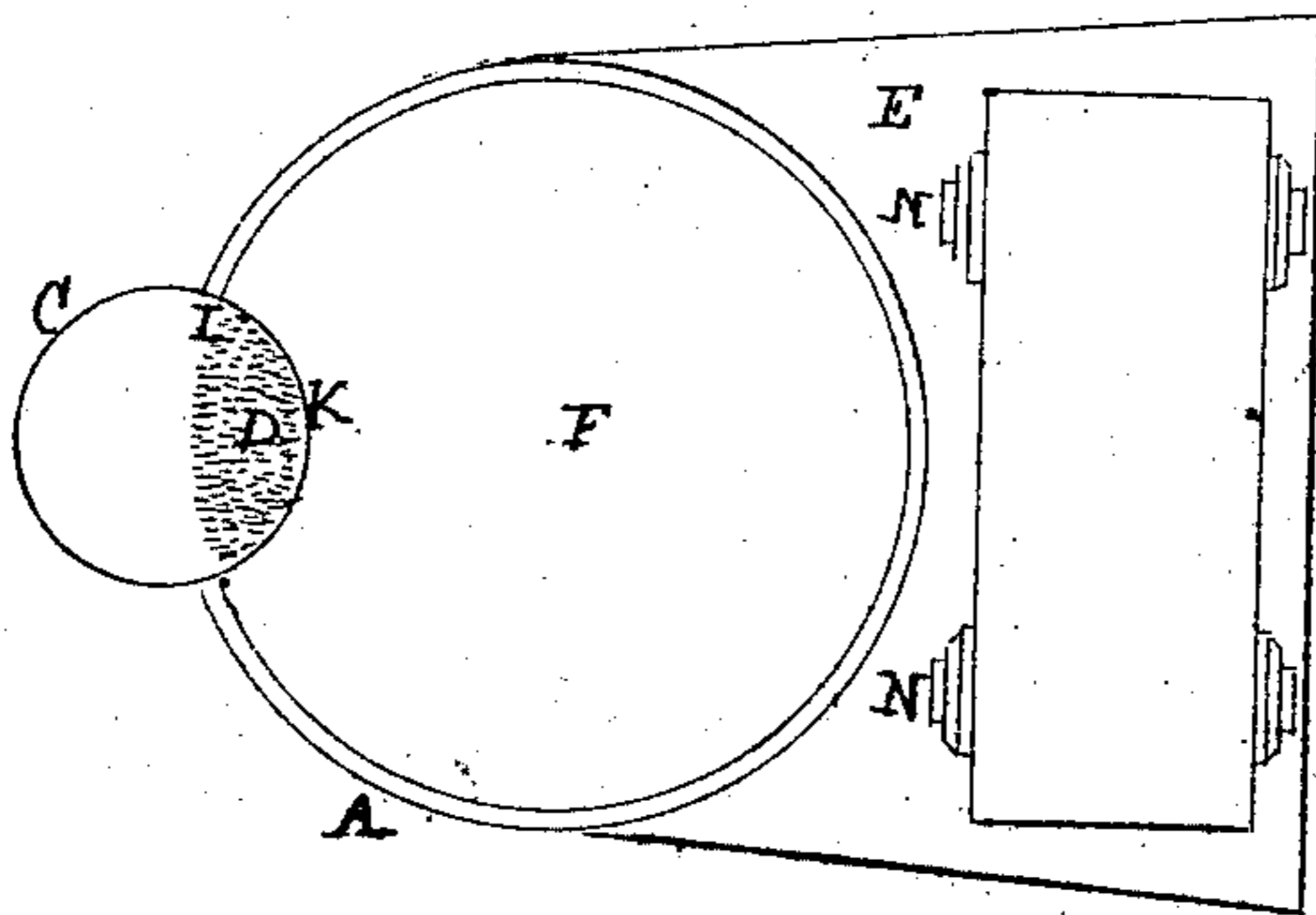


Samuel Darling Improved Pen Cleaner.

73956

Fig. 1.



PATENTED
FEB 4 1868

Fig. 2.

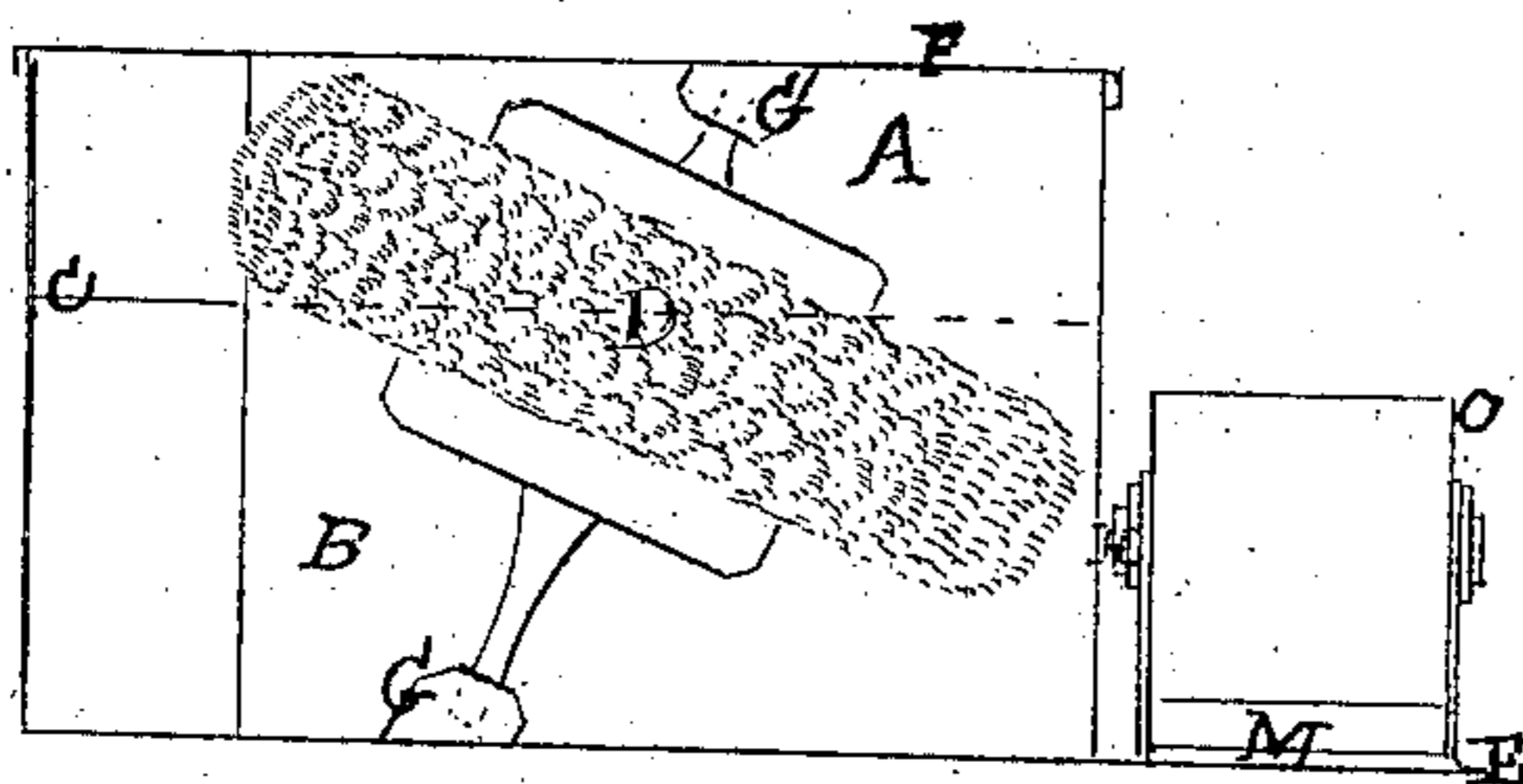
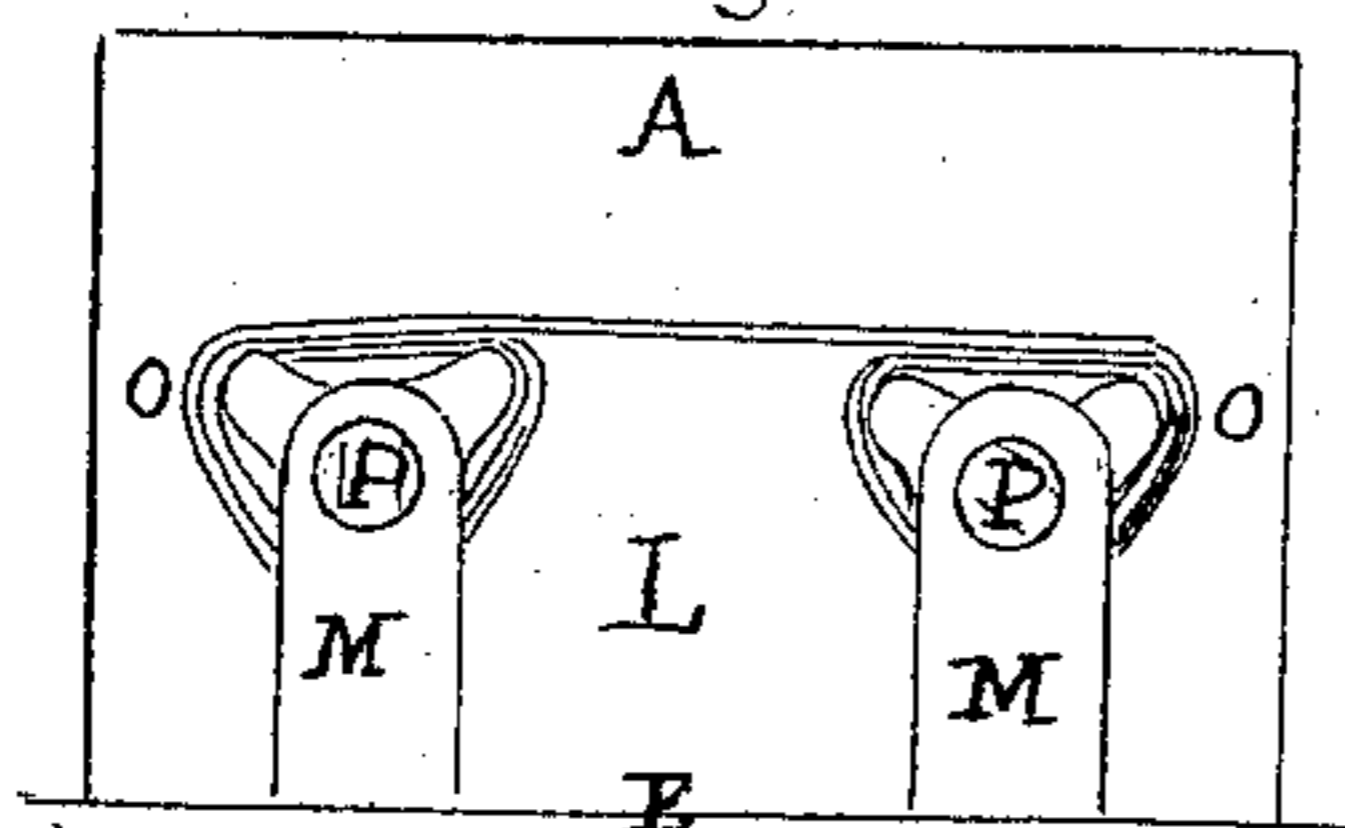


Fig. 3.



Witnesses
A. M. Stone
S. J. Taylor

Samuel Darling
by Crosby, Henshaw & Field
his Attorneys.

United States Patent Office.

SAMUEL DARLING, OF BANGOR, MAINE.

Letters Patent No. 73,956, dated February 4, 1868.

IMPROVEMENT IN PEN-WIPERS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, SAMUEL DARLING, of Bangor, in the State of Maine, have invented certain Improvements in Pen-Wipers; and I do hereby declare that the following, taken in connection with the drawings which accompany and form part of this specification, is a description of my invention sufficient to enable those skilled in the art to practise it.

The object of this invention is to provide a simple, compact, and efficient means for readily cleaning a pen, and whereby it may be dipped in water, cleansed of its ink, and wiped dry, whilst also the brush or other article upon which the ink may be wiped will be more or less self-cleaning; and it consists of a cup or water-vessel, within which is a stationary brush, or a circular brush, free to revolve upon a slight touch of the pen; and also of a reel, upon which the pen may be wiped, and which is so arranged that it may, at will, present a fresh wiping-surface for the pen. In the drawings accompanying this specification, and which illustrate one of many forms in which my invention may be embodied—

Figure 1 represents a top view,

Figure 2 a transverse section, and

Figure 3 an end view of the apparatus ready for use, the brush in fig. 2 not being shown in section.

A represents a water-tight vessel, partially filled with water, as shown at B, in fig. 2. This vessel is preferably made in a cylindrical form, except the portion C, which is a projecting portion of the cup, and which I have shown as a smaller cylinder, cutting or intersecting the larger one, and forming part of the cup. The object of this projection or bulge in the cup is to allow sufficient room for the pen to dip into the water without necessarily touching the brush D in its descent. The bottom of this vessel, or the base to which it may be secured, I make so as to project beyond the vessel, as shown at E, and upon this extension of the base I secure firmly the reel, hereinafter described. F, fig. 1, is the cover, so made, in any well-known manner, as that it will firmly hold its place when properly put on. To the under side of this cover, as also to the inside of the bottom of the cup, is soldered or otherwise firmly secured a drilled centre-piece, G, each of which is designed to receive one end of the axis of the circular brush H, and in which it should be so held, when the cover is on, as to be free to revolve easily upon a slight touch given to the brush. This axis may stand vertically, and thus cause the brush to revolve in a horizontal plane; but as this would require the brush to be made thicker, and would also keep the opposite sides equally immersed in the water, it is not so desirable as to give to the axis an inclination of some thirty degrees, more or less, from a vertical line, in order that when the water is at a proper height the part of the brush which is lowest may be immersed, while the part that is highest may be nearly or quite out of water. To effect this the pieces G have simply to be secured in a correspondingly inclined position, and the lower one to be placed at the left, and the upper one to the right, of a vertical line drawn through the centre of the cup. The diameter of the brush should be but little less than that of the cup, so as to be readily accessible to the pen, as shown at I, where it is visible underneath the curved space K, cut out from the lid, to admit of the rubbing of the pen against the brush. Upon removing the cover to cleanse the vessel, or for any other purpose, it immediately becomes disengaged from the brush, and the brush disengaged from the vessel. I have made one end of the axis longer than the other; this enables me to tilt the brush to the degree desired without touching the bottom, and hence avoid the liability of the brush to come in contact with and take up again the sediment or deposit which has previously been washed out of it or the pen. The pen-wiper L is composed of two similar upright frames, M, both secured to the base E. In each frame is firmly secured a centre or axis, N, of a reel, O, of three or more arms. The outer end of this axis has a thread to receive a nut, P, for the purpose of tightening or loosening the same, friction-washers, of leather or other suitable material, being interposed between the reel and the uprights. A strip or ribbon of wash-leather, buckskin, or other suitable material, is wound tightly upon both reels, but in opposite directions, and the screw-nuts are so adjusted as that the strip will hold its position as firmly as desired.

In order to clean a pen, the better mode is as follows: The pen should first be dipped into the water, to rinse off the looser portions of ink, and in the act of being withdrawn held so that it will rub against the brush and be still further cleaned, and by thus giving to the brush a partial rotation, cause a portion of it which had previously been in the water to rise above it, and a portion which had been above to be immersed,

thus constantly bringing up a freshly-washed part, and carrying under a part needing to be washed. The pen being thus rinsed and cleaned, may next, if desired, be wiped dry upon the reel.

When a stationary brush is used instead of a revolving one, it may be of any desired form, and held in place, in any convenient way, within the water-vessel; but it should be more or less immersed in the water.

The whole arrangement is simple and compact, and supplies a great need, viz, a means for self-cleaning or rinsing the pen-cleaner, and also a means for leaving the pen dry, the whole operation being almost instantaneous. The wash-leather may be long enough to last a great while without washing or renewal, a fresh, clean surface being always presentable to the pen, until the reel has run out.

I claim as my improvements in pen-cleaners—

1. A pen-cleaning apparatus so constructed as that the pen may be first dipped in water, and then be cleaned against a brush hung free to revolve, substantially as set forth.

2. The combination, with a water-cup or vessel, of a circular brush, free to revolve therein, as and for the purpose described.

3. The combination, with such a cup, of a revolvable brush, set at an angle with the cup, substantially as and for the purpose described.

4. The removable cover, having secured thereon one of the bearings or centres for the brush.

5. The combination, with a pen-washer, of a wiping-reel, as and for the purposes described.

6. A pen-cleaner having a brush, circular or otherwise, to be used wet or dry, in combination with a wiper, made of wash-leather, cloth, or their equivalents, for the purpose herein set forth.

SAMUEL DARLING.

Witnesses:

A. L. SIMPSON,

JOHN E. HALL.