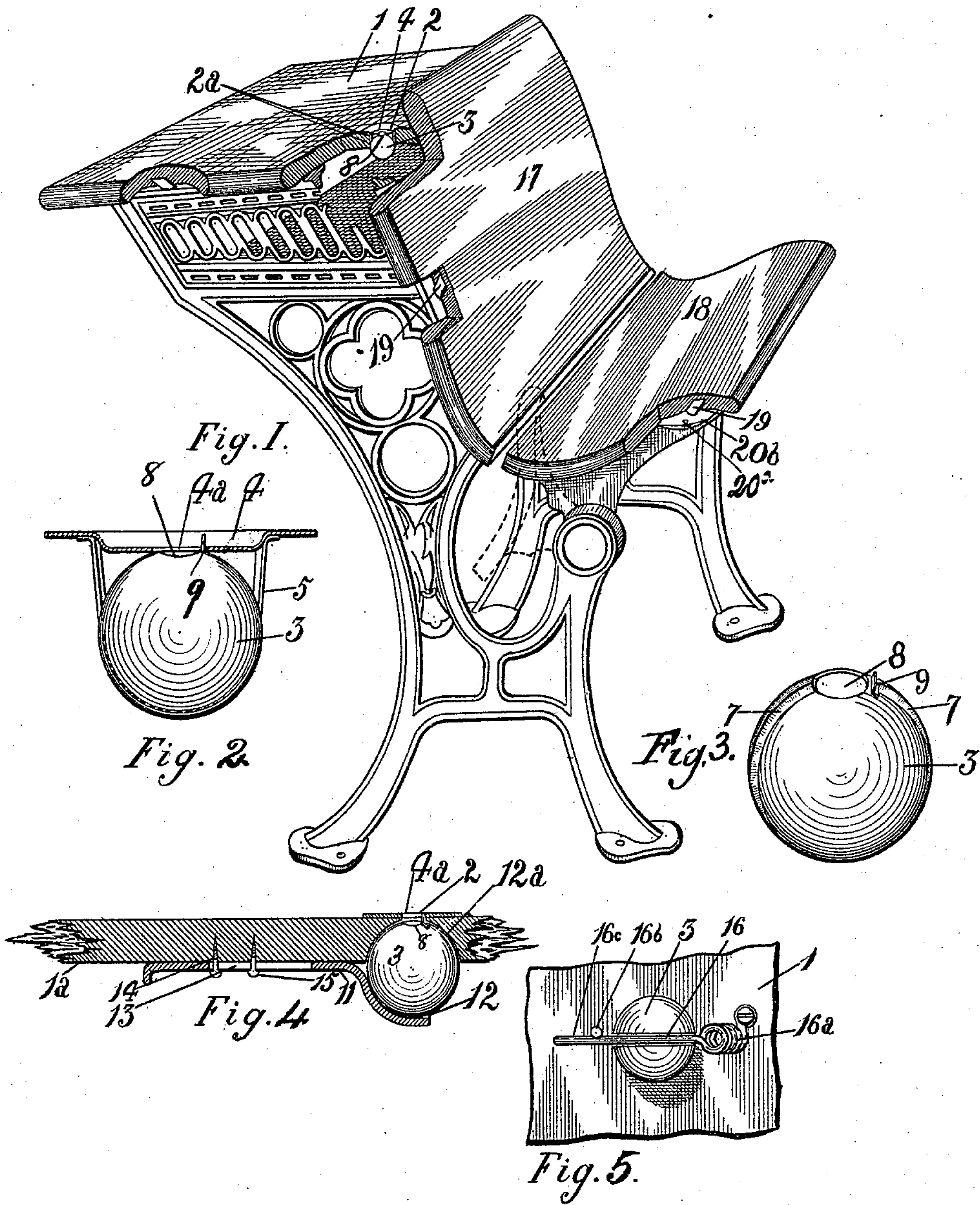


(No Model.)

W. H. MORDEN & A. J. GILMOUR.  
INK WELL FOR SCHOOL DESKS.

No. 485,595.

Patented Nov. 1, 1892.



Witnesses.

James M. Adams.  
W. E. Angell.

Inventors  
Walter H. Morden  
&  
Alexander John Gilmour.  
By C. H. Riches.  
Attorney.



# UNITED STATES PATENT OFFICE.

WALTER H. MORDEN AND ALEXANDER J. GILMOUR, OF TORONTO, CANADA.

## INK-WELL FOR SCHOOL-DESKS.

SPECIFICATION forming part of Letters Patent No. 485,595, dated November 1, 1892.

Application filed August 28, 1891. Serial No. 403,995. (No model.)

*To all whom it may concern:*

Be it known that we, WALTER H. MORDEN and ALEXANDER JOHN GILMOUR, both of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Ink-Wells for School-Desks; and we hereby declare that the following is a full, clear, and exact description of the same.

10 This invention relates to certain new and useful improvements in ink-wells for school-desks; and the objects of our invention are as follows: first, to provide a school-desk with an ink-well, which ink-well can be readily and cheaply manufactured and which will prevent the evaporation of its fluid contents and foreign matter getting into the same and to so locate and support said ink-well that under all ordinary circumstances it is secured from breakage; and it consists, essentially, of making the ink-well in the form of a hollow sphere provided at or near the top of its vertical axis with the usual opening common to all ink-wells, the edge of which opening is fitted with a lug or ear extending outwardly at right angles to the well and providing suitable means for holding said ink-well securely in place and allowing it a longitudinally-revoluble movement, which movement is arrested at certain points by means of the afore-said lug or ear coming in contact with the edge of an opening made through the desk-top to admit the pen to the ink-well, the whole being arranged and operated as hereinafter more fully set forth, and more particularly pointed out in the claims.

40 In the drawings, Figure 1 is a perspective view of a school-desk, showing our improvements. Fig. 2 is an enlarged detail view of the ink-well, showing the same construction as that illustrated in Fig. 1; Fig. 3, a detached perspective view of the ink-well. Fig. 4 is an alternative means for holding the ink-well in position. Fig. 5 is a second alternative means for holding the ink-well in position, the principle of which is identically the same as that illustrated in Fig. 4.

50 The principle illustrated in these different forms is the same throughout, although they may differ slightly in mechanical construction.

Like numerals of reference refer to like

parts throughout the specification and drawings.

In the drawings, 1 refers to the top of a school-desk, in which top is formed a circular or other geometrically-shaped opening 2 to receive the ink-well 3. This opening 2 is provided with a shoulder 2<sup>a</sup>, on which shoulder rests the top plate 4, to the under side of which plate is connected the ends of a U-shaped band 5, serving as a bearing to support the spherical ink-well 3. At or near the top of the vertical axis of the spherical ink-well 3 is a circular or other suitably-shaped opening 8, fitted with an ear or lug 9, while a corresponding opening 4<sup>a</sup> is made through the top plate 4 to admit of the insertion of the pen and fluid into the ink-well 3.

Encircling the ink-well 3 is a longitudinal groove or channel 7, into which channel enters the U-shaped band 5. This groove or channel corresponds in width and depth to the width and depth of the band 5, which rests therein and supports said ink-well, and band 5, while allowing said ink-well a longitudinally-revoluble movement, prevents any lateral or side motion on the part of the same. The lug 9 acts as a stop to arrest the movement of the spherical ink-well 3 when said ink-well is traveling in either direction—that is, when the ink-well is moved to bring the mouth 8 into or out of alignment with the opening 4<sup>a</sup> through the plate 4.

By reference to Fig. 4 there will be seen an alternative means for holding the spherical ink-well securely in place. The ink-well in this instance, as in the former, consists of a hollow sphere provided with a suitably-shaped opening 8 and lug 9, while the support in this instance consists of a slide 11, having a curved bearing 12, in which bearing rests the spherical ink-well 3. The slide 11 is provided with elongated slots 13, through which pass screws or bolts 14, fitted with enlarged heads 15, which overlap the edge of the slots 13 and hold said slide firmly in place. To remove the spherical ink-well 3, the slide 11 is drawn toward the edge 1<sup>a</sup> of the desk-top 1, which slide in its forward movement draws the curved socket 12 away from the ink-well 3 and allows said ink-well to drop into the hand or other agent waiting to receive it. In the under side of the desk-top in this instance is



shown a hemispherical recess or socket 12<sup>a</sup>, said recess forming with the hemispherical socket 12 a spherical bearing for the ink-well to work in. The revoluble movement of the ink-well in this case, as in the former, is arrested by means of the lug or ear 9 coming in contact with the edges of the said opening 2 in said desk-top 1 or the edges of the opening 4<sup>a</sup> through the top plate 4, if a top plate is employed.

In Fig. 5 is shown a second alternative means for holding the ink-well in place. The principle illustrated in this figure is the same as that shown in Fig. 2. The only difference between this and the construction shown in Fig. 2 is that the bearing consists of a wire 16, coiled at one end into a spring 16<sup>a</sup> and firmly fastened at this end to the under side of the desk-top 1, while the opposite end of said wire is bent into the form of a hook 16<sup>c</sup> to engage with the pin 16<sup>b</sup>, said wire being located in the groove or channel 7, encircling the ink-well 3.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A spherical ink-well for school-desks, provided at or near the top of its vertical axis with an opening, the edge of said opening provided with an outwardly-extending lug or ear adapted to engage the edges of the opening in the desk-top, in combination with suitable means for securely holding said ink-well in place and allowing it a partially longitudinally revoluble movement, substantially as described.

2. A spherical ink-well for school-desks, located in the under side of the desk-top and provided at or near the top of its vertical axis with an opening and at one side of the latter with an outwardly-extending lug adapted to engage the opening in said desk-top, a longitudinal groove encircling said ink-well, in combination with a support located within said groove and connected to some convenient part of the desk, said support allowing the ink-well a partially-revoluble movement, substantially as described.

3. A spherical ink-well for school-desks, provided at or near the top of its vertical axis with an opening, the edge of which opening is fitted with an outwardly-extending lug or ear adapted to engage the opening in the desk-top, a longitudinal groove or channel encircling said ink-well, in combination with suitable support located within said groove or channel, said support allowing the ink-well a longitudinally-revoluble movement, which

movement is arrested by means of the aforesaid lug or ear, substantially as described.

4. A spherical ink-well for school-desks, provided at or near the top of its vertical axis with an opening, the edge of which opening is fitted with an outwardly-extending lug or ear adapted to engage the opening in the desk-top, a longitudinal groove or channel encircling said ink-well, in combination with a support or bearing consisting of a U-shaped band, the ends of which band are connected to the under side of the desk-top and the curved portion located within said groove or channel, said support allowing the ink-well a longitudinally-revoluble movement, which movement is arrested by means of the aforesaid lug or ear, substantially as described.

5. A spherical ink-well for school-desks, provided at or near the top of its vertical axis with an opening the edge of which is fitted with a lug or ear, and a longitudinal groove or channel encircling said ink-well, in combination with a support or bearing consisting of a U-shaped band the ends of which are connected to the under side of the desk-top, and the curved or rounded portion located within said groove or channel, forming a semi-spherical bearing for said ink-well and allowing said ink-well a longitudinally-revoluble movement, which movement is arrested by means of the aforesaid lug or ear coming in contact with the edge of the opening through the desk-top, substantially as described.

6. A spherical ink-well for school-desks, provided at or near the top of its vertical axis with an opening, the edge of which opening is provided with an outwardly-extending ear or lug, a longitudinal groove or channel encircling said ink-well, in combination with a support or bearing consisting of a U-shaped band the ends of which are connected to a top plate supported on a shoulder extending inwardly from the side of the opening through the desk-top, the curved or rounded portion of said band located within said groove or channel in the ink-well, an opening through said top plate to correspond with the opening in said ink-well, said support allowing said ink-well a longitudinally-revoluble movement, which movement is arrested by means of the aforesaid lug or ear coming in contact with the edge of the opening through said top plate, substantially as described.

WALTER H. MORDEN.  
ALX. J. GILMOUR.

In presence of—  
CHAS. A. RECHE,  
M. E. ANGELL.