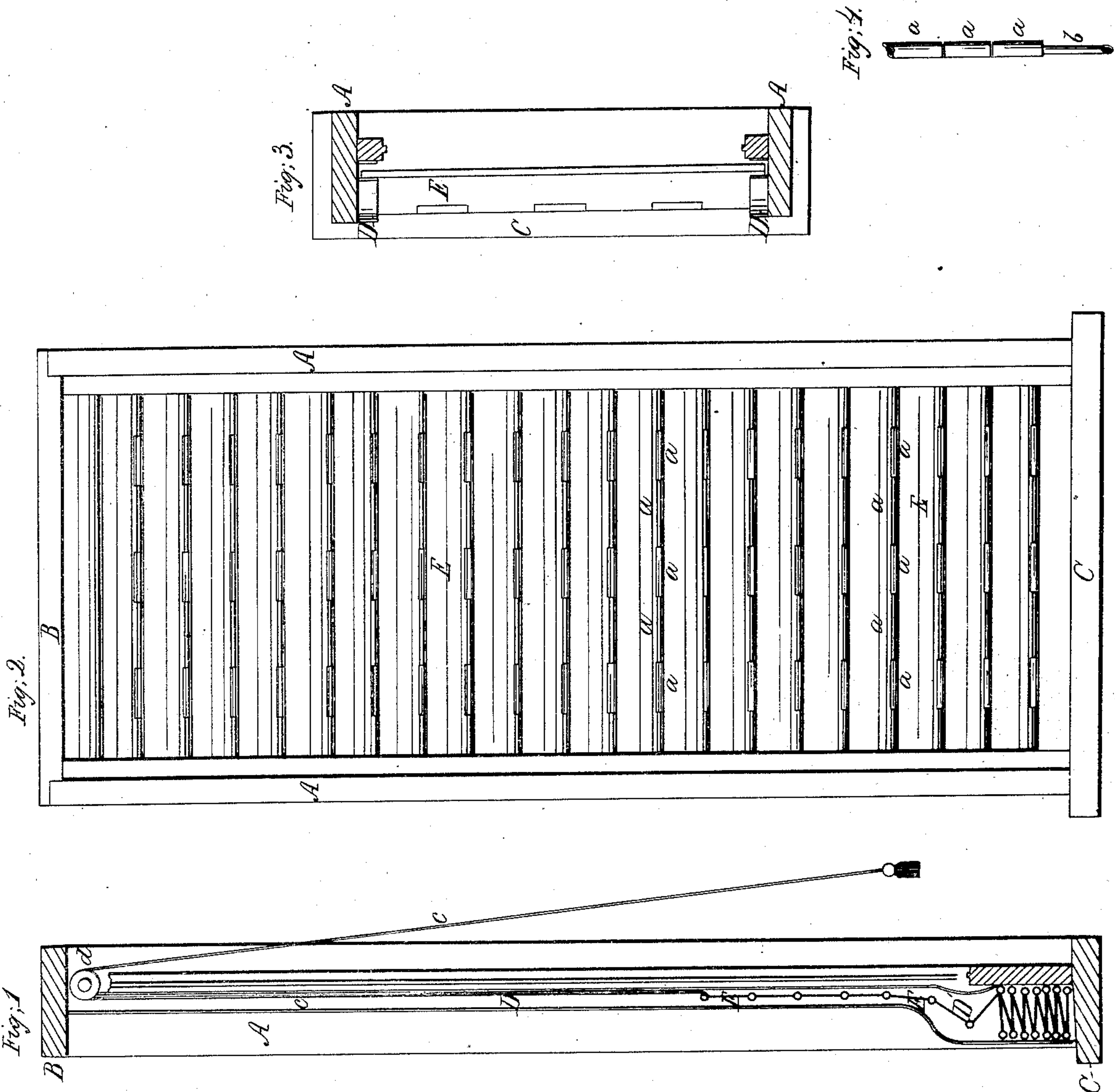


*I. Hodgson.*

*Window Shutter.*

*No 27,052.*

*Patented Feb. 7, 1860.*



Witnesses.  
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# UNITED STATES PATENT OFFICE.

I. HODGSON, OF INDIANAPOLIS, INDIANA.

## METALLIC SHUTTER.

Specification of Letters Patent No. 27,052, dated February 7, 1860.

*To all whom it may concern:*

Be it known that I, I. HODGSON, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Metallic Shutters for Store-Front and other Windows; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a vertical transverse section of my invention applied to a window. Fig. 2 is a front or face view of the same. Fig. 3 is a horizontal section of the window casing the shutter being partially lowered, and not bisected. Fig. 4 is a section of the shutter showing the joint and tubular pintle by which the slats are connected together.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in a peculiar way of connecting the slats of the shutter together and folding the same, substantially as hereinafter fully shown and described, whereby a very simple and efficient metallic shutter is obtained, one that may be readily opened and closed and capable of being applied in all cases where the usual metallic shutters can be used.

The object of the invention is to avoid the great friction and consequent labor and embarrassment attending the raising and lowering of the ordinary metallic shutters, and, at the same time, economize in the construction and in the application of this class of shutters to windows.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A A represent the jambs of a window; B, the lintel, and C, the sill. To the inner side of each jamb, A, and just at the outer sides of the sashes a cast iron guide, D, is secured. These guides are simply bars having a longitudinal groove in them to receive the ends of the slats, E, of the shutter. The lower parts of the guides, D, are expanded

at their lower ends, as shown clearly in Fig. 1, so as to form recesses, D', to allow the slats, E, room to fold over, one on the other, when the shutter is lowered and in an open state. This will be fully understood by referring to Fig. 1, in which the shutter is shown partially lowered and folded on the sill, C.

The slats, E, are of metal plate and fitted together with eyes or loops, *a*, through which a hollow pintle or tube, *b*, passes, as shown clearly in Fig. 4. The eyes or loops, *a*, of one slat fit between those of the adjoining one, as shown more particularly in Fig. 2. To the uppermost slat, E, of the shutter cords, *c*, are attached one near each end. These cords pass over pulleys, *d*, which are placed in the upper part of the window casing, one at each side, the cords passing down at the inner side of the window and connected together at their ends.

In consequence of connecting the slats, E, as shown, they are allowed to turn and fold freely, while the hollow pintle, *b*, prevents an unnecessary weight of metal and consequent wear of the joints, and produces lateral strength, while the arrangement of the expanded lower parts of the guides, D, to form recesses, D', admits of the slats folding on the sill, C. This is a very simple and economical arrangement and answers equally as good a purpose as the chamber within the walls of a building which are so expensive to construct and cause so much difficulty in case repairs are required.

The shutter may be counterpoised by weights and raised by a crank or the power may be applied directly to the ends, *c*, in order to raise and close the shutter. The shutter of course falls and opens by its own gravity.

I would remark that although the slats, E, are represented and described as folding on the sill, C, still they may be folded at the top of the casing, the expanded parts of the guides being at the upper, instead of at the lower, parts of the guides. The former plan however would be preferable.



I do not claim broadly connecting the slats, E, together by means of eyes, *a*, and pintles, *b*, irrespective of the tubular form of the latter; nor do I claim broadly a folding metallic shutter; but

I do claim and desire to secure by Letters Patent—

1. The guides, D D, attached to the inner sides of the jambs, A, provided with expanded parts to form recesses, D', to admit

of the folding of the slats, E, substantially as described.

2. Connecting the slats, E, of the shutter together by means of the tubular pintle, *b*, in connection with the eyes, *a*, as set forth. 15

I. HODGSON.

Witnesses:

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