(No Model.)

H. & J. W. DIXON & H. S. KOPP.

BRUSH FOR WASHING WINDOWS.

No. 406,128. Patented July 2, 1889.

Fig. 1.

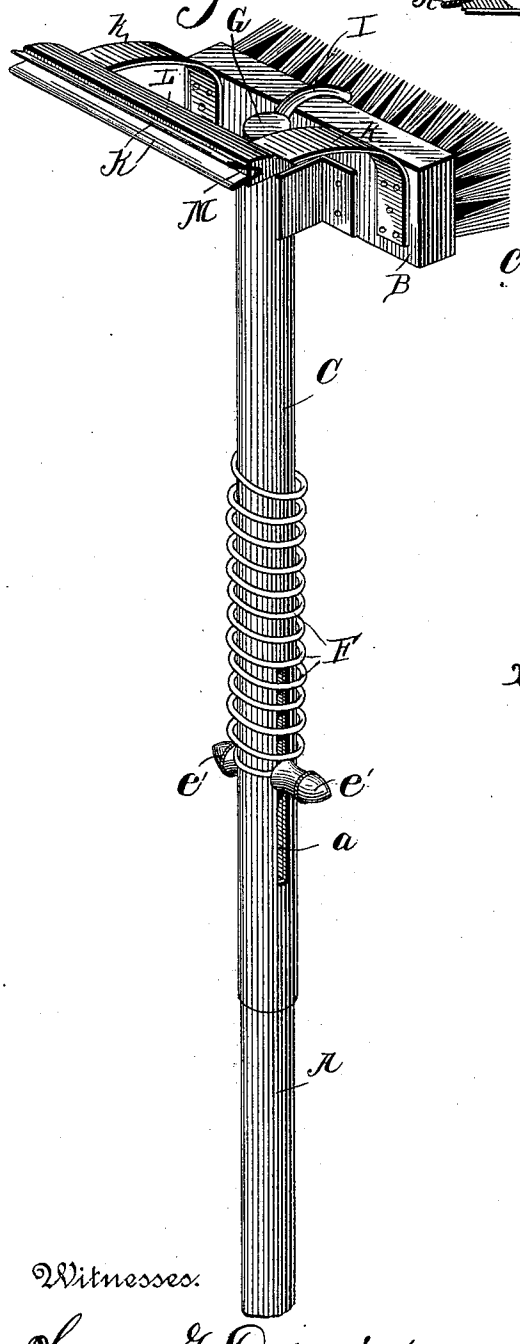


Fig. 2.

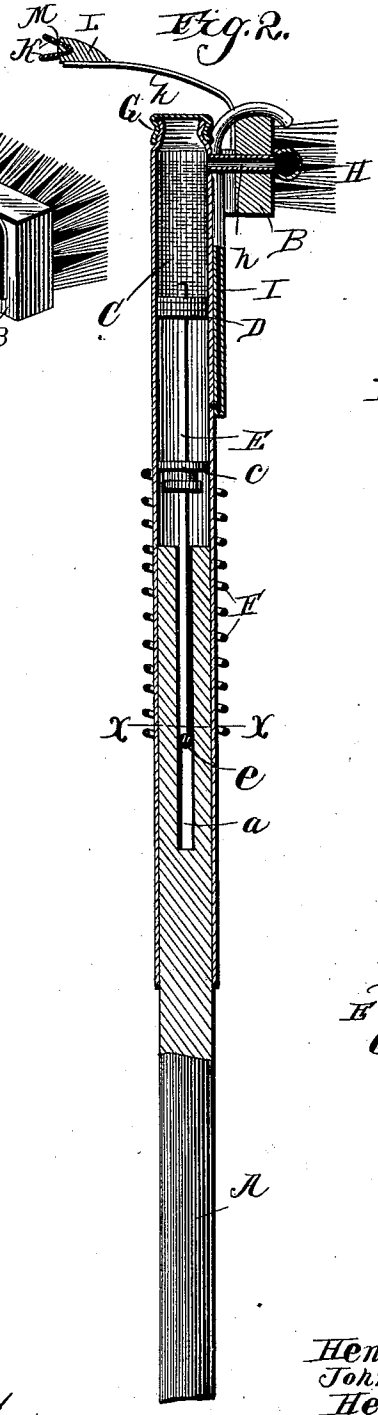


Fig. 3.

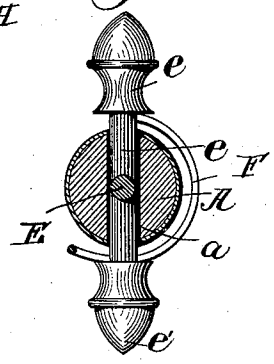
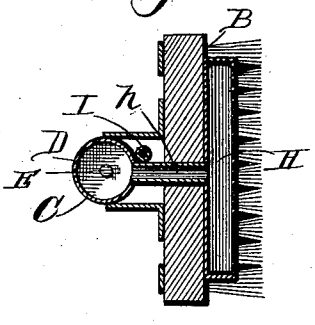


Fig. 4.



Witnesses:

Henry J. Dieterich

C. E. Doyle.

Inventors:

Henry Dixon,
John W. Dixon, and
Henry S. Kopp,

By their Attorneys

C. A. Snow & Co.

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY DIXON, JOHN W. DIXON, AND HENRY S. KOPP, OF DAYTON, OHIO.

BRUSH FOR WASHING WINDOWS.

SPECIFICATION forming part of Letters Patent No. 406,128, dated July 2, 1889.

Application filed September 29, 1888. Serial No. 286,747. (No model.)

To all whom it may concern:

Be it known that we, HENRY DIXON, JOHN W. DIXON, and HENRY S. KOPP, citizens of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented a new and useful Improvement in Brushes for Washing Windows, of which the following is a specification.

The object of this invention is to provide a brush for washing windows which is provided with simple and effective means for supplying the same with water during the operation; and it consists in a certain novel construction and combination of devices, fully set forth hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of the improved brush. Fig. 2 is a longitudinal central sectional view thereof. Fig. 3 is a transverse sectional view on the line *x x* of Fig. 2. Fig. 4 is a longitudinal sectional view of the brush.

Referring by letter to the drawings, A designates the handle of the improved brush, to one end of which is attached the brush B, and the portion of the handle adjacent to the brush consists in a cylinder C, in which operates a plunger or piston D. The piston-rod E extends downwardly through a packing-box *c* in the lower end of the cylinder, and is provided at its extremity with a cross-bar *e*, which operates in a slot *a* in the handle at a suitable distance from its lower end. The ends of this cross-bar are provided with knobs *e' e'*.

F represents a spring which is coiled around the handle, is rigidly attached thereto at one end, and is connected at its lower end to the cross-bar. This is a contractile spring, and therefore normally holds the plunger or piston raised or in the upper end of the cylinder. The upper end of the cylinder is closed by the adjustable screw-cap G.

The brush B is of the ordinary or any preferred shape and construction, and arranged longitudinally through the center thereof is the perforated supply-tube H, which communicates at its center with the upper end of the cylinder through the short tube *h*. It will be evident that if the cylinder is full of water and the plunger is in the lower end thereof the spring will gradually force the plunger up and expel the water through the supply-tube into the brush; but the upward movement of the plunger will be slow on account of the minuteness of the perforations in the supply-tube, thereby expelling only sufficient water to keep the brush moist.

I represents a vent-tube, which extends from the lower end of the cylinder, along the under side thereof, and discharges into the brush, whereby if any of the water should pass to the lower side of the plunger during the operation of the device the same will be expelled into the brush when the plunger is drawn back.

The operation of our brush is as follows: To charge the cylinder with water, the cap is removed therefrom and the plunger is drawn back, after which the cap is replaced. As the window is rubbed with the brush, a constant flow of water is provided by the spring action of the plunger, thereby obviating the necessity of frequent dippings of the brush.

The rubber K, which is attached to the back of the brush, consists of the curved arms *k k*, connected at their free ends by the grooved bar L, and the elastic webs arranged at their edges in the groove and held therein by the strip or wedge M.

It will be understood that slight alterations in the arrangement and minor details of this device may be made without departing from the spirit of the invention.

Having described our invention, we claim—

1. The combination, with the brush provided with a suitable handle, of the cylinder communicating at one end with a perforated tube in the brush and the plunger operating in the cylinder and provided with a spring to gradually force it upward to expel the contents of the cylinder into the brush, substantially as specified.

2. In a window-brush, the combination of the perforated supply-tube arranged in the brush, the cylinder connected at its upper end to the supply-tube and provided with a removable screw-cap, the plunger operating in the cylinder and provided with a suitable rod,

the vent-tube communicating with the lower end of the cylinder and discharging into the brush, and the contractile spring connected to the plunger-rod, substantially as and for the purpose specified.

3. In a window-brush, the combination, with the brush and handle attached thereto, of the perforated supply-tube arranged in the brush, the cylinder connected to the supply-tube, the plunger operating in the cylinder and provided with a plunger-rod, the cross-bar attached to the rod and operating in a slot in the handle, and the contractile spring connected to the said cross-bar, all constructed and arranged substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

HENRY DIXON.
JOHN W. DIXON.
HENRY S. KOPP.

Witnesses:
ALBERT EMANUEL,
WEBSTER W. SHUEY.