

(No Model.)

W. H. WALKER.
PENHOLDER.

No. 577,335.

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Fig. 1.

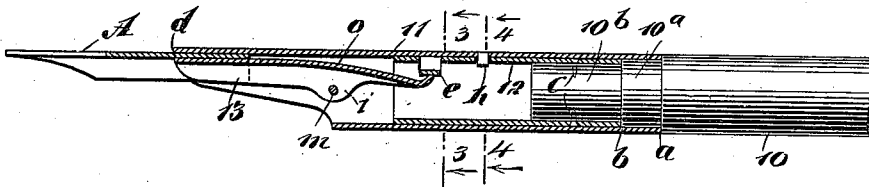


Fig. 2.

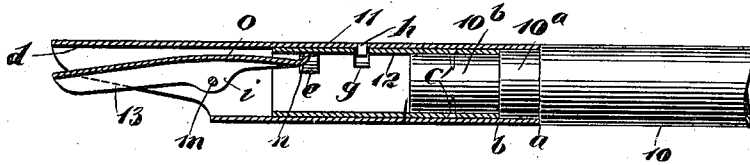


Fig. 3.

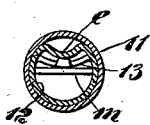


Fig. 4.

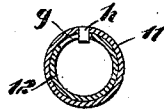
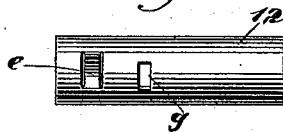


Fig. 5.



WITNESSES:

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Application filed November 14, 1896. Serial No. 612,069. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WALKER, of Dover, in the county of Kent and State of Delaware, have invented new and useful Improvements in Penholders, of which the following is a full, clear, and exact description.

This invention relates to an improved penholding attachment for a pen-stock which is of simple novel construction and adapted to readily clamp or release a clamped pen, as occasion may require.

The invention essentially consists in the construction and combination of parts, as is hereinafter described, and defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal sectional view of the improvement clamping a pen. Fig. 2 is a like view to Fig. 1, showing the parts differently adjusted. Fig. 3 is a transverse sectional view substantially on the line 3 3 in Fig. 1. Fig. 4 is a transverse sectional view on the line 4 4 in Fig. 1, and Fig. 5 is a detached side view of a cam-sleeve forming a part of the invention.

In the drawings which illustrate an embodiment of the features of the improvement, 10 represents the forward portion of a pen-stock that may be of the usual or any other preferred form and constructed of any suitable material. The front end of the stock 10 is preferably reduced in thickness at *a* and also at *b*, thus providing two short cylindrical formations 10^a 10^b thereon of different diameters.

A holder-barrel 11 is fitted at its rear end upon the stock portion 10^a, so that it may be rotated, and within said barrel the cylindrical cam-sleeve 12 is introduced, having such relative interior diameter as will permit it to closely fit upon the stock-end portion 10^b, these engaged parts being held together by small screws *c* or like means when the details are assembled.

The forward portion of the holder-barrel 11 is suitably cut away, so as to remove material on the side that is lowermost in use and afford a clamping-jaw *d*, that is the remaining portion at the front end of the barrel.

On the inner side and at a correct distance

from the normally front end of the cam-sleeve 12 a cam-toe *e* is produced, preferably by cutting two parallel transverse slits in the wall of the sleeve and inwardly pressing the intervening strip that remains integral with the sleeve at each end of said strip, which is preferably rendered convex on the inner surface, as is clearly shown in Fig. 3. At a convenient point in the cam-sleeve 12 a short transverse slot *g* is formed, or this may be a surface groove in lieu of a slot.

A stud *h* projects from the barrel 11 into the slot or groove *g*, so that the degree of rotatable movement given to the barrel is defined by the length of said slot, as is clearly indicated in Fig. 4, and for an efficient operation of the improved penholder the location of the slot and traverse of the stud therein should be such as will allow a proper rockable movement to be given to the holder-barrel, for a purpose which will presently be explained.

A clamping plate or jaw 13 is provided as a complementary member for the clamping-jaw *d*, said plate being furnished with two opposite ears *i*, that are intermediate of the ends of the clamping-plate and are perforated in alinement with similar perforations in the holder-barrel 11 for the reception of the pintle *m*, that when held in place permits the plate 13 to receive a longitudinal rocking movement thereon.

The clamping-plate 13 is preferably arched in transverse section to conform its convex upper surface with the concave inner surface of the clamping-jaw *d*, and thus adapt the plate and jaw to contact with adjacent surfaces of an inserted pen *A*, of usual make, when the clamping-plate is pressed toward the jaw at the outer ends of each of said parts.

To facilitate the clamping movement of the plate 13, an ear *n* is upwardly projected from the inner or rear end of said plate and is located so as to lie opposite the cam-toe *e*, and it will be evident that if the barrel 11 is so relatively adjusted as to dispose the ear *n* at either side of the convexly-projecting toe the clamping-plate 13 will drop at the front end by gravity for the free insertion of the pen *A*, as represented in Fig. 2.

It will be seen that if the pen *A* is introduced between the clamping-plate 13 and clamping-jaw *d* when parts of the penholder

are adjusted, as shown in Fig. 2, the partial rotation of the holder-barrel 11 in either direction will by pressure of the cam-toe *c* on the ear *n* rock the outer end of the clamping-plate forcibly into contact with the pen and clamp it in position for service, having its nib portion projecting from the penholder, as shown in Fig. 1, and the gripping parts of the holder will continue to firmly clamp the pen, as explained, until the holder-barrel is partly rotated to release the plate 13 from pressure on the pen.

To adapt the holder for the reception and clamping retention of pens of different thicknesses, it is preferred to locate the clamping-plate relatively to the inner side of the clamping-jaw *d*, so that a space of suitable width will be produced between the clamping-plate and holder-barrel above and near to the pin-
 20 tle *m*, as is clearly shown in Fig. 2 at *o*, whereby the toe *c*, pressing on the ear *n*, will cause the free ends of the jaw *d* and plate 13 to effectively bite on the clamped pen and prevent the latter from lateral displacement in
 25 use.

The features of superiority claimed for this improvement comprise the elementary combination and construction of parts that effect a positive and unyielding clamped retention
 30 of a pen in the holder without the use of springs, and, furthermore, the particular construction and arrangement of parts that enable the free release of a clamped pen when the holder-barrel is rotatably moved.

35 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a supported barrel, of an interior sleeve having an interior
 40 projection, and a pivoted clamping-plate in the barrel, rockable thereon when pressed upon at one end by the interior projection, substantially as described.

2. The combination with a pen-stock, a rotatably-movable barrel, and an interior stationary sleeve on the pen-stock and adapted to support the barrel, said sleeve having an interior projection, of a clamping-plate pivoted in the barrel intermediately of the ends
 50 of said plate, so as to contact at the front end with the front end of the barrel, and having its rear end adapted for depression, when impinged upon by the said interior projection of the sleeve during a partial rotation of the
 55 barrel, substantially as described.

3. The combination with a pen-stock, of a holder device, comprising a rotatably-movable barrel mounted at one end on the stock, a sleeve in said barrel and having an interior
 60 projection, and a clamping-plate pivoted forwardly in the barrel and having an ear adapted to be pressed by the interior projection of the sleeve when the holder-barrel is rotatably actuated, substantially as described.

65 4. The combination with a pen-stock, of a holder device, comprising a barrel having a clamping-jaw at its free end, and adapted for

partial rotation on one end of said stock, a sleeve fixed on the end of the pen-stock and supporting the barrel, a cam on the inner wall
 70 of the sleeve, and a clamping-plate pivoted to rock longitudinally in the forward portion of the holder-barrel and having its rear end in contact with the cam, substantially as described.

5. The combination with a pen-stock, of a holder device, comprising a barrel loosely mounted at one end on one end of the pen-stock, and shaped at its free end to form a clamping-jaw, a sleeve secured at one end on
 80 a reduced portion of the pen-stock and rotatably sustaining the barrel, a cam projection on the inner surface of the sleeve, a pin and grooved connection between the barrel and sleeve, and defining the rotatable movement of said barrel, and a clamping-plate
 85 convex on its face adjacent to the clamping-jaw of the barrel, and pivoted therein between its ends, said clamping-plate having an ear adapted to contact with the cam to rock the
 90 free end of the plate upwardly when the barrel is partially rotated, substantially as described.

6. A penholder comprising two jaws adapted to hold the shank of a pen between them,
 95 one being pivoted to rock toward the other and a member capable of lateral oscillation and thereby engaging said movable jaw to clamp the pen, substantially as described.

7. A penholder comprising a barrel provided with a jaw, a second jaw pivoted to
 100 rock toward the first jaw, a member within the barrel and capable of lateral oscillation relative thereto, and a projection upon said member engaging the movable jaw to close
 105 the same, substantially as described.

8. A penholder comprising two jaws adapted to hold the shank of a pen between them, one pivoted to rock toward the other, and a member capable of lateral oscillation relative
 110 thereto and having a projection adapted to enter between the inner ends of said jaws to close their outer end and clamp the pen-shank between them, substantially as described.

9. A penholder comprising two jaws adapted to hold the shank of a pen between them,
 115 one pivoted to rock toward the other, a laterally-oscillating member engaging said movable jaw to close it upon the pen, and a stop limiting the amount of said oscillation, substantially as described.

10. A penholder, consisting of two jaws adapted to receive the shank of a pen between them, the principal one of said jaws being supported upon the handle so that it may oscillate thereon and the other pivoted to rock,
 125 and a cam projection fixed to the handle and engaging the secondary or auxiliary one of said jaws to rock it toward the other, substantially as described.

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Witnesses:

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