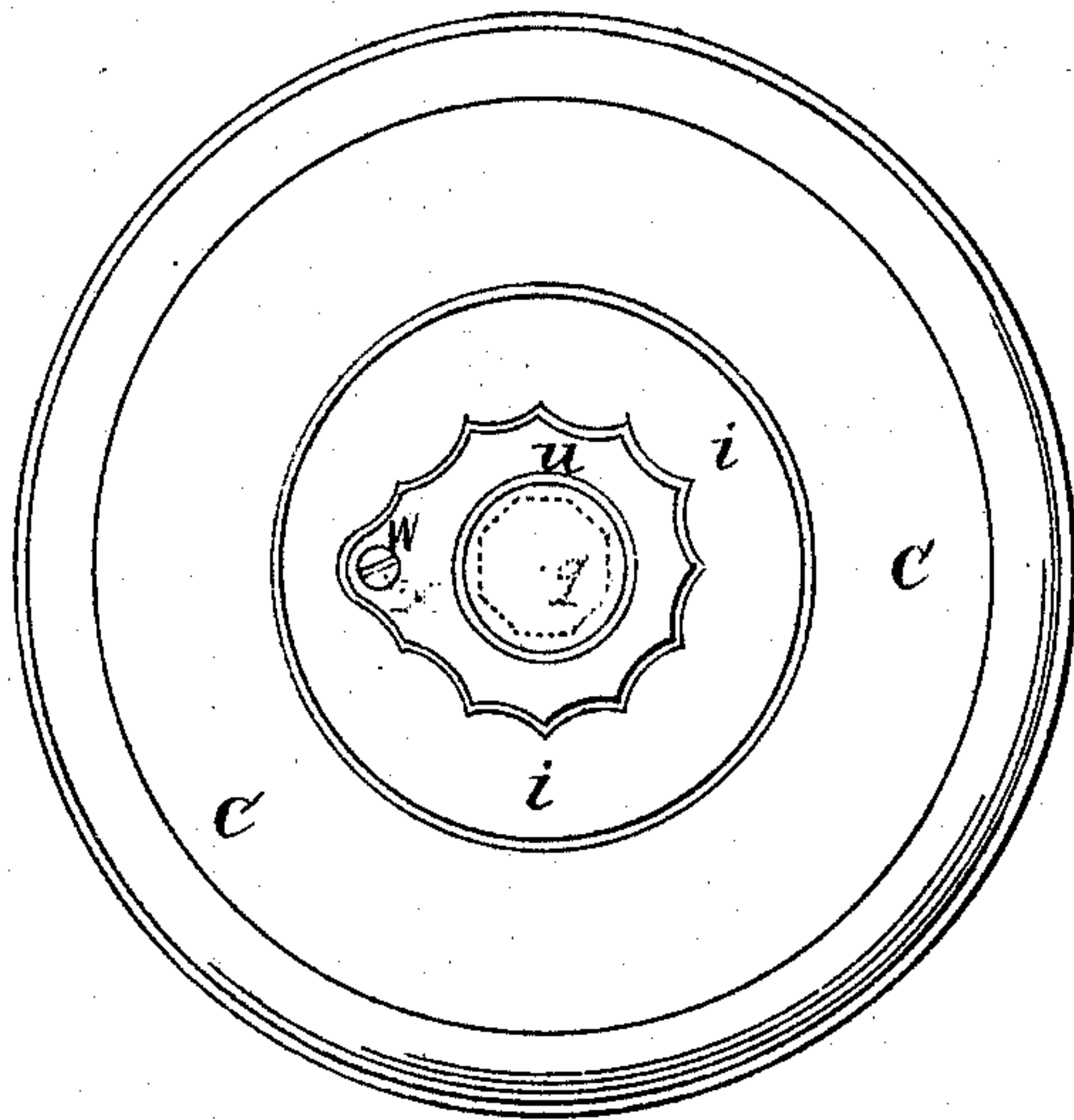


*J. W. Ross.*  
*Inkstand.*

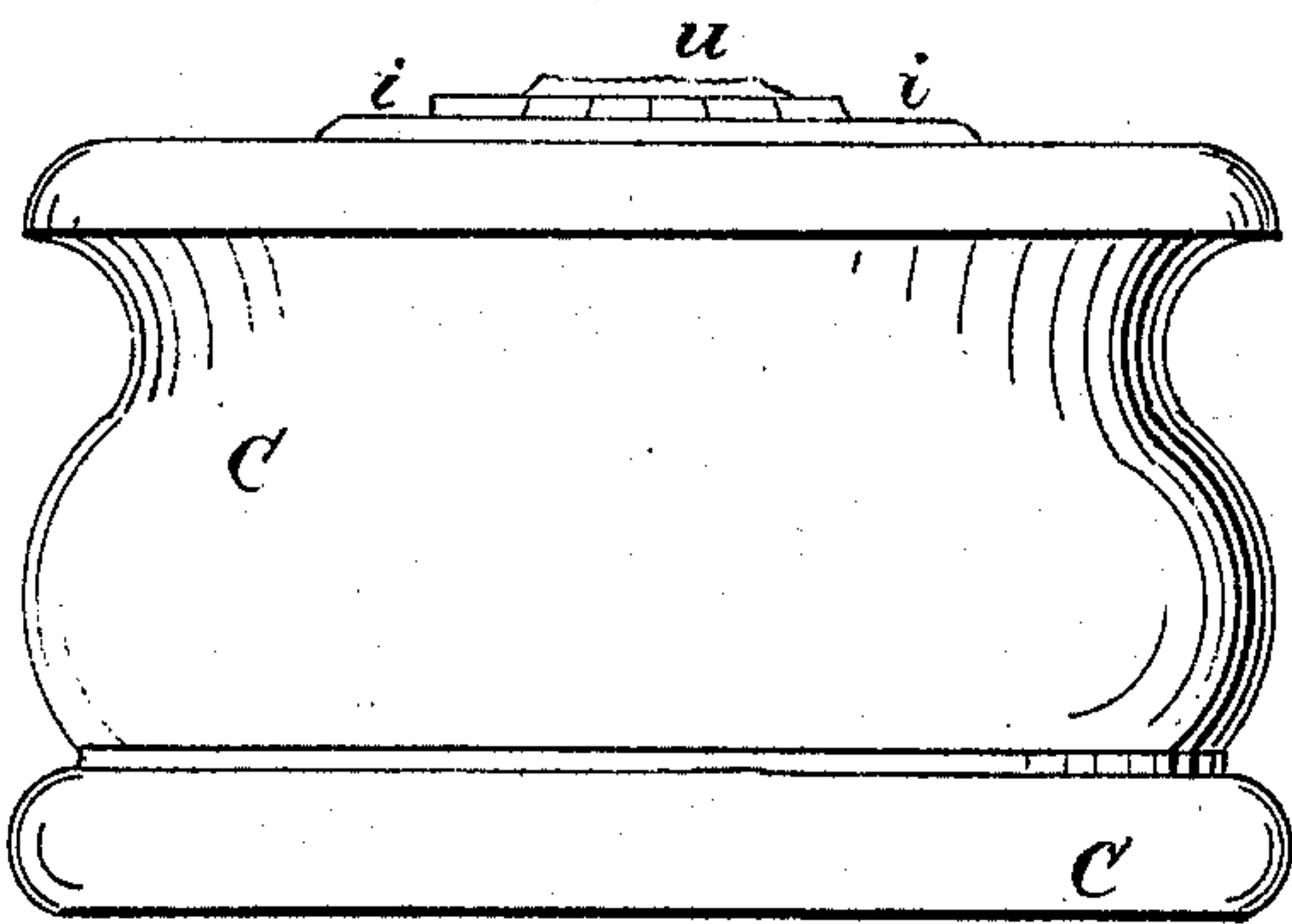
*N<sup>o</sup> 1,203.*  
*N<sup>o</sup> 32,207.*

*Patented Apr. 30, 1861.*

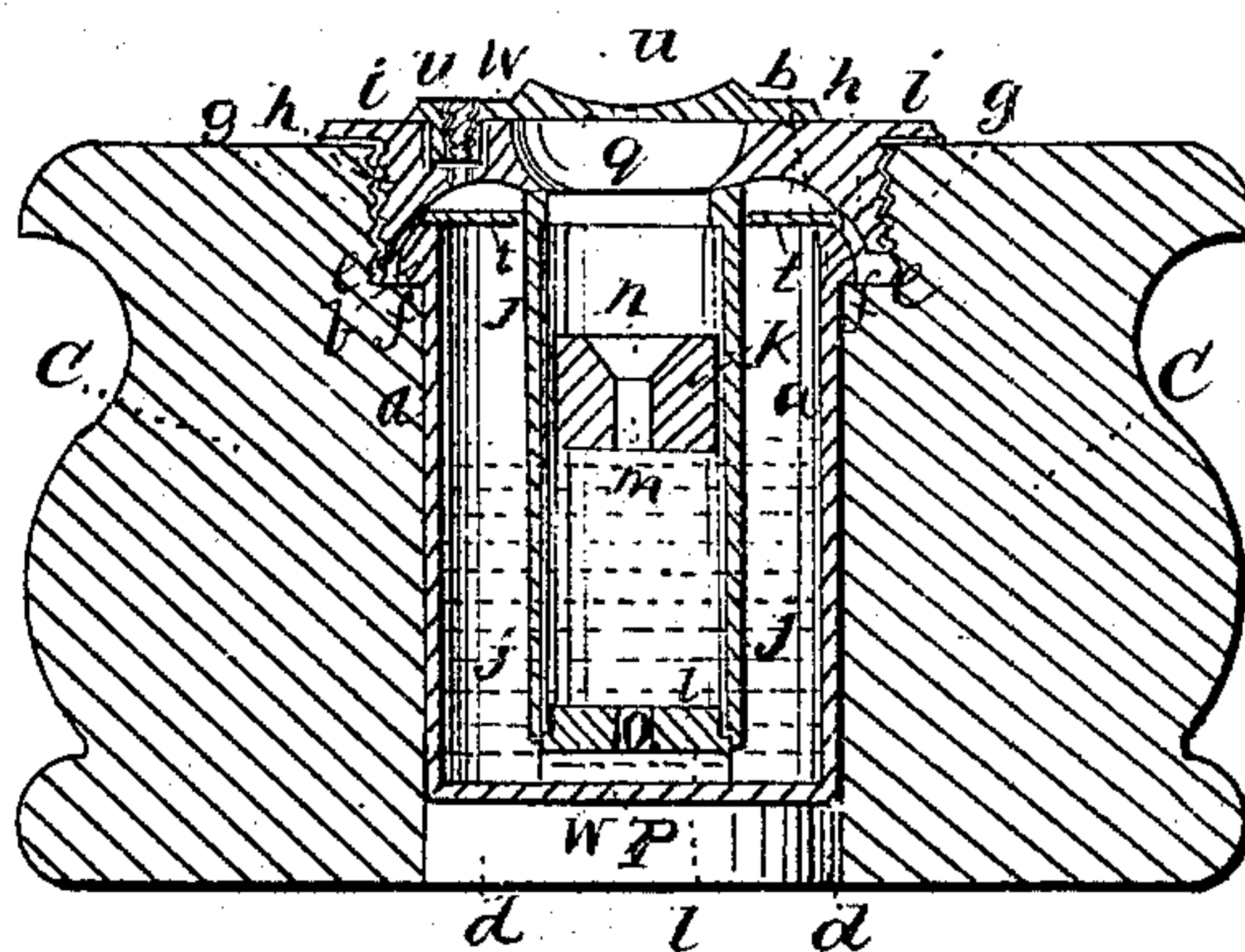
*Fig. 1.*



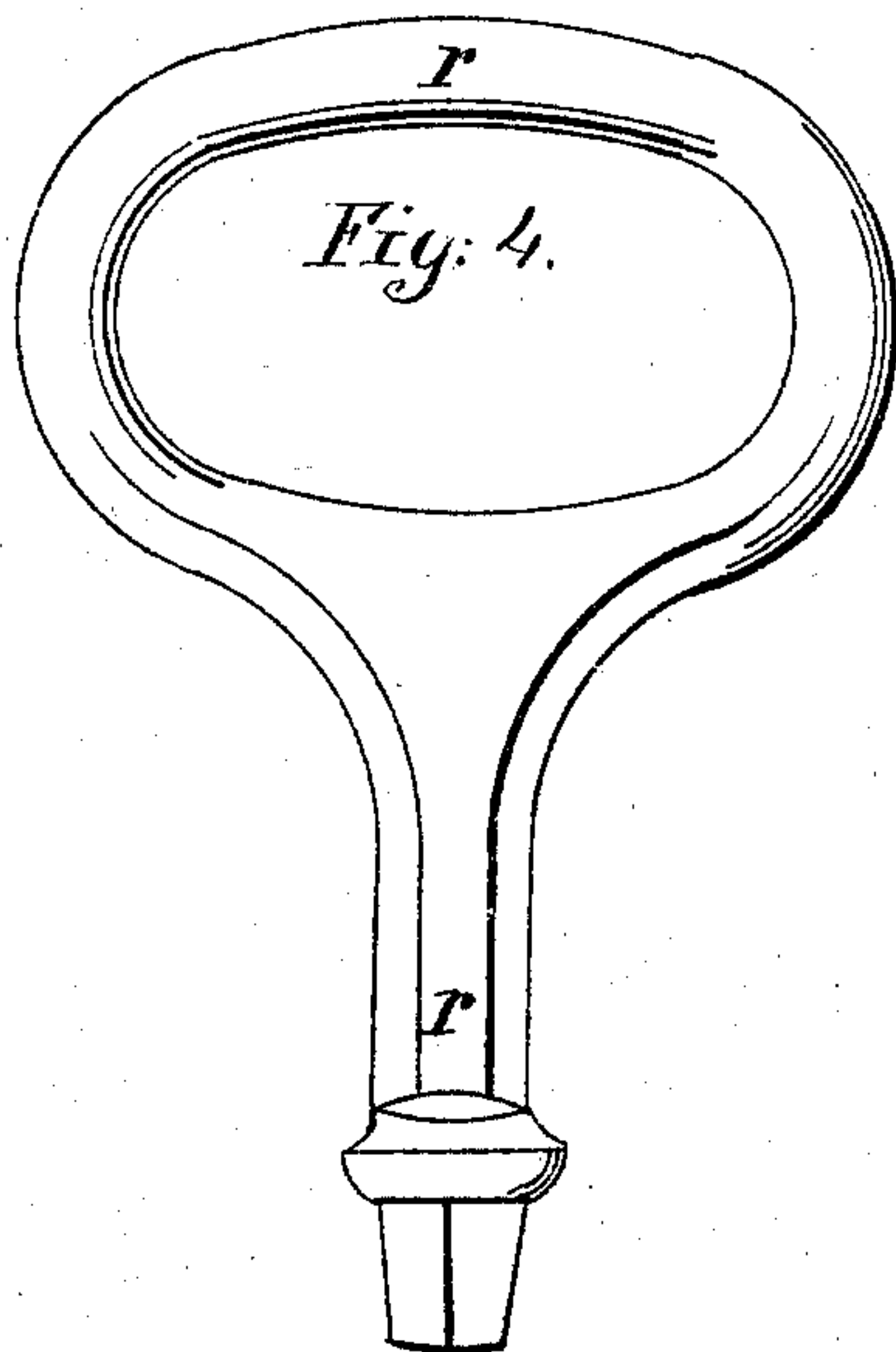
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:

*Joseph Garrett*  
*Albert W. Brown*

Inventor:

*Joseph W. Ross*  
*by his atty*  
*Esca Lincoln*



# UNITED STATES PATENT OFFICE.

JOSEPH W. ROSS, OF BOSTON, MASSACHUSETTS.

## INKSTAND.

Specification forming part of Letters Patent No. 32,207, dated April 30, 1861; Reissued March 8, 1864, No. 1,629.

*To all whom it may concern:*

Be it known that I, JOSEPH W. ROSS, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Inkstands, and that the following description, taken in connection with the accompanying drawings hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

The figures of the accompanying plate of drawings represent my improvements.

Figure 1 is a plan or top view. Fig. 2 is a side view. Fig. 3 is a central vertical section. Fig. 4 is a detail view to be hereinafter referred to.

One great disadvantage always to be met with in the use of stands or fountains for containing ink, has been that in consequence of the manner in which the same have been arranged, a greater portion or all of the surface of the ink was exposed to the atmosphere which absorbed its moisture and caused it to become thick and "muddy." Many inkstands have been invented to protect the ink from the deteriorating effects of exposure to the external air, or to render the inkstand after having been used, perfectly air-tight, but they have not generally succeeded in accomplishing the desired result of preserving the ink always in its liquefied state without so complicating their construction as to render them practically inoperative and very inconvenient in use.

By the arrangement of the devices composing the inkstand according to my improvements, but a very small and inconsiderable portion of the surface of the ink is exposed to the external air and moreover the ink well or fountain can be so secured in the tops of the desks used in schools—for which purpose my improvements are more particularly applicable—as to prevent any tampering with the same and render its removal without the use of a suitable key impossible.

$a$ , in the drawings represent the well or fountain for containing the ink, made of a cylindrical form and having a lip  $b$  formed around its mouth.

$c$  is the stand or the top of a desk, in which is sunk a socket  $d$  corresponding to the outside diameter of the well  $a$ , the upper portion  $e$  being made of a larger diameter, thereby forming the shoulder or rest  $f$  for the lip  $b$  of the well or fountain, when placed in the socket  $c$ , to rest upon. In the larger portion  $e$  of the socket  $d$  is a female screw  $g$ , which receives the male screw  $h$  attached to a thin top plate  $i$ . To the top plate  $i$  is also secured a tube  $j$ , in which is a float  $k$ , the float being prevented from dropping out of the same by a stopper  $l$  placed in its lower end. In the float  $k$  is a very small orifice  $m$  which extends through its entire thickness and its upper rimmed out so as to form a tunnel  $n$ . An orifice  $o$  is also formed in the stopper  $l$ , extending through its entire thickness and which has communication with the ink by a gutter or way  $p$  in the lower surface of the stopper  $l$ .

In the top plate  $i$  of the inkstand is a mouth or opening  $q$  made of a square or any polygonal shape and in which fits a suitable key  $r$  represented in Fig. 4.

Having placed the key  $r$  in the mouth or opening  $q$ , by turning it in the proper direction the top plate  $i$  will be forced home—that is, so as to bring it flush or nearly so with the top of the desk or stand and in consequence of its thinness, it can never be unscrewed or removed without the use of the key, whereby any tampering with the same is entirely prevented. It will be evident that in lieu of making the top plate extremely thin it can be beveled to a thin edge or it can be let down into the top of the desk or stand, the object being to so secure the top plate  $i$  (and consequently the ink well or fountain) as to prevent its being turned by means of the fingers alone.

When the top plate  $i$  is forced home the lower surface of the stopper  $l$  presses against the bottom of the well  $a$  and the rubber washer  $t$  placed upon the top of the same, is pressed or squeezed between the lip  $b$  and the under surface of the top plate  $i$  which serves to render the ink well in a measure air-tight.

The well  $a$  having been sufficiently filled with ink, placed in its socket  $c$  and the top plate  $i$  screwed in the same as above described, the ink will rise in the tube  $j$ —passing through the orifice  $o$  of the stopper  $l$ —to the same height as in the well and conse-



quently raise the float *k*, which is sufficiently light to always remain, except when depressed by any external means, upon the top surface of the ink. The tube *j* serving as a  
 5 guide to the float *k*.

By thus arranging the inkstand, it will be seen that the amount of ink surface exposed to the external air, is the area of the very small and inconsiderable hole *m* of the float  
 10 *k*, whereby the ink is prevented from becoming muddy and thick and always preserved in its liquefied state.

By inserting the pen in the mouth or opening *g* and tube *j* it will strike or impinge  
 15 against the float *k* causing it to descend and forcing up the ink through the hole *m* of the same, and upon removing the pen the float *k* will again resume its original position upon the surface of the ink. (In the draw-  
 20 ings the ink is represented by dotted red lines Fig. 3.)

*u* is a cover with a projection *v* upon its lower surface which turns in a socket of the top plate *i*. This cover *u* is secured to the  
 25 top plate by a screw *w* which passes loosely through the projection *v* and screws into the top plate *i* as represented in Fig. 3. By thus

hanging or securing the cover to the inkstand I obtain a reliable and permanent hinge and give more stability to the swing- 30 ing of the cover than could otherwise be obtained by the use of a single pivot. When the inkstand is not used, it is rendered perfectly air-tight by sliding the cover *u* over the mouth of the same. 35

Having thus described my improvements I shall state my claims as follows:

What I claim as my invention and desire to have secured to me by Letters Patent is,

1. The use of the float *k* traveling in a 40 suitable guiding tube and operating substantially as herein above described.

2. The peculiar construction of the inkstand, by which I am enabled to lock it in or remove it from its stand or desk, the same 45 consisting substantially of the screw *h* and top plate *i* attached to or forming a part of the ink-fountain and a polygonal shaped opening of suitable form to receive a key, as herein above described.

JOSEPH W. ROSS.

Witnesses:

JOSEPH GAVETT,  
 A. W. BROWN.