

(Model.)

2 Sheets—Sheet 1.

R. G. DUDLY.
Shutter Worker.

No. 238,664.

Patented March 8, 1881.

Fig. 1.

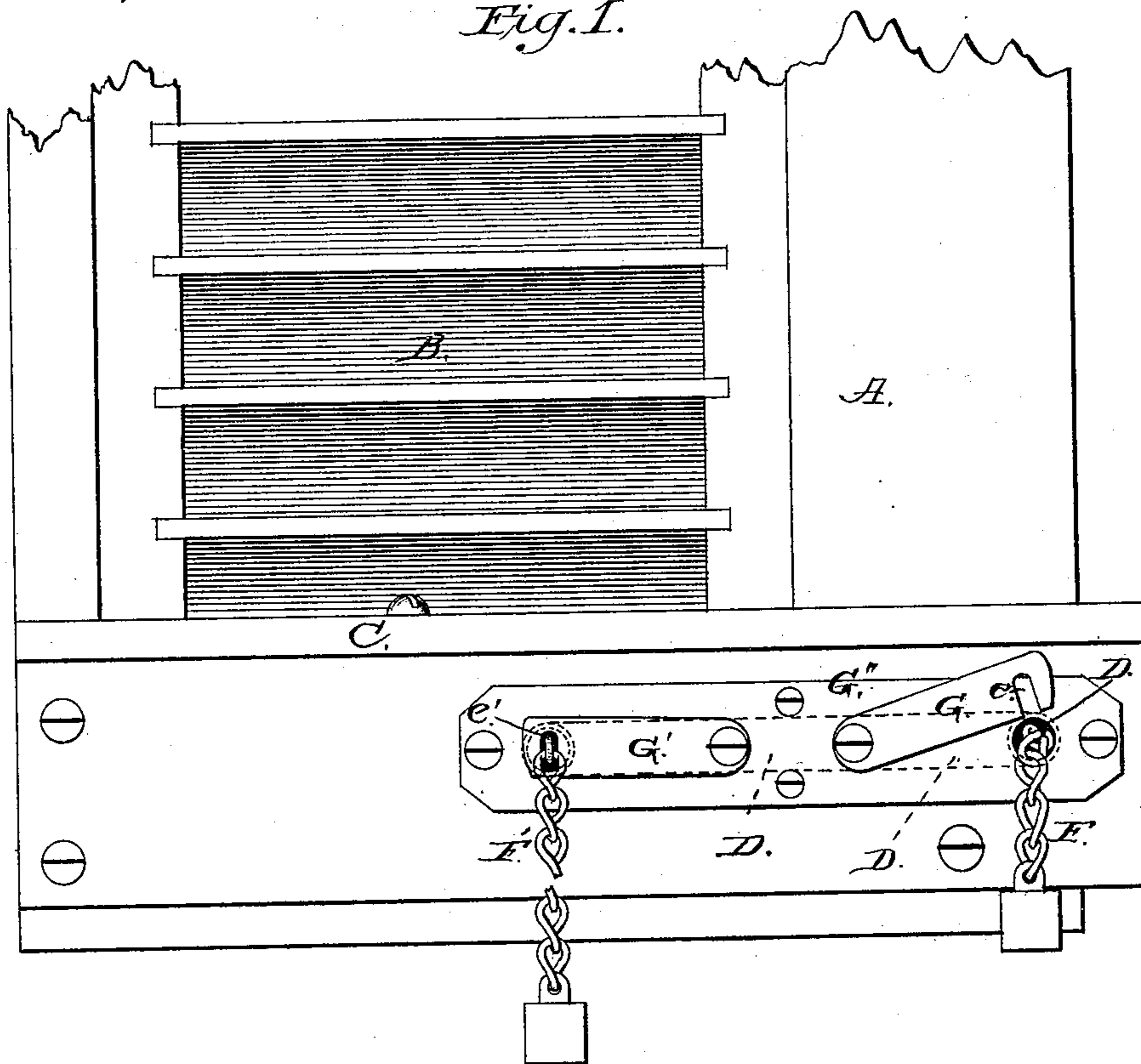
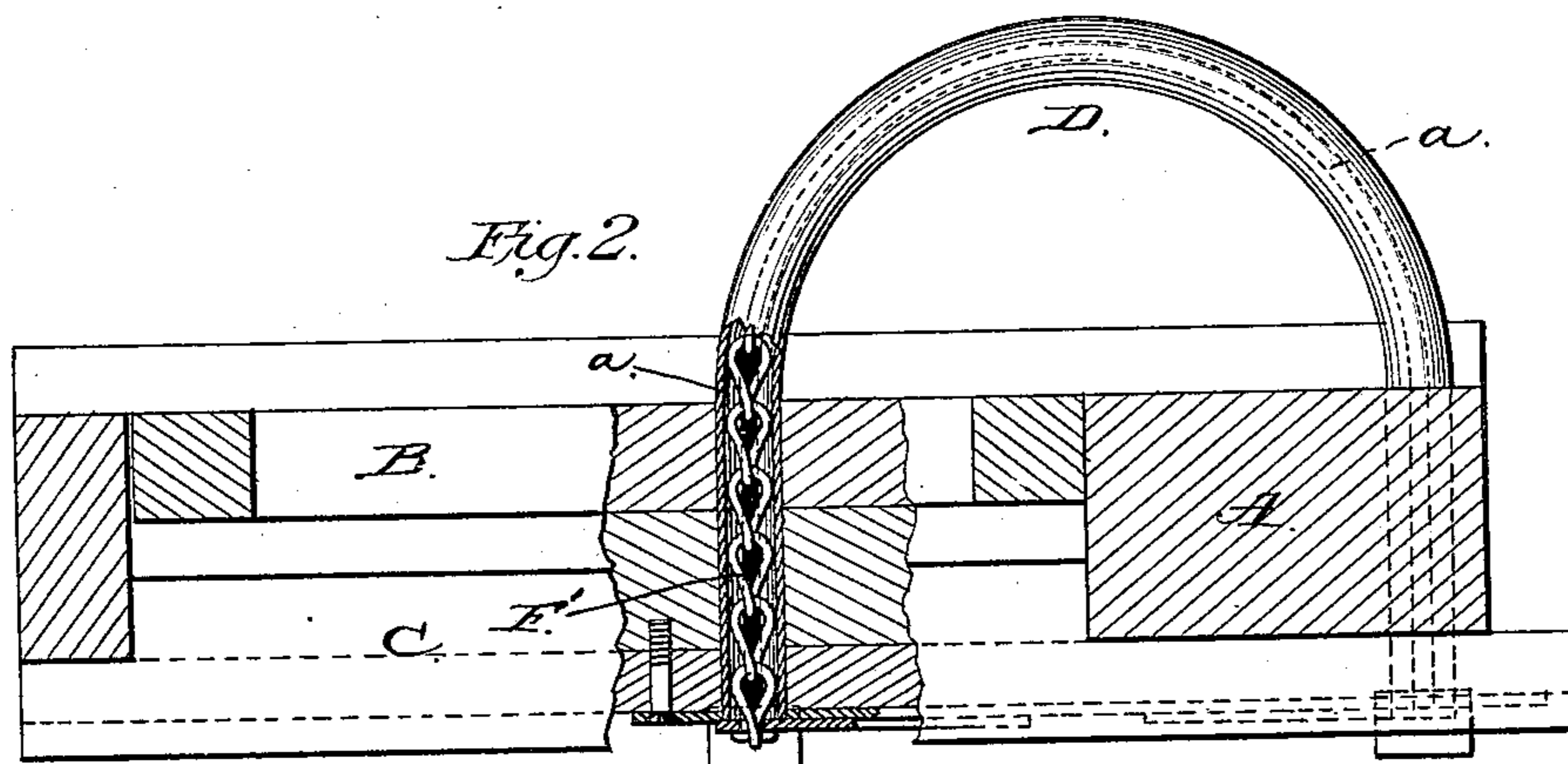


Fig. 2.



WITNESSES

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INVENTOR

Russel G. Dudley
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his ATTORNEY.

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2 Sheets—Sheet 2.

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Fig. 3.

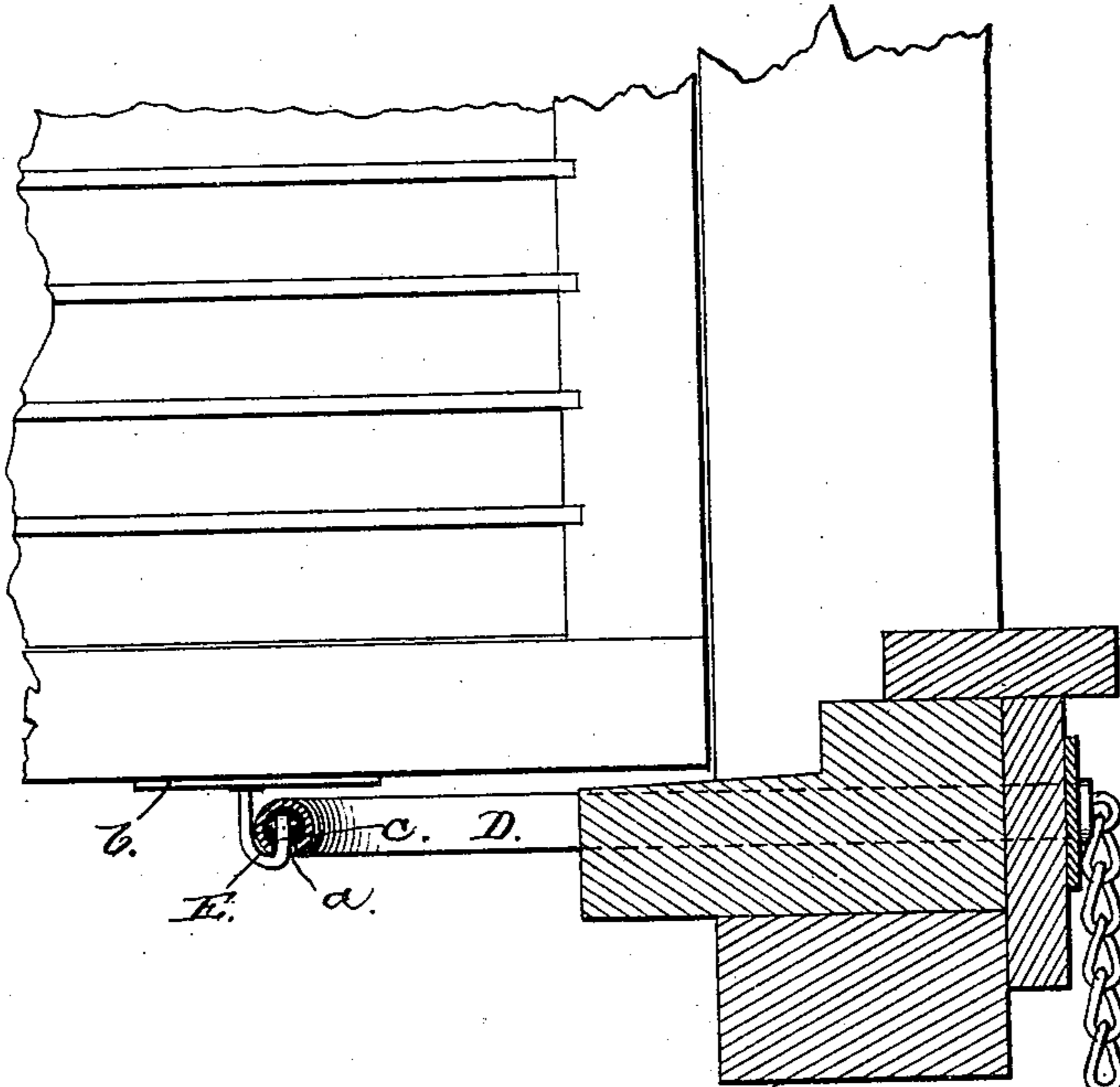
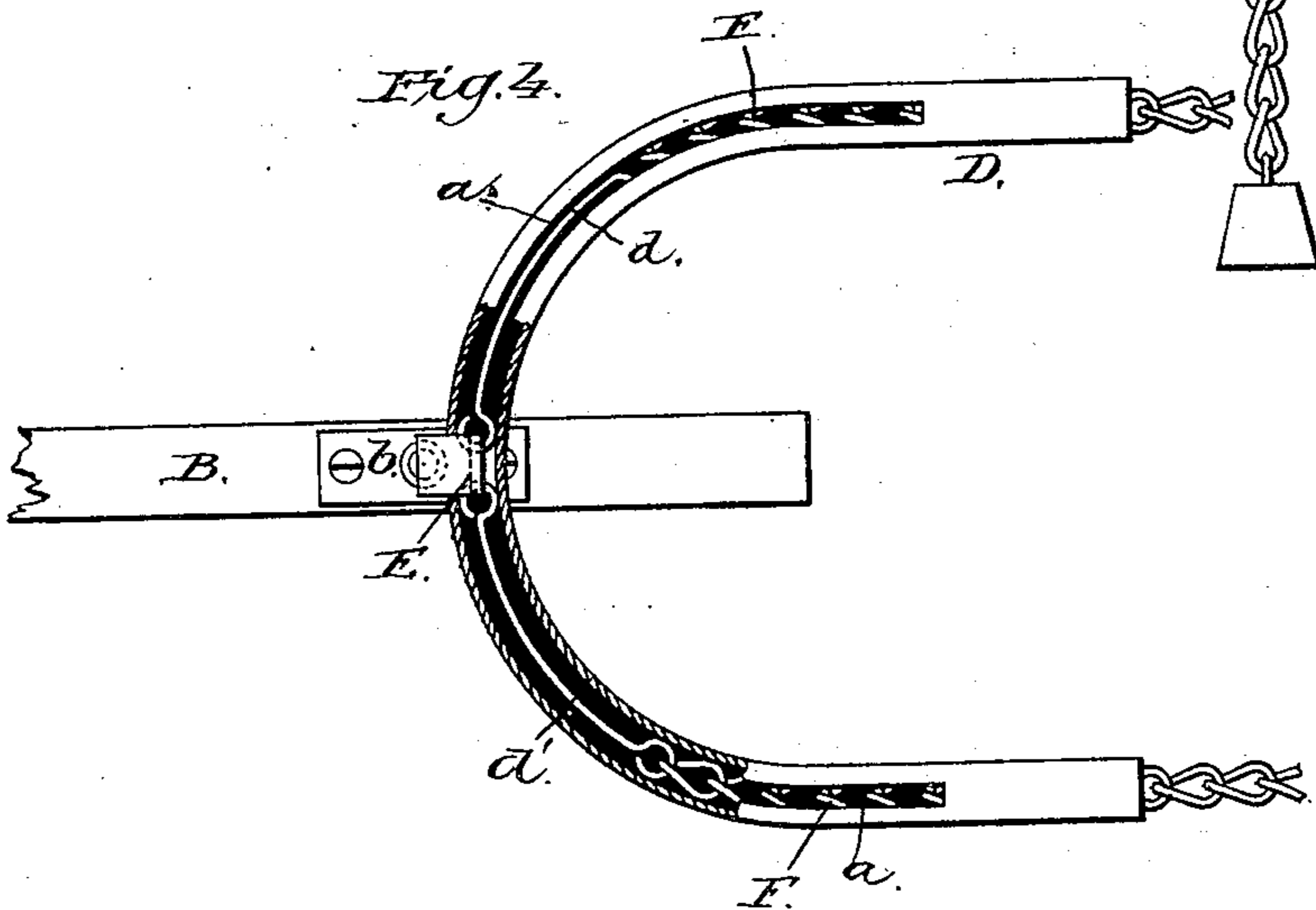


Fig. 4.



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UNITED STATES PATENT OFFICE.

RUSSEL G. DUDLY, OF JERSEY CITY, NEW JERSEY.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 238,664, dated March 8, 1881.

Application filed August 12, 1880. (Model.)

To all whom it may concern:

Be it known that I, RUSSEL G. DUDLY, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and valuable Improvement in Shutter-Workers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of an elevation or side view, taken from the inside of the window. Fig. 2 is a cross-section. Fig. 3 is a vertical section; and Fig. 4 is a detail view of the pipe-guide, partly in section.

This invention has relation to improvements in shutter-workers; and it consists in the arrangement, novel construction, and operation of the various devices used, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates window-case, B the blind or shutter, and C the window-sill.

D indicates a tubular semicircular guide, secured usually in a horizontal position to the outer portion of the sill, and projecting out beyond the same. This guide is slotted curvilinearly from end to end, as indicated at *a*, the centers of the curves both of the guide and of its slot being coincident with the pivotal point of the blind.

E indicates a hook, projecting downward from a metallic plate, *b*, and engaged by its upturned end *c* in the slot *a* of the guide. The blind swings in and out readily, as the hook E follows the curvature of the guide. Attached to the end *c* of this hook are the manipulating cords or chains F F', that extend in opposite directions through the guide D, then through the lower portion, and through the latch-plate G'', secured to the casing below the sill.

By drawing on chain or cord F the blind or shutter is swung open, the chain F' passing readily outward as the chain F is pulled in, and is locked in the open position by engaging

the latch G with a straight or flat link, *d*, the said latch being provided with a deep notch, *e*, for this purpose.

By throwing up latch G, thus releasing chain F, and then drawing forcibly on chain F', the blind or shutter is swung in upon the casing, and is locked by engaging with the said chain F' a latch, G', having a notch, *e'*, designed to receive a straight link, *d'*, of said chain. The latches G G' are with the chains engaged by a downward movement, and they are pivoted to plate G'', and the said chains are provided on their ends with a knob, weight, or weighted tassel, in order to their more convenient operation and to take up their slack. The said chains, being housed in by the curved guide, are incapable of being clogged by snow or sleet, and are hence at all times in working order.

If desired, there may be several flat links arranged at intervals in the length of the chains, by which means the blind may be adjusted in several positions between its open and closed state, the adjustment being maintained by engaging each of the latches G G' with its appropriate flat link.

What I claim as new, and desire to secure by Letters Patent, is—

In a shutter-worker, the combination of the curved guide D, having the curved slot *a* on its under side, the hook E, secured to the shutter and engaged by its upturned end in said slot, the chains F F', secured to said upturned end, extending in opposite directions through and housed in said guide, and passing through the window-casing, and the latches G G', adapted to engage the said chains, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RUSSEL G. DUDLY.

Witnesses:

PHILIP C. MASI,
JOHN A. ELLIS.