(Model.)

H. CAMUS.

SHUTTER WORKER.

No. 308,057. Patented Nov. 18, 1884.

Fig 5.

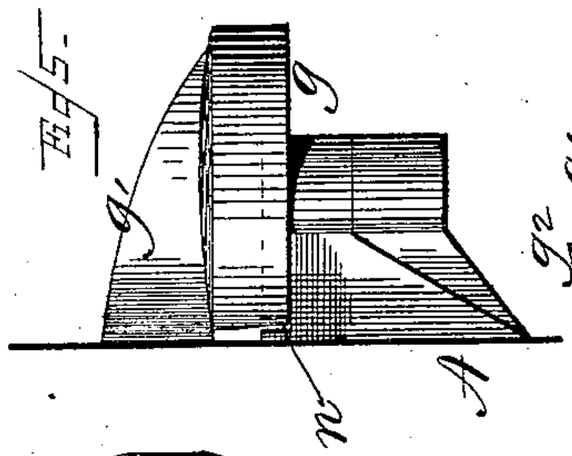


Fig 4.

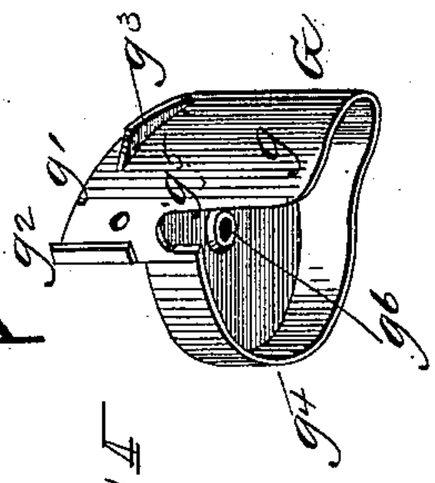


Fig 2.

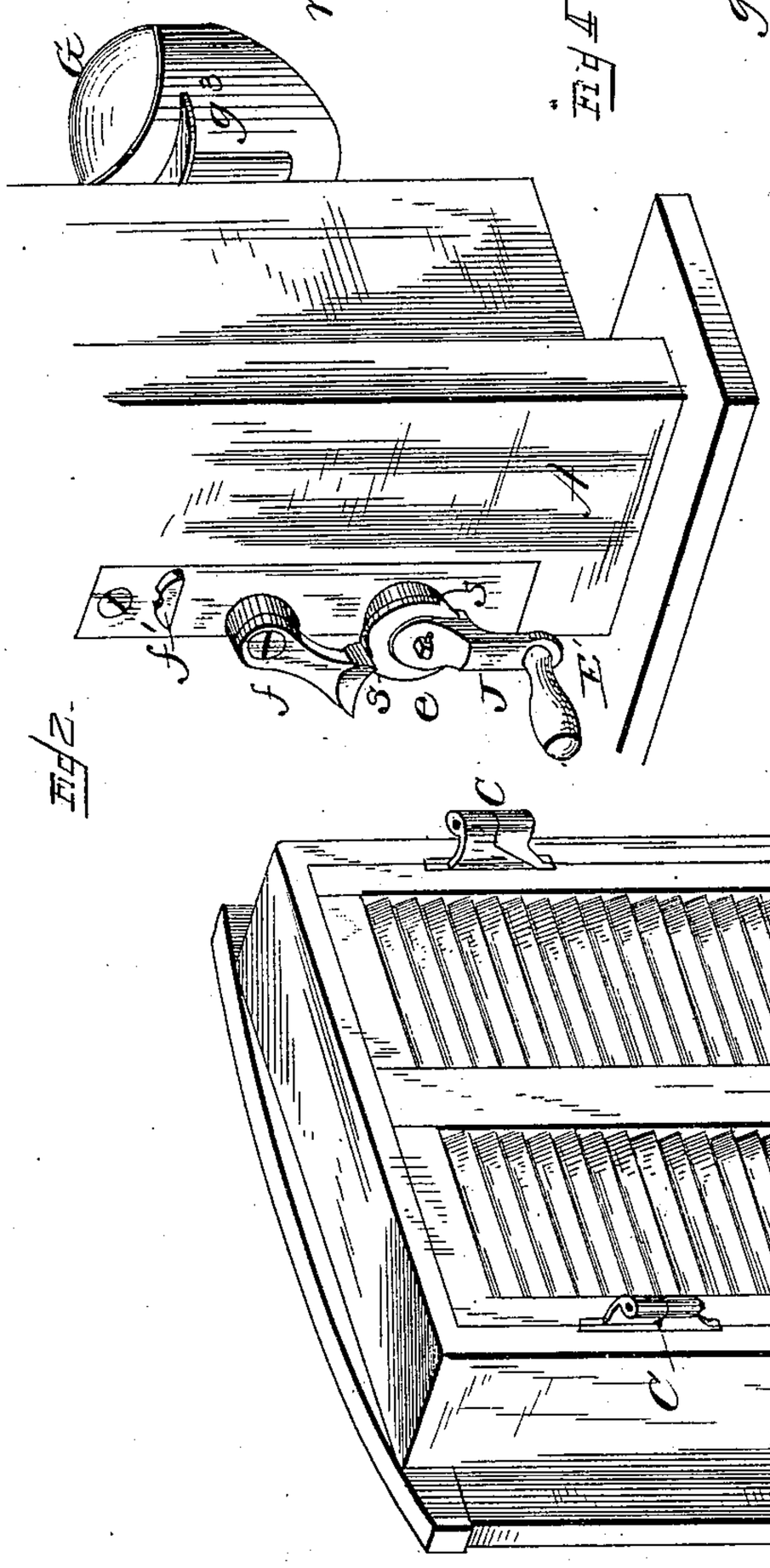
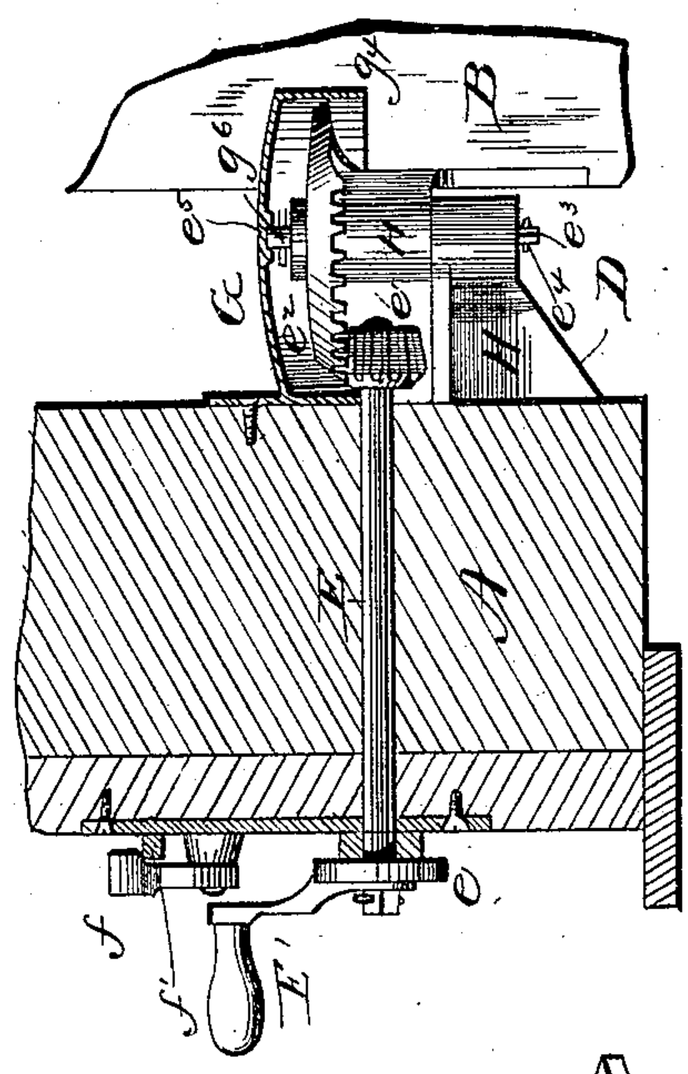
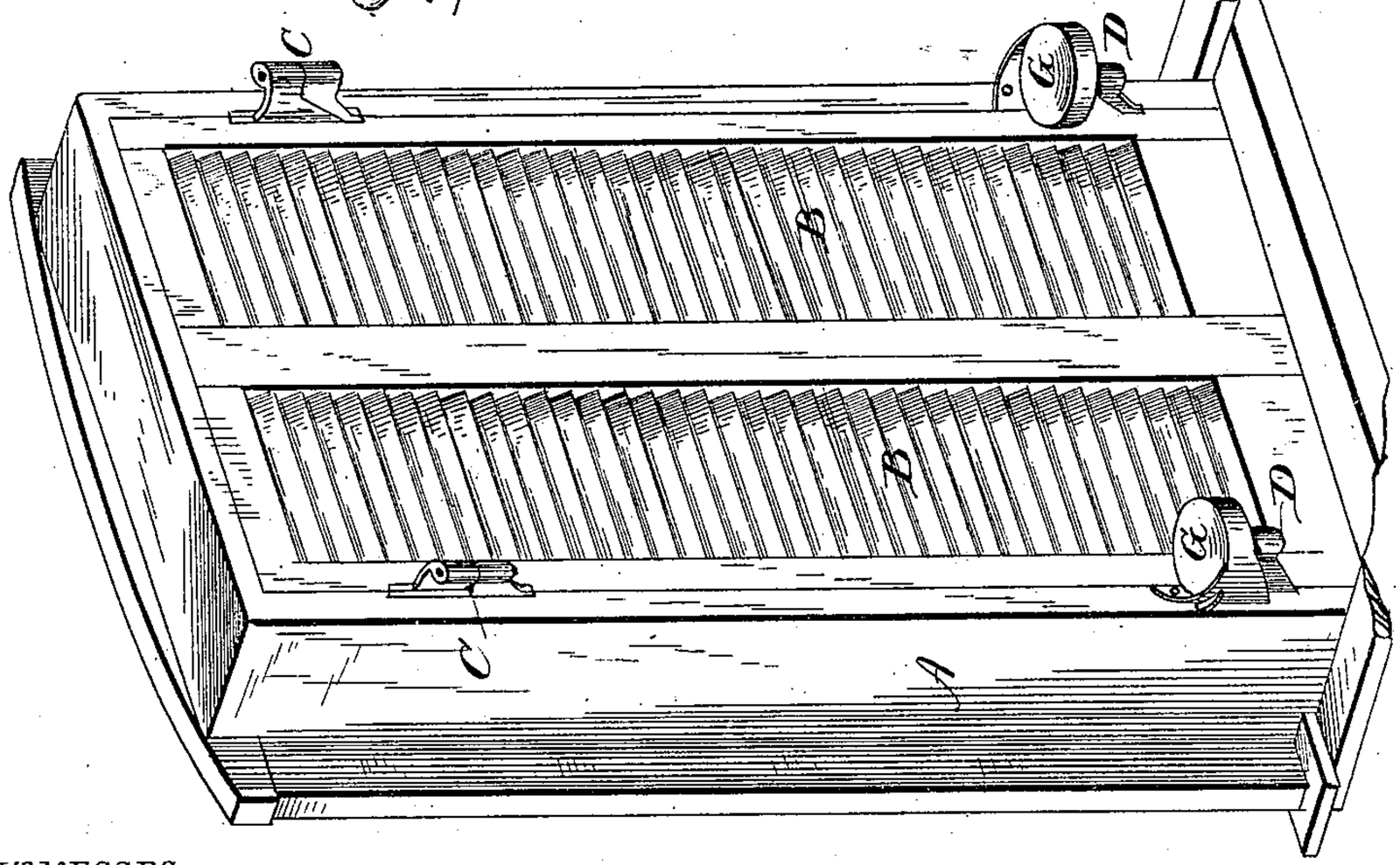


Fig 3.





WITNESSES

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UNITED STATES PATENT OFFICE.

HENRI CAMUS, OF ST. LOUIS, MISSOURI.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 308,057, dated November 18, 1884.

Application filed October 29, 1883. (Model.)

To all whom it may concern:

Be it known that I, HENRI CAMUS, of St. Louis, Missouri, have made a new and useful Improvement in Shutter-Workers, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a perspective view of a window-frame as seen from the outside of the building, showing the improved hoods applied to the shutters for shielding the lower hinges. Fig. 2 is a detail in perspective, showing one of the hoods and also the device for locking the shutter at different angles, and the crank on the working shaft. Fig. 3 is a vertical section in detail, showing the shutter-worker, the hood, and part of a shutter. Fig. 4 is a perspective view of the improved hood. Fig. 5 is a view in detail of the hood and the swinging leaf of the hinge, showing the notch in this leaf.

This invention relates to improvements which are applicable to shutter-workers wherein the shutters are swung open and shut by means of gearing and a shaft which is operated by a crank or knob on the inside of the shutter or window-frame; and the nature of my invention consists in a novel device for protecting the gearing of the shutter-hinge from the weather, and also in novel means for preventing said device from being broken, as will be fully understood from the following description, when taken in connection with the annexed drawings.

A designates a window-frame, and B B shutters, which are applied to it by means of upper butt-hinges, C C, and lower hinges, D D.

E designates a horizontal shaft, which passes through the window-frame, and has keyed on its inner end a crank or knob, E', constructed with a disk, *e*, having stops *s s* on its periphery, with which a pawl, *f*, will engage for holding the shutter at different angles. By means of a notched lug, *f'*, and a tooth on the said pawl the latter can be held up, as shown in Fig. 3.

On the outer end of the shaft E a toothed pinion, *e'*, is keyed, which engages with a spur-wheel, e^2, that is secured to the pintle e^3 and upper leaf, H', of the hinges D by means of a pin, e^4. When the shutter is properly hung, it is supported upon the lower leaf, H, of the hinge D and held down in place by means of a pin, e^4, passing through the pintle e^3, as shown in Fig. 3.

G designates a hood or shield, which is designed for protecting the gears and hinge from ice and snow, and which completely covers the top and sides of said parts. This hood is secured to the frame A by one or more screws, and it is preferably made of cast metal. It consists of a cylindrical capping portion having a flange, g^4, presenting a horizontal lower edge terminating in an angular flange, *g*, and a deep vertical notch, g^5. From the upper part or edge of the hood, and directly above the angular flange *g*, having a lip, g^2, and a rib, g^3, through the flange *g'*, is passed a screw, which secures the hood to the frame A, as shown in Fig. 1. The rib g^3 affords a square abutting cut for the hood against the frame A, and the lip g^2 extends around and lies snugly against the inner surface of the upright of the frame A.

By reference to Fig. 3 it will be seen that the upper end of the pintle e^3 fits into a socket in the hood G, which pintle thus affords a bearing for the center of the hood. It will also be seen by reference to Fig. 5 that the lower edge of the skirting *g* of the hood is received into a notch, *n*, in the upper edge of the lower leaf of the hinge D.

It is obvious that the lower pin, e^4, through the pintle e^3 of the hinge will positively prevent the shutter from rising and breaking the hood G. I am thus able to afford a support for the hood upon the upper end of the pintle.

I am aware that it is not new, broadly considered, to protect the outside gearing of shutter-workers by means of an inclosing-box, and therefore I do not claim such a contrivance.

What I claim as new is—

The hood or shield G for a shutter-worker, consisting of a capping portion, a skirting, g^4, upper and lower angular flanges, a lip, g^2, a rib, g^3, and a central socket, substantially as described.

HENRI CAMUS.

Witnesses:
C. D. MOODY,
JULES C. JALAGEOS.