

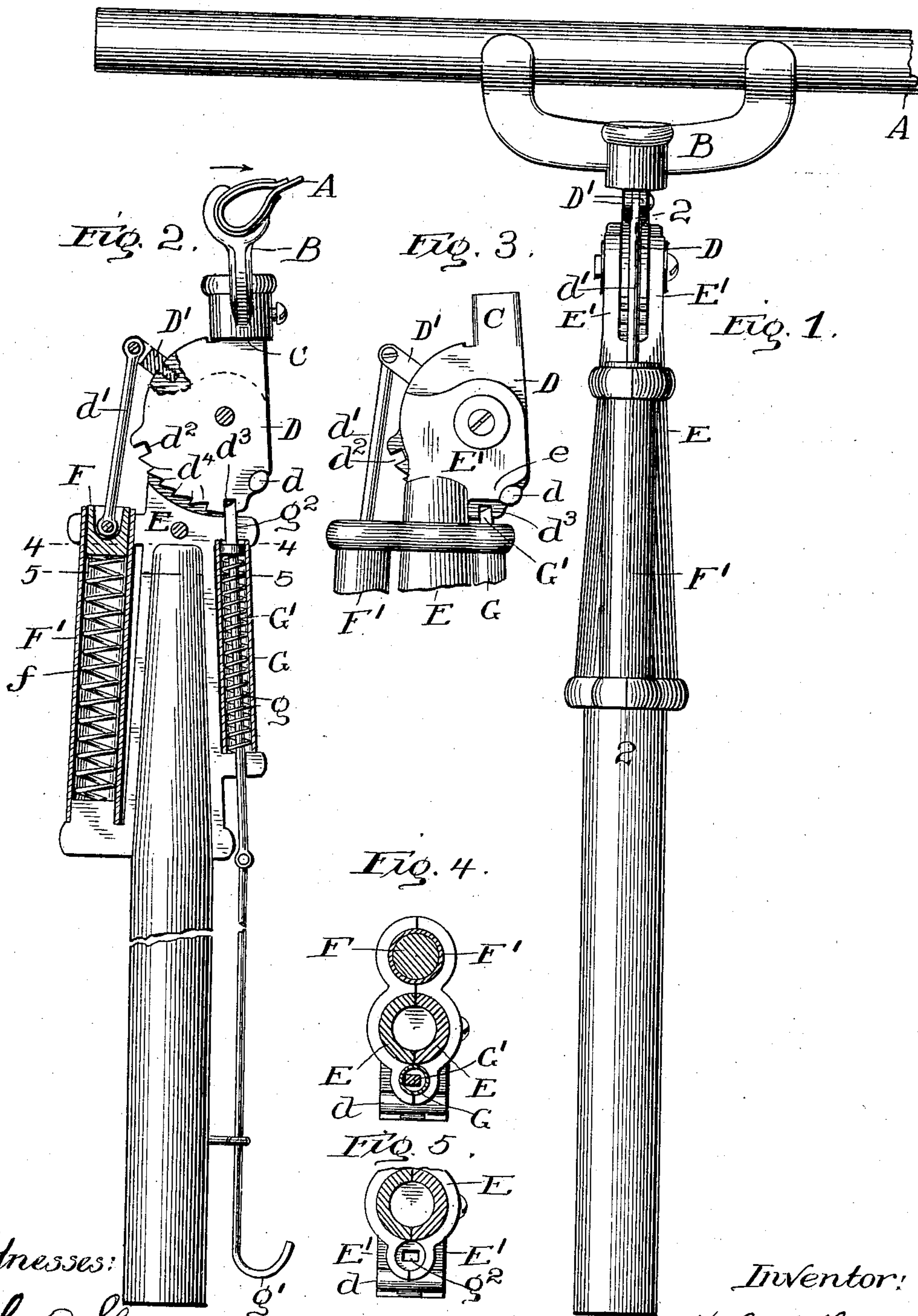
No. 742,590.

PATENTED OCT. 27, 1903.

W. H. CATTELLE.
WINDOW CLEANER.

APPLICATION FILED JAN. 20, 1902.

NO MODEL.



Witnesses:

Chas. O. Sherway
S. Bliss

Inventor:

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Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM H. CATTELLE, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
MORTIMER CAHILL, OF CHICAGO, ILLINOIS.

WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 742,590, dated October 27, 1903.

Application filed January 20, 1902. Serial No. 90,492. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. CATTELLE, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Window-Cleaners, of which the following is a specification.

My invention relates to certain new and useful improvements in window-cleaners. Its object is to provide a cleaner which will operate satisfactorily on windows of varying heights and in all positions with respect to the surface of the glass.

To this end my invention consists in certain novel features of construction, which are fully shown in the accompanying drawings and described in the specification.

In the drawings, Figure 1 is an elevation of my improved window-cleaner. Fig. 2 is a section in the line 2 2 of Fig. 1. Fig. 3 is a side elevation of my window-cleaner, showing the external appearance of the rotating portion shown in Fig. 2. Fig. 4 is a section in the line 4 4 of Fig. 2; and Fig. 5 is a section in the line 5 5 of Fig. 2, showing only the front portion of the device.

Referring to the drawings, A is the window-cleaner proper of the ordinary type, consisting of a strip of rubber suitably held within a metal tube. The cleaner A is supported by the fork B, as shown. This is the usual way in which window-cleaners of this type are made, and there is, therefore, no novelty in this form of construction. The fork B is mounted upon a radial projection C of a metal plate D, which is rotatably pivoted in the frame E of the cleaner, said frame being mounted upon the end of the stick of the cleaner. The plate D is provided with a second radial extension D', which is connected by a link d' to the piston F, as shown in Fig. 2. The piston F runs in a cylinder F' and is pressed upward by means of the spring f. The tendency of the spring is therefore to move the cleaner as far as possible in the direction of the arrow. The motion of the cleaner in this direction is limited by lugs d, which engage the shoulders e of the plates E', which form a portion of the frame E.

The plate D is provided with two depres-

sions d² d³ and with the ratchet-teeth d⁴. In the front portion of the frame E is a cylinder G, containing a rod G', adapted to engage the depressions d² d³ and the ratchet-teeth d⁴ of the plate D, with which it is held in contact by means of the spring g, which forces it upward. This rod is longitudinally movable and is provided with a hook g' at its lower end by which it may be drawn down out of engagement with the plate D. The rod G' is rectangular at its upper extremity, as shown in Fig. 4, and passes through the rectangular hole g², Fig. 5. If it is desired to hold the rod permanently out of engagement with the rotatable plate D, it is pulled down below the hole g² and turned, which of course locks it in its lower position.

The operation of the device is substantially as follows: In cleaning the top of the window it is desirable to have the cleaner proper in about the position shown in Fig. 2 with reference to the rod; but in cleaning the bottom of the window it is desirable to have the cleaner about sixty degrees back of that position. The operator of the device draws the cleaner down the window, the spring f holding the cleaner in continuous contact with the window; but the pressure against the window gradually increasing the cleaner proper is moved around and at the bottom of the window is in a position approximately sixty degrees back of that in Fig. 2. The ratchet is used, so that in taking the cleaner from the window the head will not fly back with a sudden jar. Of course it is understood that in the operation as here described the rod G' is disengaged from the rectangular depression before starting.

The device can be used in the ordinary way by leaving the rod G' in place, and it can be used in a different way entirely—that is, with a yielding pressure—by holding the rod out of contact with the plate altogether and locking it, as described above.

I realize that considerable changes can be made in the details of this construction, and I therefore do not intend to limit myself to the specific form herein described.

I claim as new and desire to secure by Letters Patent—

1. The combination with a suitable rod, of a window-cleaner pivoted to the extremity thereof, a suitable spring secured to said rod and means for connecting the spring to the cleaner and adapted to rotate the same and produce continuous forward rotatory pressure upon said cleaner with respect to said supporting-rod; substantially as described.
2. The combination with a suitable supporting-rod, and a window-cleaner pivoted to its upper end, of a suitable spring secured to said rod and means for connecting the spring to the cleaner and adapted to rotate the same and produce continuous forward rotatory pressure between said window-cleaner and said supporting-rod and suitable means for locking said window-cleaner in position with respect to said supporting-rod; substantially as described.
3. In a device of the class described, the combination with a suitable supporting-rod, a window-cleaner pivoted to its upper end, a suitable spring secured to said rod and means for connecting the spring to the cleaner and adapted to rotate the same and produce continuous forward rotatory pressure upon said window-cleaner with respect to said supporting-rod, of suitable means for limiting the forward motion of said window-cleaner; substantially as described.
4. In a device of the class described, the combination with a suitable supporting-rod, a metal plate pivoted to the upper end of said rod, a projecting radial lug upon said metal plate, a window-cleaner secured to said projecting lug, suitable means for producing forward rotatory pressure on said plate with respect to said supporting-rod, of suitable teeth upon said plate a suitable movable dog adapted to engage said teeth, and to lock the same in position either at the forward or backward

end of its swing, or to permit of gradual backward motion; substantially as described.

5. In a device of the class described, the combination with a suitable supporting-rod and a metal plate pivoted upon the end of said rod, a window-cleaner secured to said metal plate, a suitable spring rigidly seated with respect to said supporting-rod and adapted to produce forward rotatory pressure upon said plate, of a series of ratchet-teeth and two square-sided depressions upon said pivoted plate and a suitable movable dog adapted to lock said plate in either its forward or backward position or to permit of its backward motion as may be desired; substantially as described.

6. In a device of the class described, the combination with a suitable supporting-rod, and metal plate pivoted upon the upper end thereof, said metal plate having two peripheral notches and a series of ratchet-teeth, a window-cleaner secured to said plate and a suitable spring adapted to produce forward rotatory pressure upon said plate with reference to said supporting-rod, of a suitable movable dog connected with said supporting-rod, adapted to engage said peripheral notches and said ratchet-teeth and thereby lock the cleaner in either of two positions or to permit of backward motion of said cleaner, and suitable means for permanently locking said dog out of engagement with said ratchet; substantially as described.

In witness whereof I have hereunto set my hand, at Chicago, in the county of Cook and State of Illinois, this 14th day of January, A. D. 1902.

WILLIAM H. CATTELLE.

Witnesses:

CHAS. O. SHERVEY,
S. BLISS.