(No Model.)

2 Sheets—Sheet 1.

C. J. KEATING.

ADJUSTABLE SHUTTER.

No. 382,707. Patented May 15, 1888.

Fig. I

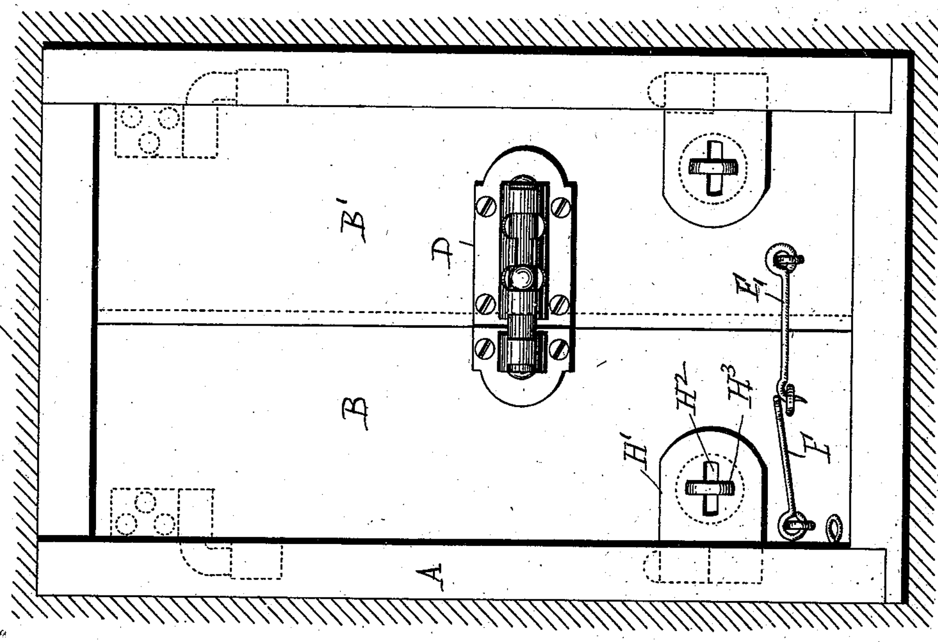
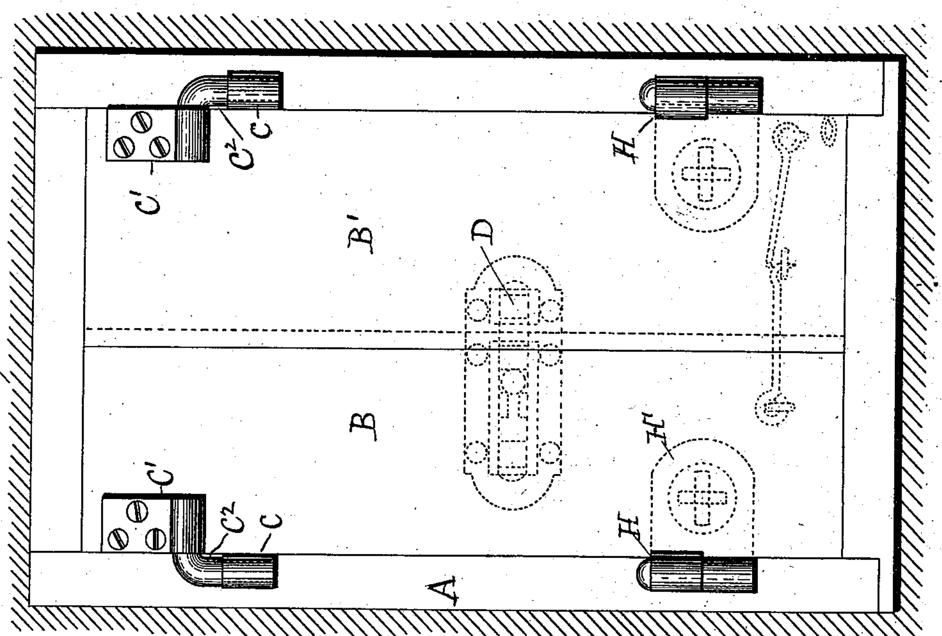


Fig. II



WITNESSES:

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N. PETERS, Photo-Lithographer, Washington, D. C.

(No Model.) 2 Sheets—Sheet 2.

C. J. KEATING.

ADJUSTABLE SHUTTER.

No. 382,707. Patented May 15, 1888.

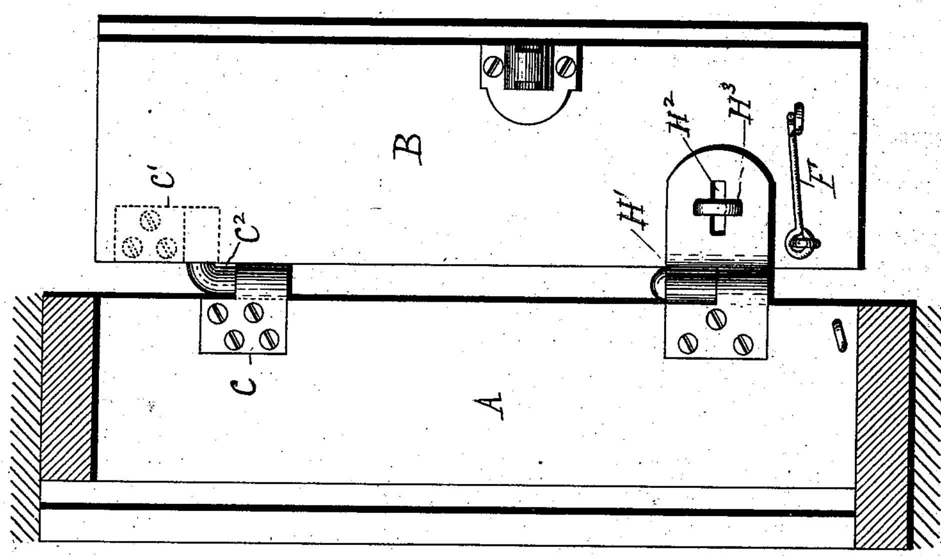

FIG. IV

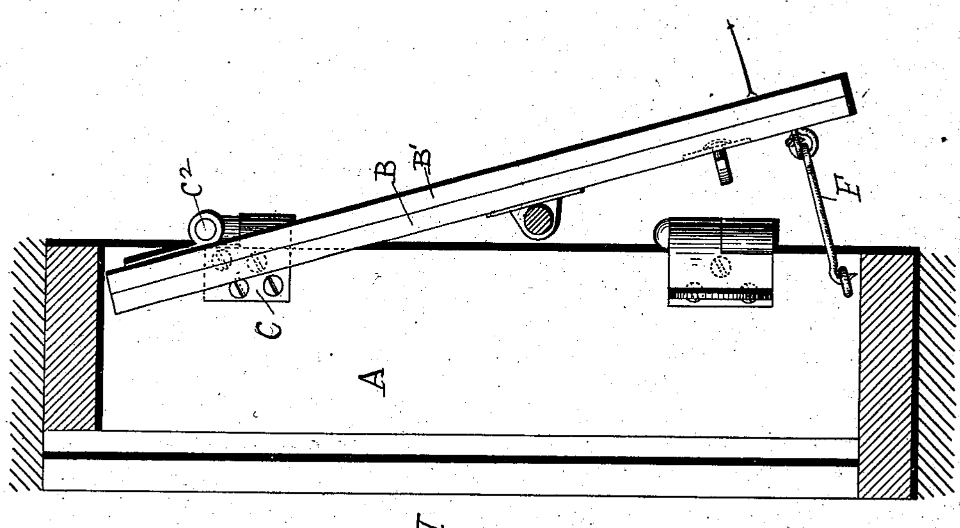

FIG. III

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UNITED STATES PATENT OFFICE.

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ADJUSTABLE SHUTTER.

SPECIFICATION forming part of Letters Patent No. 382,707, dated May 15, 1888.

Application filed December 31, 1887. Serial No. 259,461. (No model.)

To all whom it may concern:

Be it known that I, CHARLES J. KEATING, a citizen of the United States, residing at Beverly, in the county of Burlington and State of New Jersey, have invented certain new and useful Improvements in Adjustable Shutters, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to adjustable window-shutters; and it consists in the combination, with a window-frame and pair of shutters, of a double-acting hinge which will allow the shutters when unfastened to swing laterally and when bolted together to swing vertically; also, in the combination, with a window-frame and pair of shutters hinged at their upper extremity, of an adjustable lower hinge which may be fastened to and unfastened from the shutter at pleasure by the hand; and, finally, in the combination, with a window-frame and pair of shutters, and with means whereby said shutters may be fastened together, of a double-acting hinge at the upper extremity of each shutter to enable the latter when fastened together to swing vertically and be adjusted at any required angle.

In the drawings, Figure 1 represents an inside view of a window-frame, pair of shutters, inside bolt, and part of the inside adjustable lower hinges; Fig. 2, an outside view of the same, but showing the double-acting upper hinges on the outside. Fig. 3 is a side view of the window-frame and upper and lower hinges; and Fig. 4 is a view from the inside, intended to show more particularly the lower adjustable hinge.

The window-frame A is shown as deep, but is not necessarily deeper than usual. The shutters B B are constructed as usual, and to each of the same, near the top and on the outside surface, are screwed the hinge-plates C′, (see Fig. 2,) to which on the inside of the window-frame, at right angles to the shutter, is screwed a similar hinge-plate, C, (see Fig. 4,) and the two are connected by means of the hinge-bolt C^2, made in the form of a right angle and playing loosely in the bearings of the plates C C′, the operation being such that when the shutters are swung only laterally the hinge-bolt plays in the socket-bearing of the plate C only; but when the shutter is swung vertically, or, rather, in the arc of a circle, the hinge-bolt C^2 will play only in the socket-bearing of the other plate, C′. The lower portions of the shutters B B′ are secured to the window-frame by a hinge, H′, which is screwed to the window-frame in the usual manner; but the other part of the hinge-plate is not permanently fastened to the shutter, but is slotted at H^2 to admit the insertion in such slot of a turn-bolt, H^3, fastened to the inside of the shutter, so that the shutter can be freed from the hinge H′ at pleasure by the mere turning by hand of the turn-bolt H^3, and again so fastened. When the shutters are swung open laterally, the bolt H^3 remains as shown in Fig. 4; but when the shutters are swung vertically, as in Fig. 3, the turn-bolt H^3 is moved around to admit it passing through the slot H^2, and when so swung the shutter is supported in position by the hook F, Fig. 3, or by other appropriate means, and the hook E, as well as the bolt D, holds the two shutters together when they are swung vertically, as mentioned.

Having thus described my invention, I claim as new—

1. In combination with a window-frame and a pair of adjustable shutters, the double-acting hinge consisting of the hinge-plate C, having a socket-bearing secured to the inside of the frame at right angles to the shutter, a similar hinge-plate, C′, secured to the outside of the shutter, and a hinge-bolt, C^2, in the form of a right angle, playing in the socket-bearing of both hinge-plates, substantially as described.

2. The combination, with a window-frame and a pair of adjustable shutters, of a double-acting hinge located at the upper end of each of said shutters and frame, and consisting of the hinge-plates C C′ and the angular hinge-bolt C^2, playing in the socket-bearings of said hinge-plates, and of adjustable hinges located at the lower end of each of said shutters and frame, and consisting of the hinge-plate H′,

secured at one side thereof to the frame, the other side being slotted at H^2, and a turn-bolt, H^3, secured to the shutter and adapted to be inserted in said slot, the said parts being constructed, arranged, and operating substantially as and for the purpose set forth.

In testimony whereof I have hereunto affixed my signature this 17th day of December, A. D. 1887.

CHARLES J. KEATING.

Witnesses:
H. LAUSSAT GEYELIN,
H. T. FENTON.