

(No Model.)

J. B. CHILDS.
WINDOW BLIND.

No. 262,929.

Patented Aug. 22, 1882.

Fig. 1.

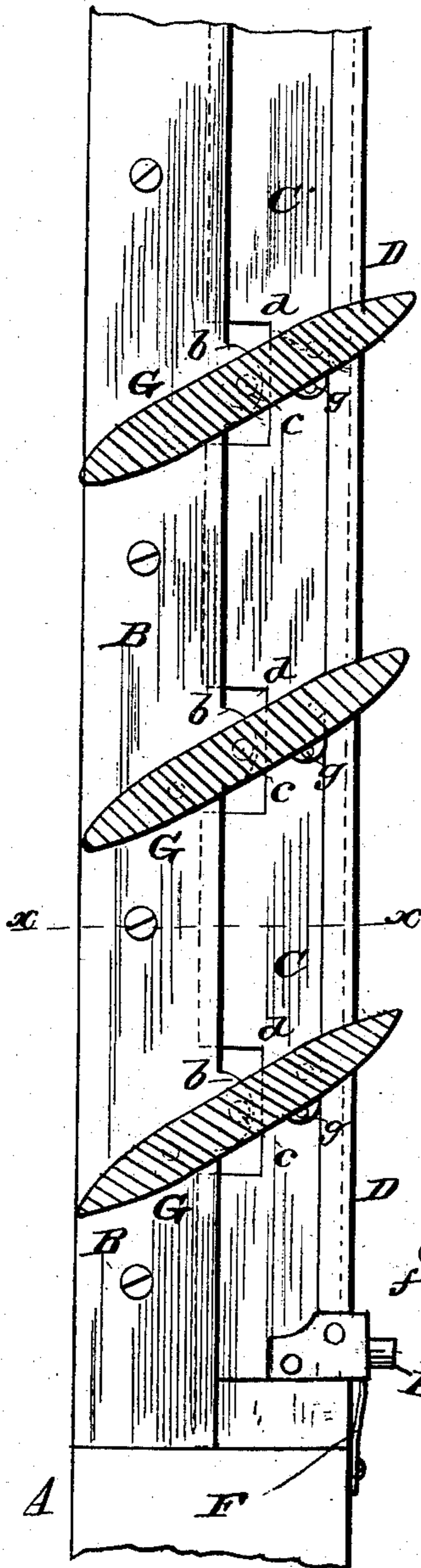


Fig. 2.

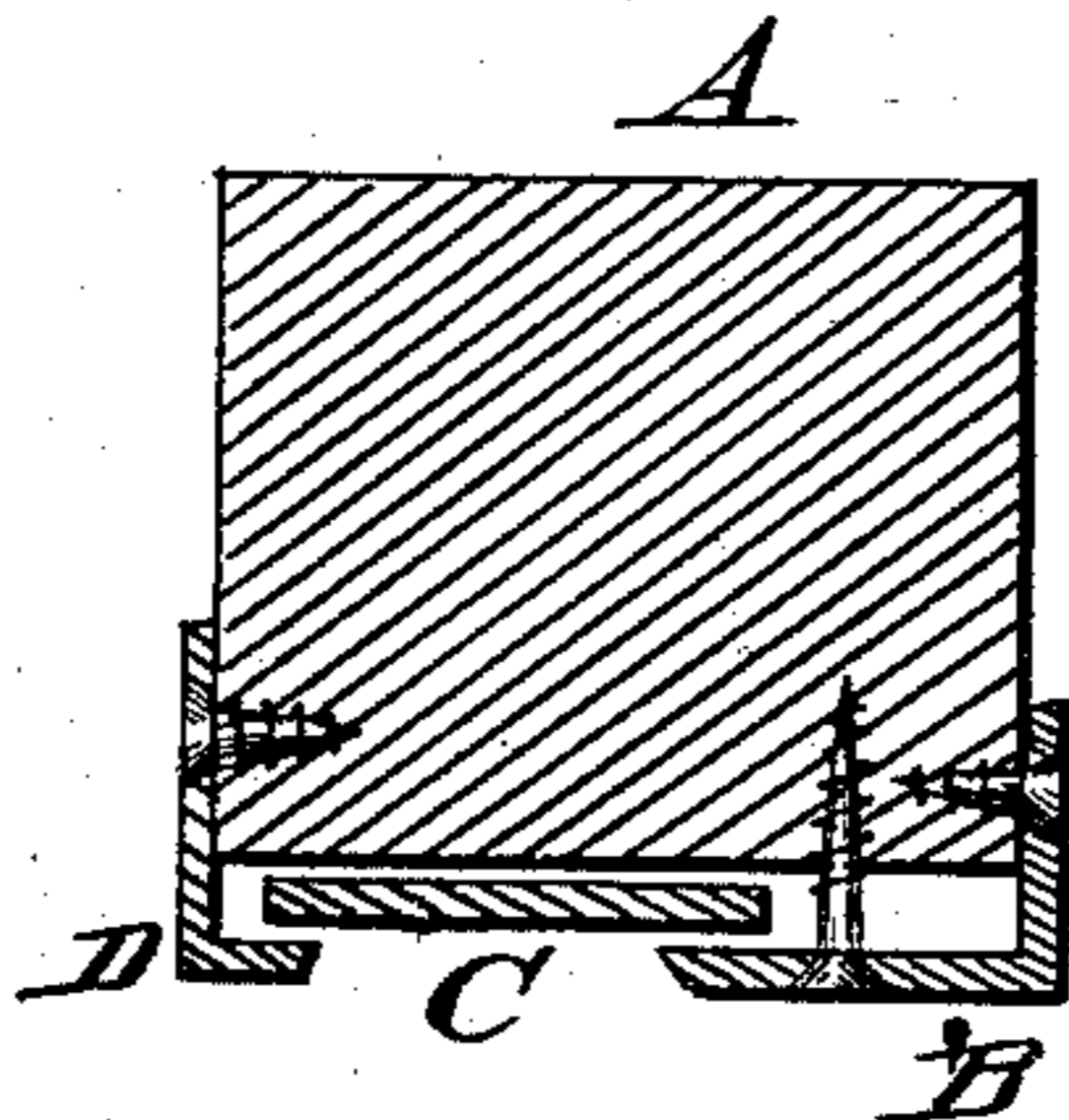


Fig. 3.

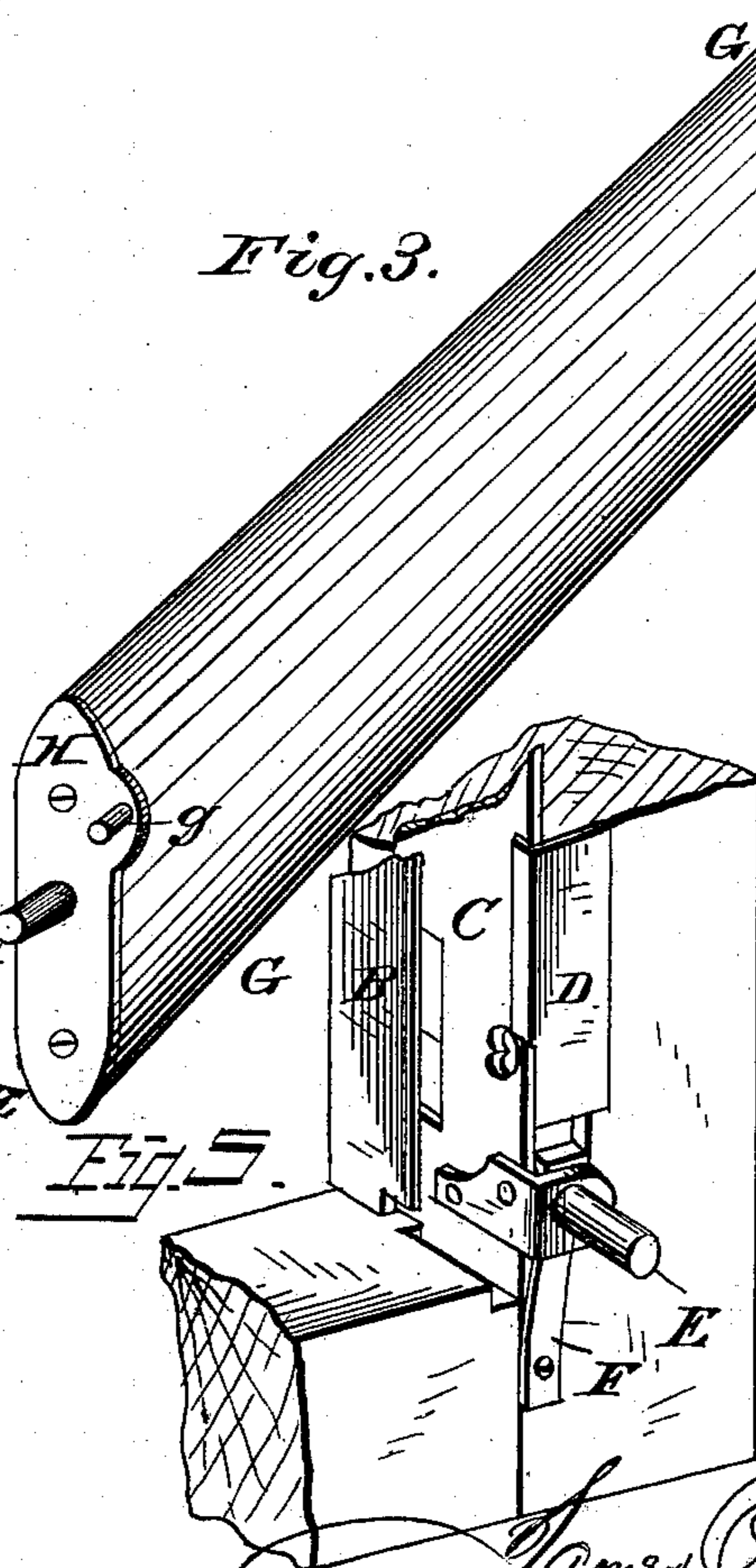
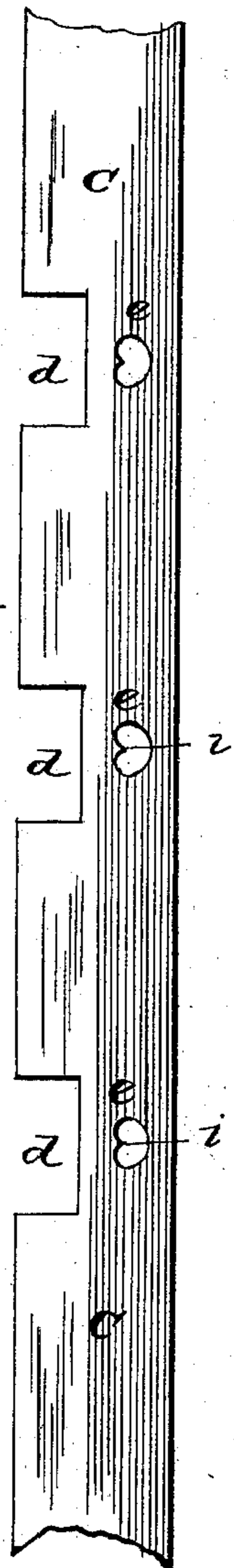


Fig. 4.



WITNESSES:

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WINDOW-BLIND.

SPECIFICATION forming part of Letters Patent No. 262,929, dated August 22, 1882.

Application filed February 17, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. CHILDS, a citizen of the United States, residing at Rock Falls, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Window-Blinds; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of window-blinds which is furnished with slats, and thereby suited to both inside and outside use, and more particularly relates to the elimination of the common slat-rod in use.

In the drawings, Figure 1 is an elevation of the inner side of frame with section of slats. Fig. 2 is a horizontal section through the line *xx* of Fig. 1. Fig. 3 is a perspective view of the end of the slat fitted with the casting herein described. Fig. 4 is a detached view of the plate C, showing the peculiar formation of the holes *e*. Fig. 5 is a detail showing how the sliding plate C may be stopped.

A is the side of a blind-frame, of which the inner face is shown, and is provided with the angular metal plate B, which is screwed or otherwise fastened to such inner face, leaving between the plate B and frame A a space sufficient for the easy play of the sliding plate C.

D is an angular metal plate on the outer face of such frame, which is bent over the inner edge of the frame, forming a way or sliding space for the outer edge of the sliding plate C to operate.

The plate B has formed on its free edge the semicircular parts *b*, forming bearings for the journals of the slats, and in which are the holes *c* for the journals on the end of the slats.

The sliding plate C is provided with the recesses *d*, which are made of any length or depth found necessary for the successful operation of my device, which permits the edges of the plate C not thus cut away to extend sufficiently under the plate B to be guided in its operation by such plate B. At the opposite side of and at a point sufficiently below the center of the recess *d* to permit the blind-

slat to lie horizontal when it is fitted into position, I form the holes *e*, the purpose of which is hereinafter more fully explained.

On the bottom of the sliding plate C is secured the knob E, by which such plate is easily moved upward or downward, thus opening or shutting the slat, as hereinafter shown.

To the blind-frame I attach the spring F or other similar device, which, when the blind is closed, is turned up so that its end comes against the knob E, thus firmly locking the slats into position, from which they cannot be moved except from the inside.

G is an ordinary wooden slat, provided at one end with a metallic journal, *f*, centrally located, and at the other with a metallic end piece, H, fashioned to conform to the end of such slat, and having formed on and integral therewith the journal *f* and small crank-rod *g*.

In constructing my device I first screw on the angular plate B, and then put the sliding plate C in position. Then I put on the other angular plate, D, which keeps the sliding plate C in position. I then insert the journal *f* on one end of the slat into the holes *c*, and the short crank-rods *g* are inserted into the holes *e* in the plate C. The journals on the opposite ends of the slats G are then inserted in holes formed through a metallic strip, which is placed on the opposite side of the blind-frame, the end pieces of the blind-frame are put into position, and the whole is ready for operation. The holes *e* in the plate C are of the peculiar conformation shown in Fig. 4. The plate C has a rectilinear motion strictly, as distinguished from that of one part of a parallel rule. The position of the pin *g* with reference to the other parts is such that as the slats change from a nearly vertical to a horizontal position the pin *g* changes from a position about forty-five degrees above to one about forty-five degrees below a horizontal line drawn through the pivot or journal *f*, and when the slats are in a horizontal position the crank-rod *g* is in the upper side of the hole *e* and rests upon the upper face of the projection *i*. In the process of closing the slats the crank-rod *g* follows the conformation of the hole *e*, and is stopped in its movement against the under side of the projection *i*. The limit of movement downward of the plate C is such that

when the slats are opened they cannot be thrown inward—that is, toward the window—any further than that they will assume a horizontal position, so that, while all possible light is transmitted between the slats, there is small possibility for rain to drive through the blind and be deposited upon the window frame and sill, and thereby rot away the window frame, sill, or casing. When the slats are turned to shut out the light or weather and locked by the spring F they cannot be blown open by the wind, nor can they rattle or work loose. By making the slat-journals of metal they cannot be easily cut out, as can the ordinary slat-blind, and all these journals working on metal bearings insures the free and perfect operation of the slats, as they are not subject to the swelling and shrinking of the ordinary wood-journaled slats or the metal-journaled slats working upon bearings of wood.

I am aware that there are other inventions directed toward the same result; but none of them accomplish the object in a cheap manner, so as to compete with the ordinary blind furnished with the central slat rod or stick, and therefore cannot and do not enter into general use. In case one of my slats gets broken and it is desirable to replace it with another, such replacement can easily and quickly be made by the withdrawing of a few screws, while in

the ordinary blind the whole frame must be taken apart and put together again. In my invention as many slats can be used in a section upon the same sliding plate as are or may be desired, and each section can be worked from above or below by a change in the position of the holes *e* in the plate C.

The plates above described may be made of any desired metal, and I find that in actual use the plates B and D, when made of sheet-iron one sixty-fourth of an inch thick, are sufficient, while the sliding plate C need be but little heavier.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In a window-blind, the combination of the frame A, plates B, C, and D, knob E, and spring F, arranged and operating substantially as described.

2. The frame A, plate B and C, the latter provided with recesses *d* and cordate holes *e*, combined with slats G, having journal *f* and crank-pin *g*, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES B. CHILDS.

Witnesses:

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W. S. WINDOM.