No. 676,425. Patented June 18, 1901.

S. I. DEPEW.

DUSTER AND WINDOW CLEANER

(Application filed Jan. 28, 1901.)

(No Model.)

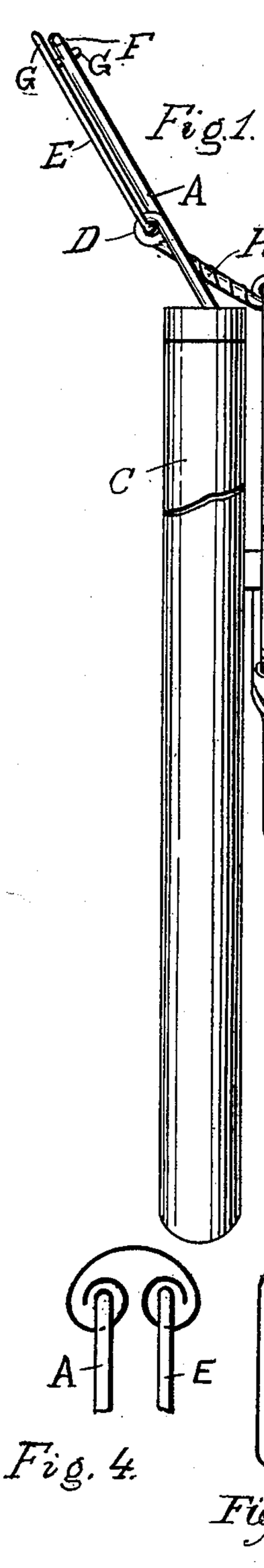

Fig. 1.

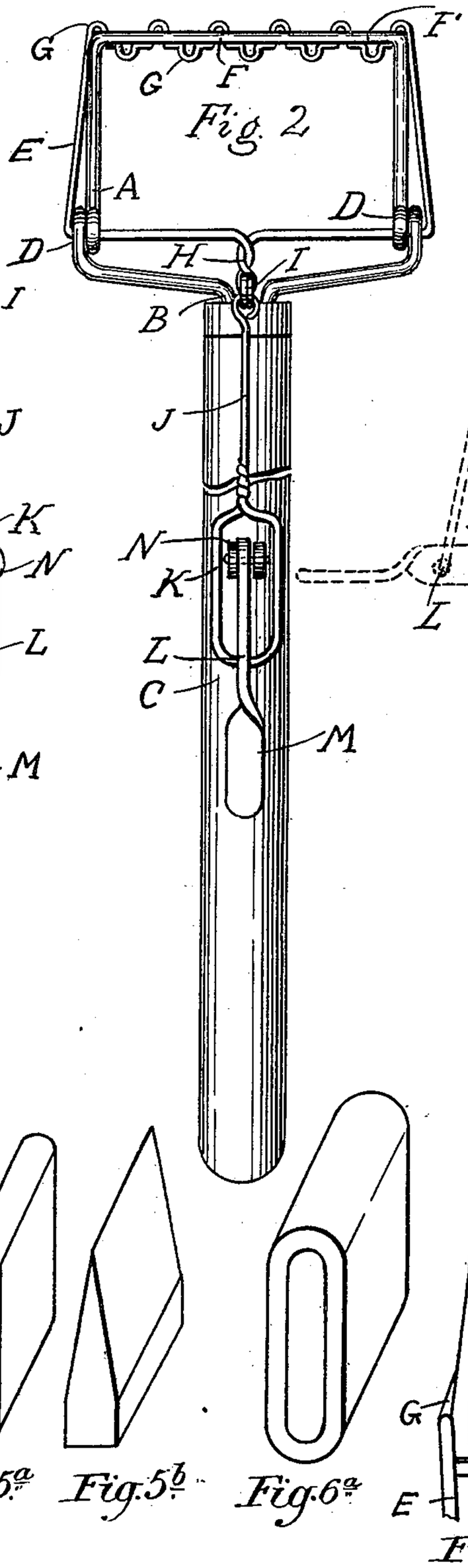

Fig. 2.

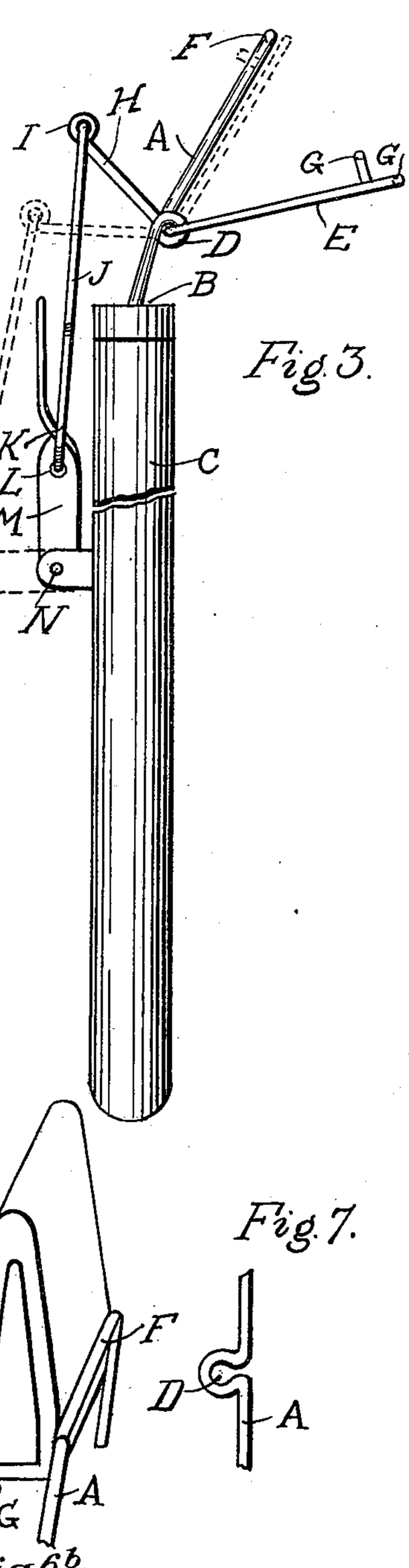

Fig. 3.

Fig. 4.

Fig. 5a.

Fig. 5b.

Fig. 6a.

Fig. 6b.

Fig. 7.

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UNITED STATES PATENT OFFICE.

STROTHER I. DEPEW, OF PANA, ILLINOIS, ASSIGNOR OF ONE-HALF TO BYRON E. CRONKHITE, OF ROSSVILLE, ILLINOIS.

DUSTER AND WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 676,425, dated June 18, 1901.

Application filed January 28, 1901. Serial No. 44,987. (No model.)

To all whom it may concern:

Be it known that I, STROTHER I. DEPEW, a citizen of the United States, residing at Pana, in the county of Christian and State of Illinois, have invented a new and useful Duster and Window-Cleaner, of which the following is a specification.

My invention relates to improvements of domestic utensils, and in particular to dusters and cleaning implements.

The object of my invention is to provide a light yet strong and serviceable utensil in such a simple form that its cost of production and also its purchasing price can be low.

My invention has many advantages over other products for similar purposes owing to its simplicity and cheapness of material, but especially for its adaptability to different uses for which heretofore entirely different utensils have been used.

To explain the nature of my invention more clearly, reference may be had to the accompanying drawings, in which—

Figure 1 is a view in elevation of my invention in a closed condition. Fig. 2 is a side view of the same. Fig. 3 is a view similar to Fig. 1, but in an unlocked or released condition. Fig. 4 shows in diagram the preferred manner in which a cloth may be applied. Figs. 5^a and 5^b show two core forms to be used in connection with my invention. Figs. 6^a and 6^b show cloths applied to cores shown in Figs. 5^a and 5^b, and Fig. 7 shows a detail construction.

Referring in particular to Figs. 1 and 2, the duster is shown in a closed condition without a dust-cloth applied. A is preferably a strong wire frame, whose ends B are retained in a handle C of any suitable length, preferably of wood. The frame A contains two loops D to serve as bearings for a movable frame or jaw E. This jaw consists also of a frame, which may be of somewhat lighter and more elastic material. Frame E is slightly smaller than A and is adapted to engage the upper cross-bar F by the cross-bar G, which has projecting teeth formed in zigzag fashion and located in two planes. One set of these teeth or bent-wire projections engage the bar F at its upper side, the other at its lower side. These projections are applied to enable the clamping-frame to engage any cloth or rag more closely and evenly and to hold it more with the nature of teeth, however, without cutting the texture, and yet hold it firmly enough to avoid its becoming dislodged by any projecting obstruction, such as a nail. The lower end of the frame E is held in bearings D, while the wire ends of the frame are bent to form an obtuse angle with it. These ends, which form an elastic lever, project through frame A. Their extremities are shaped into the loops I, through which threads the wire J, whose other end forms the loop K, which has a bearing at L in lever M, mounted and pivotally secured at N to the handle C.

Fig. 3 shows the movable frame E entirely released, with the lever M moved one hundred and eighty degrees from the position shown in Fig. 1. When frame E engages frame A, it moves into the position shown by dotted lines. In this position spring-lever H stands almost horizontal, as also lever M. The two frames loosely engage each other at the upper cross-bars F and G. In forcing down lever M into the position shown in Fig. 1 wire J is pulled down below bearing N, thereby pulling at I on lever H, which, due to its elasticity, is displaced downward and assumes the position shown in Fig. 1. The supporting-point L in this position falls below that of lever M and effectively locks frame E with F in a firm yet elastic manner.

Fig. 4 indicates, diagrammatically, the preferred way of applying the cloth. It will be observed that the ends are threaded through the frames and cover them. If it is desired to fully cover all the sides of the frames to prevent their rubbing on any projecting ornament on wall or ceiling, the cloth may be wound spirally around all four sides while the two frames are not in a locked position, but in a partially-closed one, and when the wire frames are properly covered the lever M is pulled down and the frames clamped together. The bend or angle with relation to the handle is given to frame A to permit the person dusting to stand some distance from the wall and to enable the frame to reach some distance beyond a projection.

Figs. 5^a and 5^b show two differently-shaped blocks or cores of wood or other suitable ma-

terial. Fig. 5ª shows a flat core with rounded ends, while Fig. 5ᵇ shows one with parallel sides at the end where it is to be held by the clamp, while it tapers to an edge at the other end. These may be wrapped with cloth, preferably of a width the same as the block or core and wound around the same a number of times until the whole length of the cloth strip is spooled up and clamped between the bars F and G, as indicated in Figs. 6ª and 6ᵇ. The layers of material are not indicated in the drawings. Fig. 6ª shows the core Fig. 5ª surrounded by a removable material—such as cloth, linen, leather, &c.—and Fig. 6ᵇ shows core Fig. 5ᵇ surrounded by any such suitable material and held between the jaws F and G. They are especially adapted for dusting light ceilings and wall-paper, and as soon as the engaging edge becomes soiled one turn or layer may be undone and another clean edge is presented for use, thereby preventing the embedding of streaks of dust into the ceiling or wall. In this manner a large piece of cloth can be economically used and quickly new clean surfaces presented, resulting in a considerable saving of time. For brushing, dusting, or washing calcimined walls or washing of windows the utensil, in combination with the cloth-wound cores, has proved very effective. For walls felt, rubber, or other material may be applied, while for windows chamois-skin is preferred.

My invention is open to numerous modifications in the shape of parts without departing from the nature of the invention. The bearing D, which is shown in form of a closed loop, may be made of an open bend, into which the frame E is forced, and it becomes removable by this construction. (See Fig. 7.) The lever M may be fulcrumed at any convenient place on the handle and may consist of wire, sheet metal, or other suitable material.

Having described my invention, what I desire to protect and claim as new is—

1. In a utensil the combination with a handle, of a wire-formed frame secured to said handle, a second frame movably supported in said wire-formed frame, an elastic lever applied to said second frame, a second lever hinged to said handle, and a wire connecting said elastic lever with said second lever, as and for the purpose described.

2. In a utensil the combination with a handle, of a wire-formed frame firmly mounted in one extremity of said handle, a second wire-formed frame pivotally supported in the first, an elastic lever formed by the wire ends of said second frame, a second lever movably mounted on said handle, and means for mechanically connecting the two levers.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 21st day of January, A. D. 1901.

STROTHER I. DEPEW.

Witnesses:
H. N. SCHUYLER,
HARRY MCKAY.