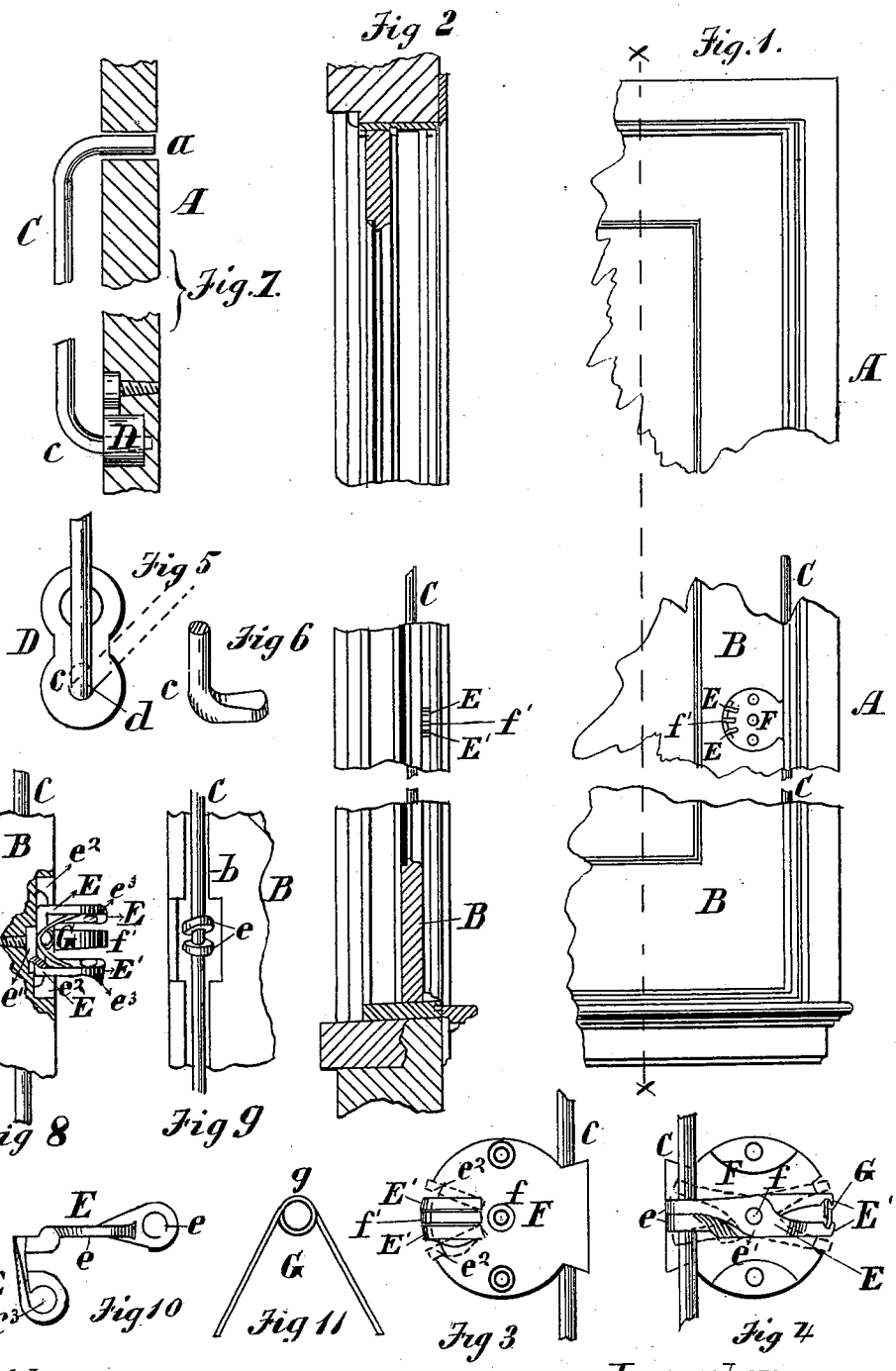
O. R. COOKE.
Sash-Fastener.

No. 202,154. Patented April 9, 1878.



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OSBORN R. COOKE, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SASH-FASTENERS.

Specification forming part of Letters Patent No. **202,154**, dated April 9, 1878; application filed February 21, 1878.

To all whom it may concern:

Be it known that I, OSBORN R. COOKE, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Sash-Holders, which is fully described in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents an inside elevation of a window-frame and sash with my improved holder applied; Fig. 2, an edge view of the same, taken on the line *x x*, Fig. 1; Fig. 3, a plan view of the holder and rod attached; Fig. 4, a similar view of the bottom of the same; Fig. 5, a plan view of the keeper for the lower end of the clutch-rod, with the latter in place; Fig. 6, a detail view of the lower end of clutch-rod; Fig. 7, an edge view of the box-frame, showing the clutch-rod in place; Fig. 8, an edge view of the sash next to the glass, with the holder applied; Fig. 9, a similar view of the opposite edge of the same; Fig. 10, a plan view of one of the dogs or clutches; and Fig. 11, a similar view of the catch-spring.

My invention relates to an improvement upon the sash-holder shown and described in Letters Patent No. 129,774, granted July 23, 1872.

In the patent aforesaid the holding-catch is attached to the sash-frame, and is consequently stationary, while the rod in connection with which it operates is attached to the sash and moves up and down with it.

In my improvement I attach the rod to the frame, making it stationary, and mount the dogs or catches on the sash, by which arrangement I am enabled to improve and simplify the construction and operation of the latter.

The invention consists in a rod attached to the window-frame, in combination with a pair of spring dogs or catches attached to the sash, and arranged to bite at one end on the rod, along which they are free to move when their outer ends are pressed together.

It also consists in a special device for holding the rod in place in the frame, by means of which it is secured in place, but at the same time is detachable.

It also consists in the special construction of other devices, all of which will be hereinafter more fully set forth.

In the drawings, A represents a window-frame, and B the sash. A rod, C, is attached to the box-frame, so as to project out therefrom toward the sash, as shown in Fig. 7 of the drawings. The ends of this rod are bent, and the lower bent portion *c* is flattened, as shown in Fig. 6 of the drawings, so that it is wider and thinner at its extremity than anywhere else. A hole, *a*, is made in the box-frame for the upper end of the rod C. The lower end is held by a keeper, D, inserted in a recess near the bottom of the frame, and provided with an elongated slot, *d*, at its lower end. This slot is made of such width that it will only receive the lower bent end of the rod when turned up edgewise, and the rod C is placed in position by first inserting the bent lower end into the slot of the keeper, as shown by dotted lines in Fig. 5 of the drawings, then turning it up, as shown in full lines in the same drawings, and inserting the upper end in the hole *a*, the latter being preferably arranged at a distance from the upper end of the slot in the keeper about equal to the length of the rod. It will thus be seen that the lower end of the rod cannot be removed from the keeper until turned down again, and, as the other end is up out of the way, the rod will be held in place and cannot be easily disarranged.

The outer edge of the sash is provided with a longitudinal groove, *b*, which receives the rod C, so that the latter will not interfere with the raising and lowering of the former.

Two catches or dogs, E, are arranged within a recess in the side of the sash upon the inside of the latter, and are provided at one end with apertures *e*, which are adapted to receive the rod C on which the catches are placed. The catches are also provided with central apertures e^1, extending in an opposite direction to those in the ends. A shield, F, is fitted to cover the recess within which the catches are placed, and is attached to the sash by screws, one of which passes through a central opening, *f*, and the central apertures e^1 in the catches, thereby securing the latter in place and forming a pivotal bearing for them. The outer ends of the catches are bent outward at right angles, as shown in Fig. 10 of the drawings, and extend outside of the shield, and are enlarged to form thumb-pieces

E′, in which recesses, e^2, are cut to receive the inner edge of the shield. The inside faces of the thumb-pieces have shallow grooves e^3, which are adapted to receive the free ends of a spring, G, having a coil, *g*, at its center, as shown in Fig. 11 of the drawings. The shield F is also provided with a projection, *f′*, upon its outer face, which is arranged between the outer ends or thumb-pieces of the catches.

When the catches are placed within the recess in the sash, the spring G is arranged in position between their outer ends, as shown in Fig. 8 of the drawings, so that when all the parts are arranged and secured to the frame and sash, as hereinbefore described, this spring will operate to spread open the outer ends of the catches, thereby spreading apart the inner ends also. But the rod C passes through the inner ends of the catches, and the holes in the latter pass directly through, so that they will slip readily on the rod only when brought together. Hence, whenever these inner ends of the catches are forced apart, as by the spring above described, they will bite upon the rod, and prevent the sash from being moved in either direction. At the same time the pivotal catches may be vibrated by means of the thumb-pieces E′, so as to bring their inner ends together, and permit them to slip upon the rod whenever it is desired to raise or lower the sash.

The device is extremely simple and very efficient, furnishing a means not only for preventing the sash from dropping, but for locking it against movement from the outside in either direction. The parts are not easily disarranged, and the slight wear occasioned by friction on the rod does not impair the efficiency of the catches.

Instead of a spring, the dogs may be weighted, in which case it is evident that the weights must be arranged upon opposite ends of the two catches—*i. e.*, the weight must be upon the lower outer end of one catch and upon the lower end of the other, in order to make them gripe the rod when released. The spring may be used with such weighted catches, if desired and found necessary. The form of the spring may be changed, if found desirable for efficiency.

Instead of a screw passing through the shield and catches, a stud-pin may be cast on the inside of the shield to form the pivotal support for the catches; and in this construction it will be necessary to cut away the thumb-pieces somewhat, as shown in Fig. 10 of the drawings, to permit the shield to be adjusted properly to insert the pin in the central openings of the catches. This style of holder is adapted to the lower sash of the windows of houses; but is not so convenient for upper sash, for it is evident that the device must necessarily be located near the upper end of the sash, and therefore could not be easily reached. It is also well adapted for use upon car-windows, and in other like places.

I do not limit myself to the precise form and arrangement of all the parts herein described and shown, for changes may be made to some extent without materially affecting the principle of operation as hereinbefore described.

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

1. An upright stationary rod, C, attached to the window-frame, in combination with a pair of catches or dogs pivoted to the sash, with their inner ends embracing the rod, and constructed and arranged so that when these ends are closed together they will slide freely on the rods, and when opened will bite or gripe the latter in opposite directions, substantially as set forth.

2. The stationary rod C attached to the window-frame, in combination with the sash B, having a groove, *b*, the pivoted catches E, and a separating-spring, G, substantially as described.

3. The shield F, provided with a projection or stop, *f′*, in combination with the pivoted catches E and the spring G, substantially as described.

4. The bent rod, C having its lower bent end flattened and widened, as specified, in combination with the keeper D, provided with an elongated slot, *d*, substantially as described.

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