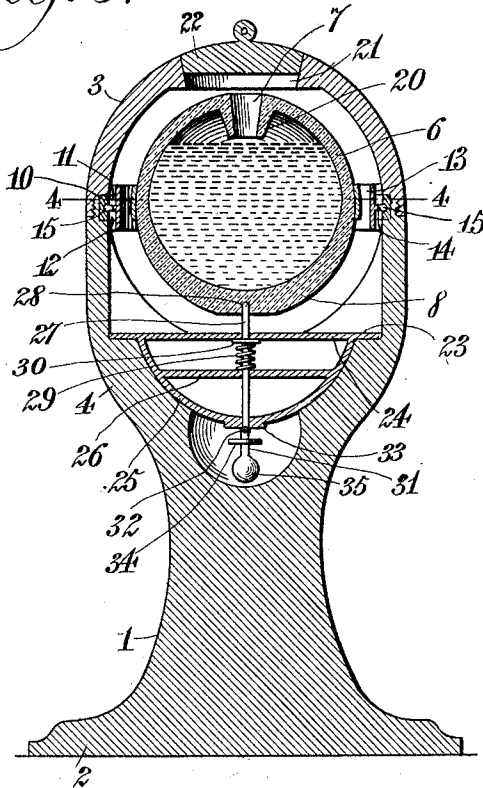


Fig. 2.

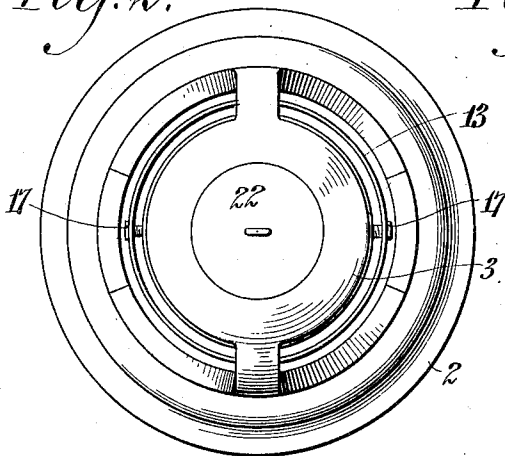
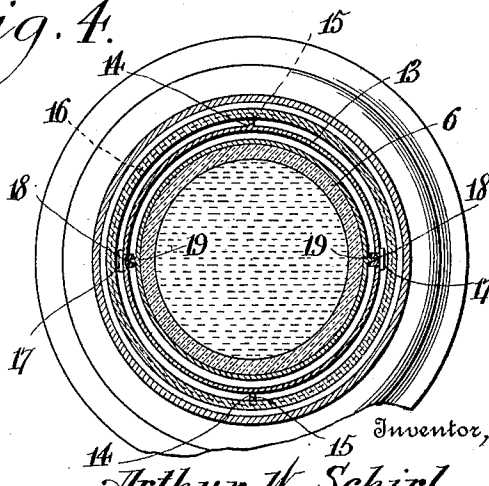


Fig. 4.



Witnesses: —

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2 SHEETS—SHEET 2.

Fig. 5.

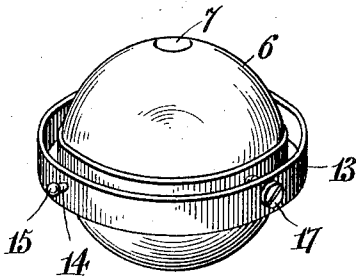


Fig. 6.

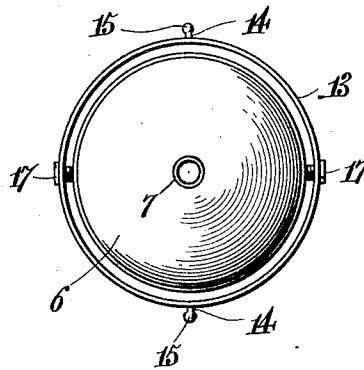
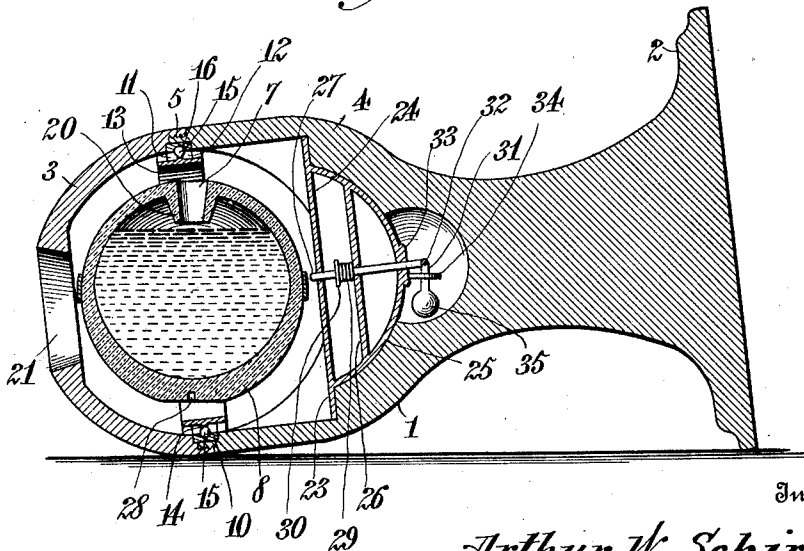


Fig. 7.



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# UNITED STATES PATENT OFFICE.

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## INK-WELL.

1,083,861.

Specification of Letters Patent.

Patented Jan. 6, 1914.

Application filed January 29, 1913. Serial No. 744,992.

*To all whom it may concern:*

Be it known that I, ARTHUR WILLIAM SCHIRL, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Ink-Wells, of which the following is a specification.

My invention relates to an ink well which will not spill its contents when tipped over.

The primary object of the invention is to provide a device of this character comprising a stationary supporting body and a movable ink container suspended within the said body so that it will remain constantly in an upright position with its pen opening uppermost no matter what position the supporting body may assume.

A further object of the invention is to provide means for locking the movable container in a rigid upright position while the supporting body is in its erect position and to provide further means for releasing the said locking means at the instant the supporting body becomes overturned.

The invention consists in the features of construction, combination, and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawings, in which:

Figure 1 is a side elevation of the device; Fig. 2 is a plan view of the same showing the lid removed; Fig. 3 is a longitudinal sectional view taken on line 3—3 of Fig. 1. Fig. 4 is a transverse sectional view taken on line 4—4 of Fig. 3; Fig. 5 is a detail perspective view of the movable ink container and its suspension means; Fig. 6 is a top plan view of the same; and, Fig. 7 is a longitudinal sectional view through the entire ink well when tipped over.

In the drawings the numeral 1 designates the stationary, supporting body of the ink well, which may be constructed of any desired shape or of any material, but may be constructed as shown in the form of a hollow elliptical body mounted upon a suitable base 2. This body is composed of separable upper and lower sections 3 and 4, which are threaded together as at 5.

A hollow ink container 6, which is preferably spherical in shape and which is provided with a pen opening 7 in its top wall and a heavy weighted bottom wall 8, is mounted within the body 1 by means of a tripple motion suspension device. This sus-

pension device includes an outer attaching ring 10, which is secured within the body between the annular flanges 11 and 12 provided upon the body portions 3 and 4 respectively, and an inner movable ring 13 having diametrically opposite pivot members 14 adjustably connected therewith and provided with rounded heads 15 for rotary and sliding movement within the internal, annular groove 16 in the ring 10, the said ring 13 being pivotally connected to the ink container 6 at points spaced ninety degrees from the pivot members 14 by means of adjustable pivot screws 17 mounted within openings within the said ring 13 and having recesses 18 in their inner ends for the reception of the diametrically opposite trunnion 19 provided upon the container 6. These trunnions 19 are preferably disposed above the geometric center of the container 6, so that the center of gravity of the same will be lowered further, the weighted bottom 8 thus being aided in maintaining the container in its upright position. The said container is provided with an inwardly projecting frusto-conical shield 20 surrounding the pen opening 7, so that the ink will be prevented from splashing out of the container on excessive swinging of the same, due to sudden overturning of the ink well body. It will thus be seen that I have provided suspension means for the ink container which will cause the same to be maintained in upright position when the supporting body becomes overturned or even when it rolls upon the desk or other surface upon which it is mounted, this last-named motion of the body being allowed for by the ability of the rounded heads 15 of the pivot members 14 to slide within the internal groove 16 of the attaching ring.

The upper end of the body portion 3 is provided with an opening 21 permitting communication with the pen opening 7 in the ink container, and a closure cap or lid 22 is adapted to close this opening. The body 1 may be cut away at intervals, as shown, in order to lighten the structure and permit access to the suspension device for the purpose of adjustment of the pivot members, without the necessity of separating the body portions. In the use of an ink well of this character, it is desirable that the ink container should be maintained rigid in its upright position while the supporting body is likewise erect, so that there will be no

danger of the container being turned, due to misdirected insertion of the pen nib within the opening 21, so as to cause the pen opening 7 of the ink container to be moved out of registration with opening 21 or even to be moved into such a position that the ink may escape therefrom. In order to meet this requirement of usage, I have provided means for normally locking the ink container in upright position as long as the supporting body is upright. A frame member 23 is mounted within the body portion 4 and comprises an uppermost plate 24, a yoke 25 depending therefrom, and an interposed plate 26. The parts of this frame member may be formed integrally or may be separable, as proves desirable in the manufacture of the device. The frame plates 24 and 26 and the yoke 25 are centrally provided with alined vertical openings for the reception of a slidably and rotatably mounted locking plunger 27. The upper engaging end of the plunger 27 is adapted normally to be maintained in engagement within the recess 28 provided in the flattened bottom of the container 6 by means of a helical spring 29 which surrounds the said plunger between the plates 24 and 26 in interposed relation to the last-named plate and a collar 30 secured to the said plunger for limiting engagement with the first-named plate 24. A tripping lever 31 is pivotally connected at its upper end to the lower end of the plunger 27 by means of the pivot pin 32 beneath the lowermost portion of the yoke 25, which latter is provided at this point with a circular bearing portion 33 for engagement by the edge of a fulcrum sleeve 34 provided upon the lever 31 adjacent its pivot. This tripping lever 31 has its lower end enlarged as at 35 to provide an overbalancing weight, which will become operative upon the body 1 becoming overturned, so as to cause the said tripping lever to draw the locking plunger out of engagement with the ink container, thus permitting the suspension device to maintain the same in upright position. The weighted portion 35 of the

tripping lever is heavy enough to cause tripping of the locking plunger, when the ink well body becomes overturned, due to the lever action, but is light enough to be supported by the spring 29 under normal conditions.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided an ink well which is adapted to meet all the requirements of usage and which will not spill the ink upon becoming overturned, and which further is simple in construction so as to be inexpensive in cost of manufacture. It is to be understood, however, that any desired changes in the construction of the device falling within the scope of the claim may be resorted to in practice.

What I claim is:

An ink well of the class described comprising a supporting body of hollow construction, an ink container movably mounted within said body, means for suspending said container within the body in an upright position irrespective of the position of the supporting body, the said container being provided with a recess in its under face, a locking plunger rotatably and slidably mounted within the body, yieldable means for normally maintaining the said plunger in its innermost position with its inner end in engagement with the container recess, the supporting body being provided with a bearing under face surrounding the plunger, a tripping lever pivotally connected at one end to the lower end of the plunger, an annular fulcrum sleeve provided on the lever adjacent its pivoted end for engagement with the said bearing face, and an overbalancing weight provided on the opposite end of the lever for tripping the plunger when the supporting body is overturned.

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

ARTHUR WM. SCHIRL.

Witnesses:

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