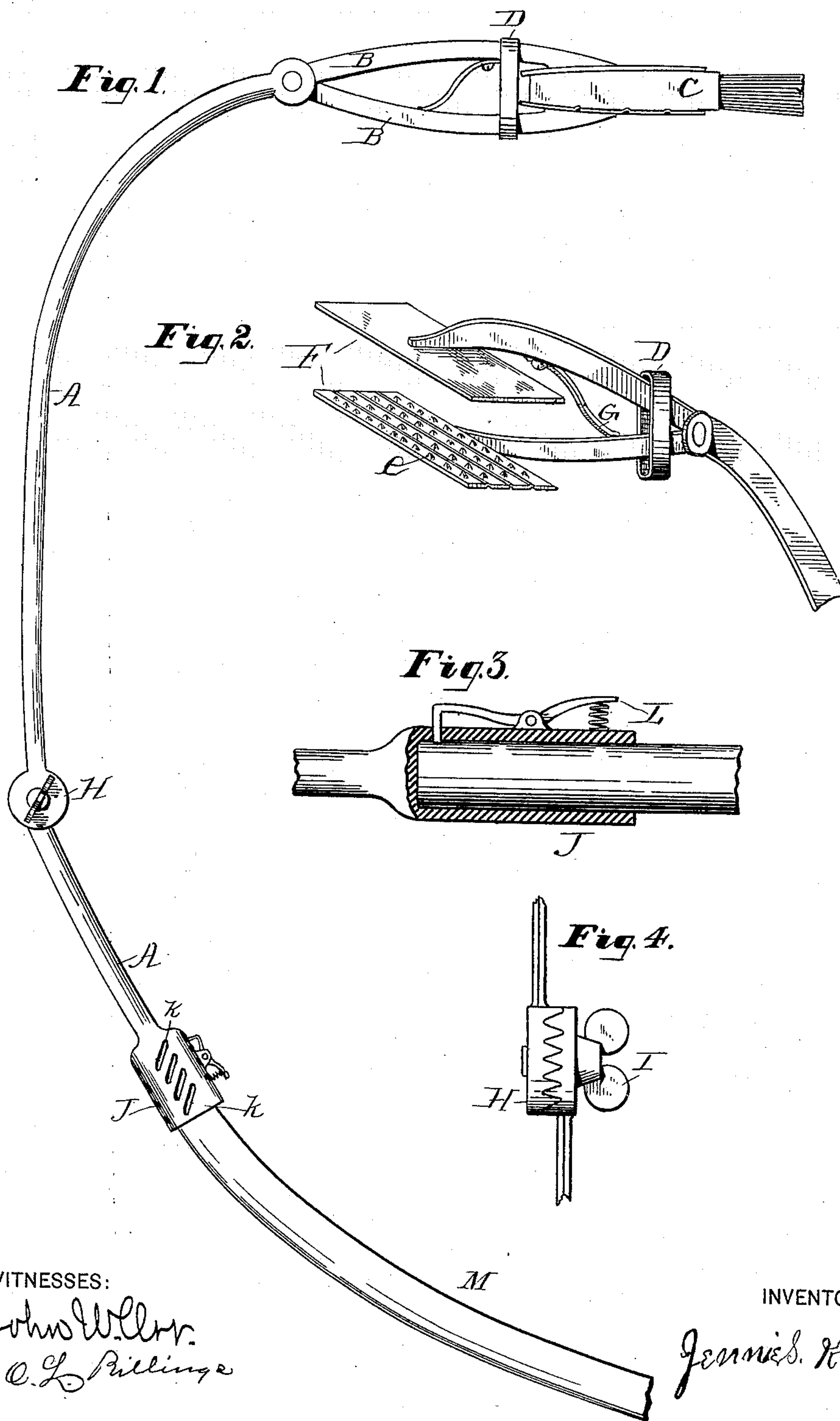


(No Model.)

J. S. RUTAN.
WINDOW CLEANER.

No. 322,070.

Patented July 14, 1885.



WITNESSES:

John W. Orr.
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JENNIE S. RUTAN, OF PHILADELPHIA, PENNSYLVANIA.

WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 322,070, dated July 14, 1885.

Application filed September 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, JENNIE S. RUTAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Window-Cleaner, of which the following is a specification.

My invention relates to a newly-devised apparatus for reaching and cleaning the outer side of windows, especially those of upper stories in high houses, and so avoid the danger and exposure incurred by those who are obliged to climb outside on window-sills, as the machine is so constructed that by means of its curved handle every part of the weather-surface of the glass can be easily reached while the operator stands safely inside. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 represents a side view of the device fitted up for use. Fig. 2 shows the clamp-head piece thrown open, showing the roughened inner surface. Fig. 3 represents the socket-joint connecting the two portions of the handle. Fig. 4 is a front view of the joint in the iron part of the handle, by means of which the degree of curvature can be increased or diminished, as required in operating.

Similar letters refer to similar parts throughout the several views.

A A represent the iron portion of the handle; B B, the two halves of the clamp, securing the brush C by means of the ring D, slipped forward for that purpose. At E is represented the roughened inner surface of these jaws, designed to assist the ring in retaining the brush in position.

F are the jaws, thrown apart by means of the spring G when the ring is slipped back.

H is a joint regulated by the thumb-screw I, placed at and connecting the lower third with the upper two-thirds of the iron part of the handle, and used for the purpose of straightening the same and converting the device into an inside window-cleaner.

J is a socket-joint connecting the wooden and iron portions of the handle. K K are perforations in the iron socket, through one of which the spring-lock L plays into the wooden portion inside.

M represents the wooden part of the handle, curved to correspond with the curve of the iron part above the joint.

The apparatus is constructed of wood and malleable iron, its length varying from four feet upward, as required by the varying height of windows. The lower part of the handle is made of any pliable wood, preferably ash or hickory. The upper part and head-piece are malleable iron. The two lengths are connected by means of a socket-joint, J. This socket is of iron, two and one-half inches deep, and perforated. Through one of the perforations a spring-lock plays against or into the head of the wooden portion of the handle, which fits closely inside. This is designed to render the union more secure and to admit of separation when necessary. The entire length of handle is subject to a uniform curve, being ten inches from a parallel surface at the deepest point in the center, resembling a lengthened arm of the human window-washer when curved for such work. This curve may be increased or lessened, if required in operating, by means of the shallow-toothed joint H, rendered movable by the thumb-screw I. In manufacturing these handles, however, I find it advisable sometimes to use other methods for attaining the necessary curve, and do not confine myself to the one described.

The head-piece consists of two flat jaws, F, roughened on the inner surface by means of the raised lines and teeth shown at E. The lower jaw is riveted directly to the handle, the upper four inches of which is bent smartly forward, making a right angle. The upper-jaw and short neck are molded in one piece and united to the lower at the angle by means of a movable dovetailed joint.

Between the two pieces B B, which constitute the neck, a flat steel spring, G, plays, one end of which is riveted to the one of said pieces B, while the other end plays against the other piece B. This throws the jaws widely asunder when the clasp is removed.

The clasp D is an iron ring that plays between the movable joint and the jaws over the neck-pieces B B, the degree of closure depending on the distance this ring is pushed forward. Articles varying in thickness from

a brush to a small chamois-skin can so be held securely. The brush especially designed for this use is shown in the drawings.

In using this device the operator, who
5 stands inside the window, raises the lower sash far enough to thrust out and up the machine, the curved handle bringing the head-piece and its contained washer closely against the glass. This, when the handle is moved
10 up and down, produces enough friction to speedily remove all dust and dirt and leave a finely-polished surface.

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

1. In a window-cleaner, the combination, with the head-piece, of a handle consisting of two portions united by an adjustable lock-joint, each portion of the handle being curved,
substantially as described. 20

2. In a window-cleaner, the combination, with the head-piece, of the curved and jointed metallic handle A A, the lower portion of which is provided with a socket, J, to receive an additional wooden handle, substantially as
described. 25

JENNIE S. RUTAN.

Witnesses:

SARAH E. EDWARDS,
JOHN S. NELSON.