

(Model.)

M. F. KIRK.
Shutter-Fastener.

No. 227,266.

Patented May 4, 1880.

Fig. 1.

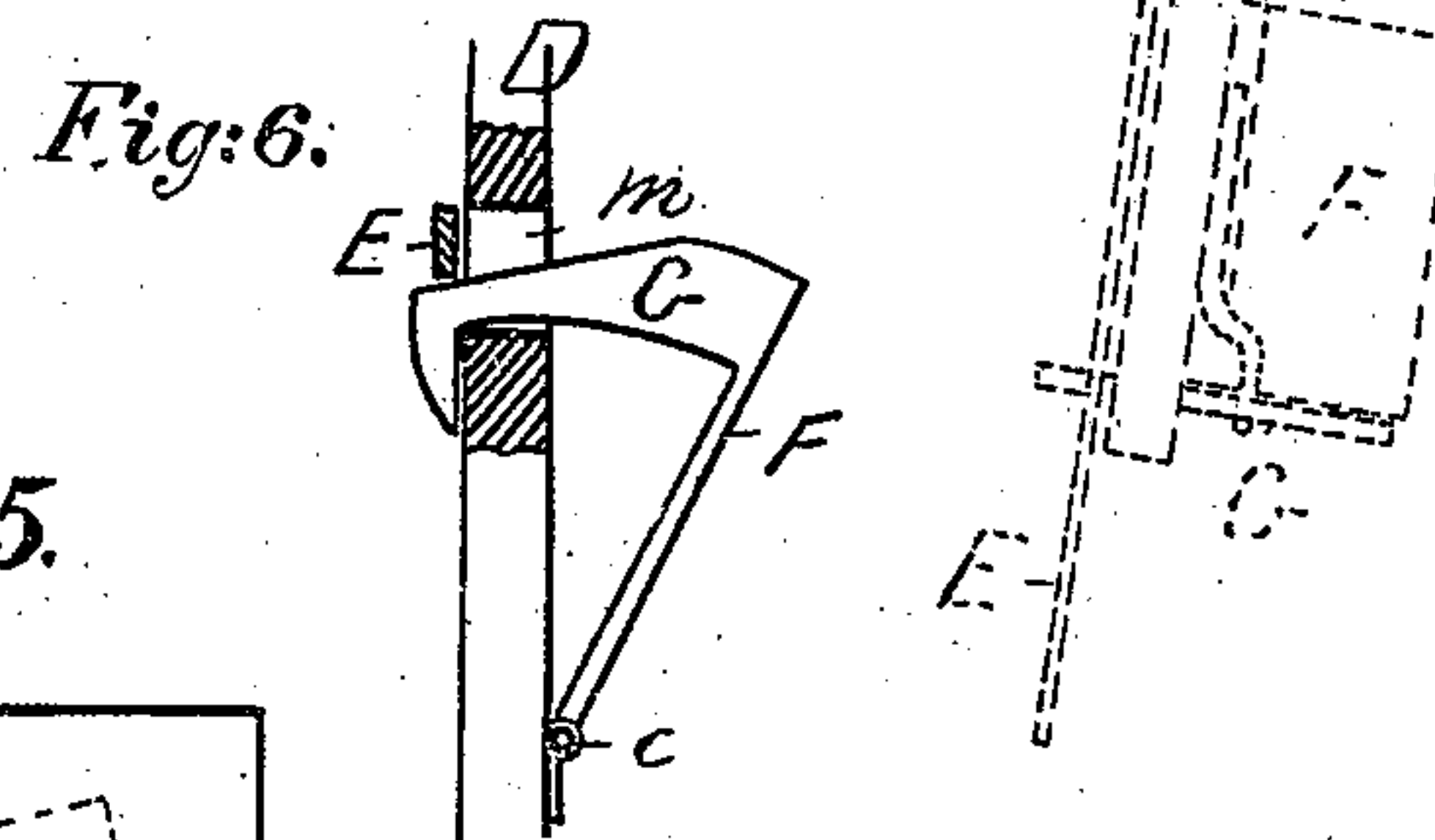
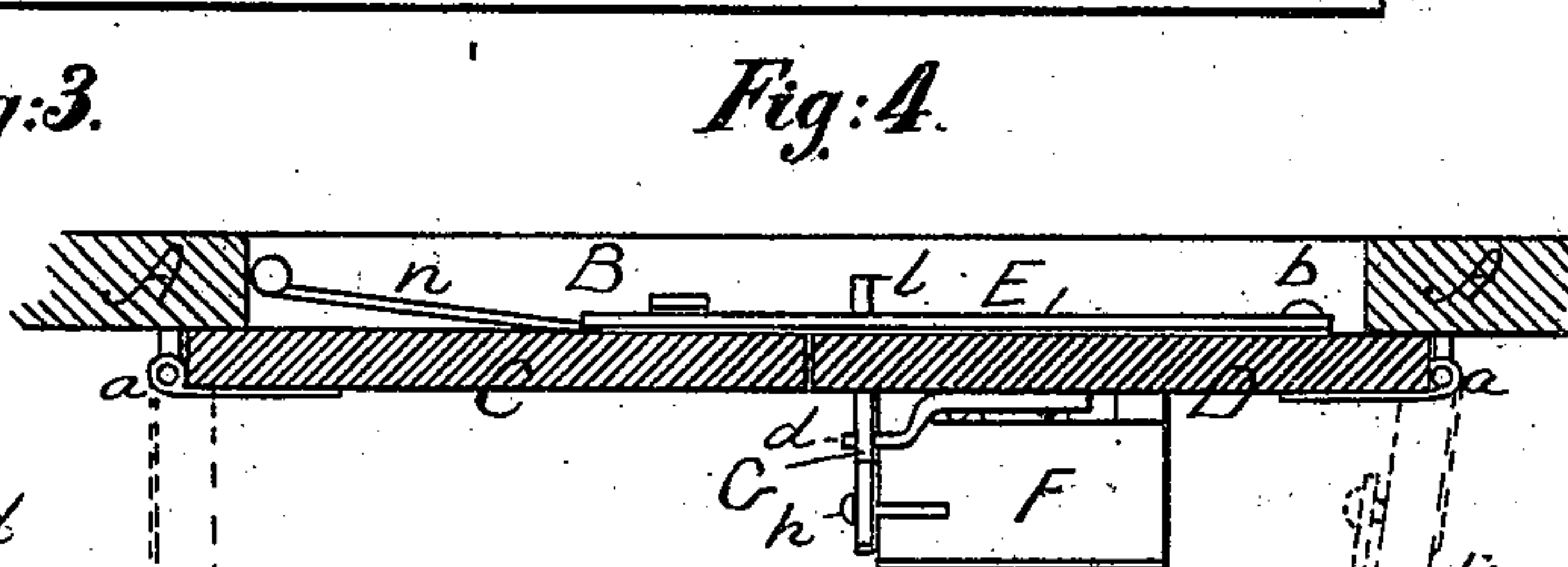
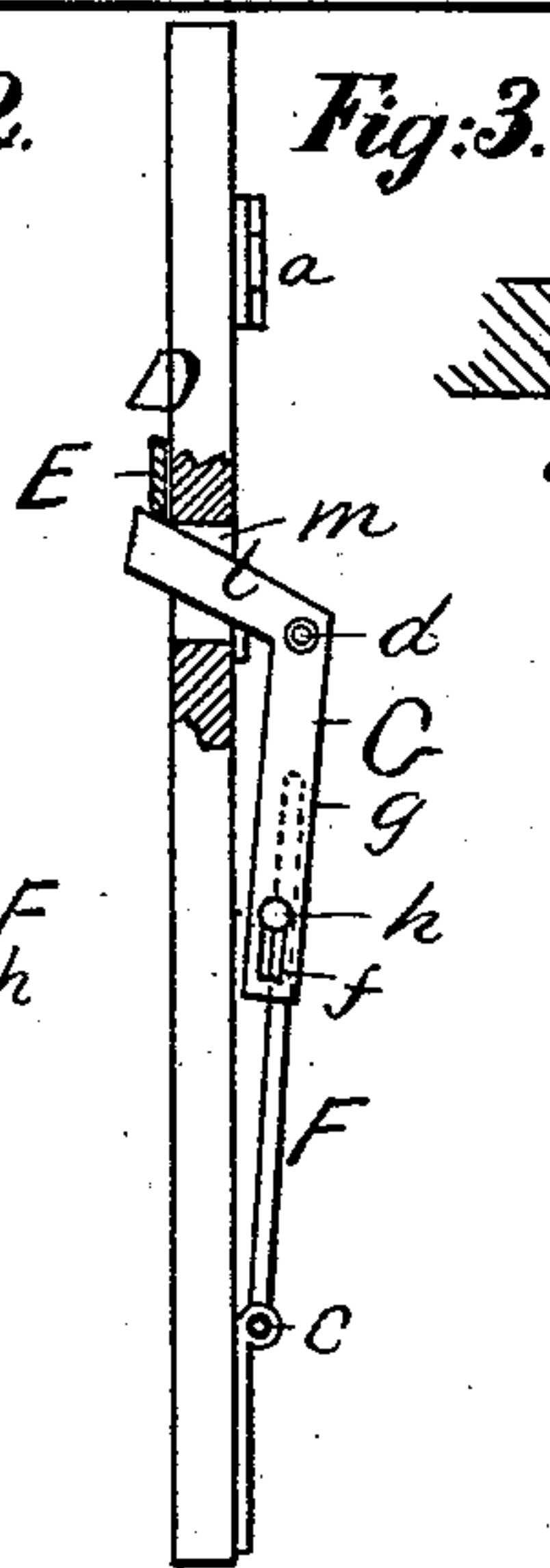
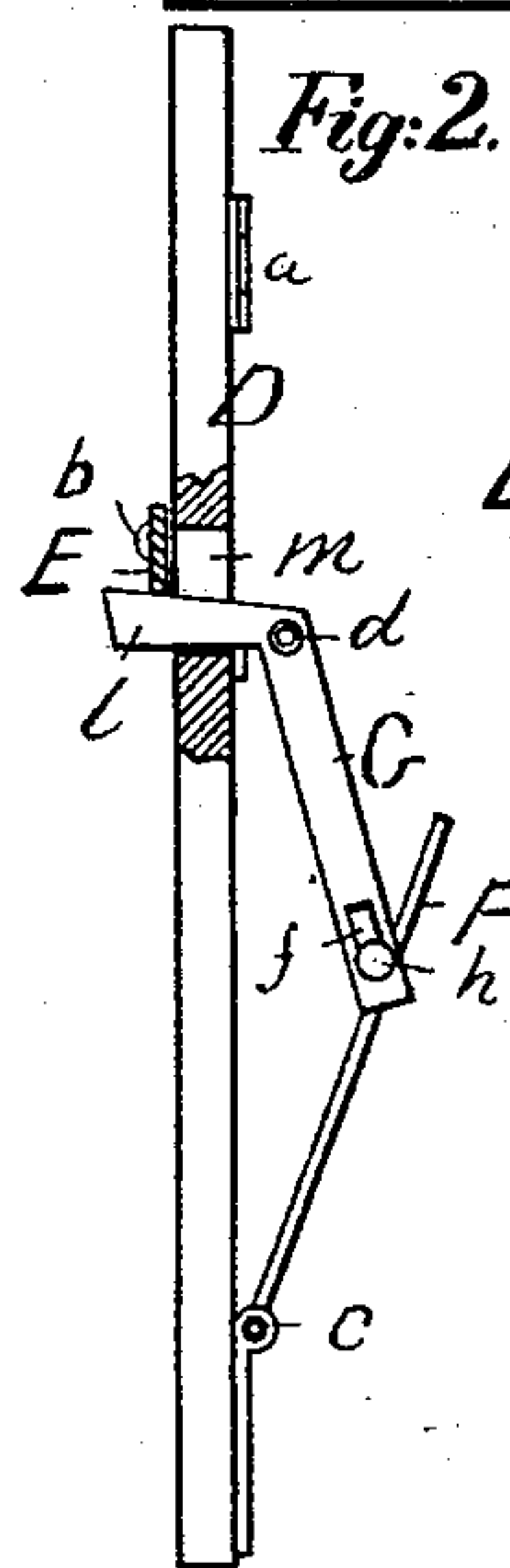
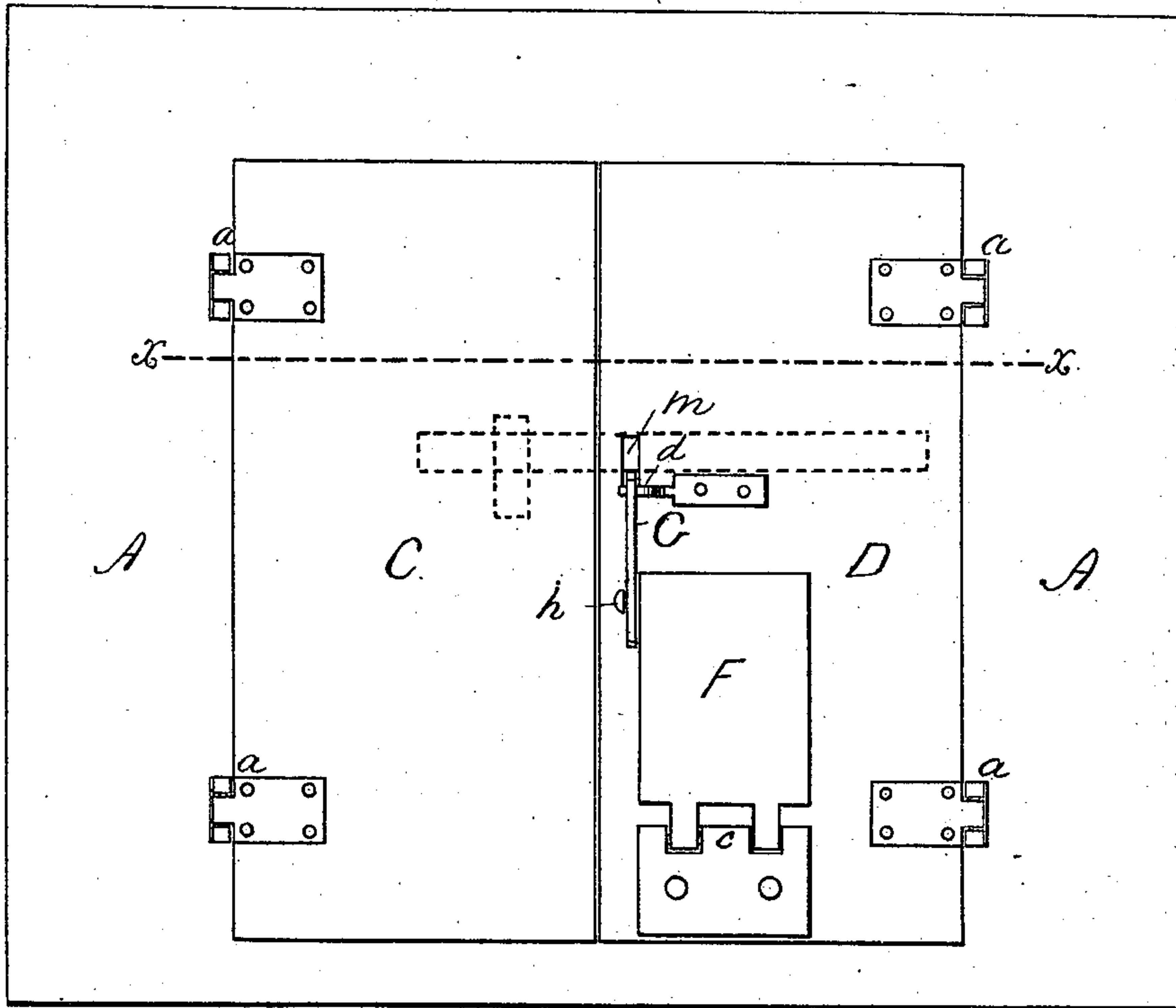
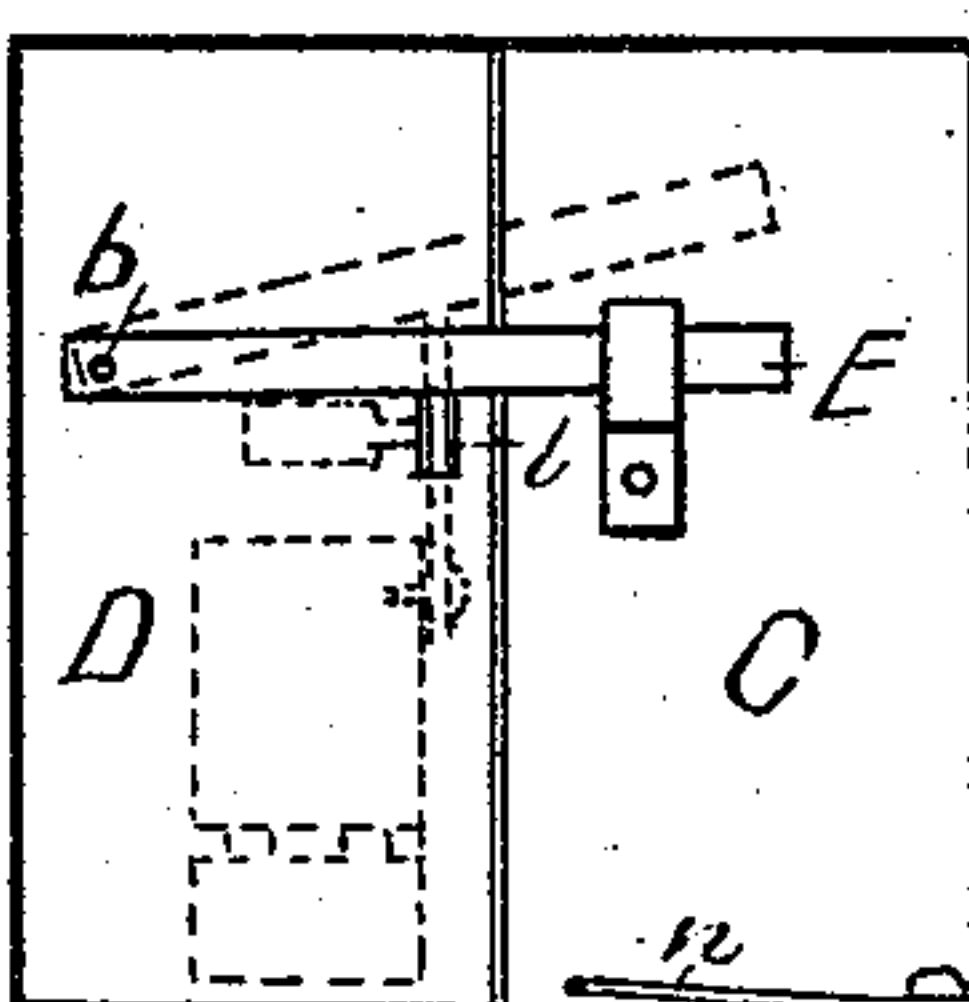


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

MATTHEW F. KIRK, OF CHELSEA, MASSACHUSETTS.

SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 227,266, dated May 4, 1880.

Application filed March 2, 1880. (Model.)

To all whom it may concern:

Be it known that I, MATTHEW F. KIRK, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Fire-Proof Shutters, of which the following is a specification.

Fire-proof shutters to buildings, as is well known, are adapted to be fastened and unfastened from the inside of the building to which they are applied. In cases of fire within the building it is therefore oftentimes impossible to open them, and as a consequence the interior of the building and its contents cannot be reached by the firemen to bring streams of water and other fire apparatus and means against the fire for the purpose of extinguishing it.

To obviate this disadvantage is the object of the present invention; and to that end it consists in a construction of the shutter substantially as hereinafter described, whereby such shutter, when closed and fastened, can be opened from the outside of the same.

In the accompanying plate of drawings, Figure 1 is a view, in elevation, of the outside of two shutters to a window of a building provided with my improved construction for opening the same from the outside when the same are closed and fastened; Figs. 2 and 3, edge views, showing said parts in their two positions—to wit, with the shutter fastened and with the shutter unfastened; Fig. 4, a horizontal section on line *xx*, Fig. 1; Fig. 5, a view, in elevation, of the inside of the shutter when closed; Fig. 6, a view, in detail, of a modification, to be hereinafter described.

In the drawings, A represents the walls of a building, and B an opening or window thereto; C and D, iron or fire-proof shutters hinged to the outside of the walls A at *a*, and so as to cover the window B when closed, and both adapted to be fastened on the inside by a latch-bar, E, hinged at *b*, all as usual; F, a vertical plate hinged at *c* to the outside of shutter D, and arranged to swing vertically; G, an angular lever, pivoted at *d* to the outside of shutter D above the plate F, and connected by a slot, *f*, of its arm *g* to the pin *h* on one edge of the plate F.

The arm *l* of lever G passes through an opening, *m*, in the shutter D, and is located and arranged for the latch E to rest upon its upper edge when the plate F is in its normal position, which is as shown in Figs. 1, 2, and

4, and when the shutters are closed and fastened by the latch E.

Press the plate F toward the shutter D, and thus, by and through the lever G, connected with it, as aforesaid, the latch E is raised, which releases it from its fastening on the shutter C, leaving the shutters free to be readily opened.

The pressing of the plate F, as aforesaid, may be done by various means—as, for instance, in case of a fire, by directing a stream of water against it or by directing a ladder against it.

The latch thus being released, the shutters may be opened by the hands or other means, or automatically, through the action of the spring *n*, suitably applied between the shutter and the window-casing, to cause the shutter, on a release of its fastening, to swing open.

The parts herein described for releasing the fastening of the shutters obviously may be applied at a small expense and to shutters having a latch already connected to them.

In Fig. 6 the lever G is shown as in one piece with the plate F, and differs only in that respect from the lever and plate shown in the preceding figures.

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

1. The combination, with the upwardly-movable latch-bar and the shutter provided with a slot, *m*, coincident with the path of said bar, of the plate F, pivoted to the outer surface of the shutter, and a lifting-arm passing through the slot in the shutter under the latch-bar and arranged to raise said bar when plate F is swung inwardly, substantially as described.

2. The combination, with the vertically-movable latch-bar and the shutter provided with a suitable catch and a slot, *m*, coincident with the lower part of the path of the said bar, of the lever G, pivoted to the outside of the shutter and having its short arm bent inwardly through slot *m* and under the latch-bar, and its lower arm slotted, and the plate F, pivoted to the outside of the shutter and provided with the pin passing through the slot of the lever G, substantially as described.

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Witnesses:

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