J. BLOCHER.
SASH HOLDER.

Patented June 16, 1891. No. 454,025. E John Blocker. Witnesses

United States Patent Office.

JOHN BLOCHER, OF FRANKLIN GROVE, ILLINOIS.

SASH-HOLDER.

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To all whom it may concern:

Be it known that I, John Blocher, a citizen of the United States, residing at Franklin Grove, in the county of Lee and State of Illinois, have invented certain new and useful Improvements in Window-Stops; 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, and to the letters of reference marked thereon.

Figure 1 of the drawings represents a vertical section of a window frame and sash embodying my invention, the sash being shown as locked in a closed position; Fig. 2, a similar view showing the sash partly raised; Fig.

3, a detail view of the bead; Fig. 4, a detail view in perspective and on an enlarged scale of the eccentric for operating the bead; Fig. 5, a cross-section taken on line z z of Fig. 2.

The object of the present invention is to provide means whereby the window will be rendered dust, air, and water tight without the necessity of using the usual weatherstrips, and also to hold the sash firmly at any point to which it is raised, and to securely and firmly lock the sash when it is down.

A further object of the invention is to prevent the rattling of the sash, to prevent it from becoming dust-clogged or water-swelled, and further to remove all friction from the sash when it is desired to raise it, so that any one having sufficient strength to lift the weight of the sash can raise it with comparative ease at all times and under all atmospheric conditions.

These several objects I attain by the construction substantially as shown in the drawings, and hereinafter described and claimed.

In the accompanying drawings, A represents a window-frame of the usual construction, and in the present instance I have shown a frame with a single sash, such as used upon cars, although my invention is equally applicable to windows having double sashes, as are used in dwellings or other like struct-

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In the present instance I have shown the

sash B as provided with a suitable stop C, se-50 cured to the side of the sash by screws or other desirable fastenings, the purpose of which will be hereinafter described.

When the invention is used in connection with a single sash, as shown in the drawings, the frame has connected to it upon either side 55 a bead D, so that it can be conveniently operated from within the car or room, said bead being slightly shorter than the length of the window-frame, so as to allow of its movement lengthwise or in a vertical direction. The 60 bead D has at a suitable distance from its ends diagonal or inclined slots a, which are preferably provided with a bushing b, of brass or other suitable metal, and through these slots pass headed screws c, which may be orna- 65mental or plain, as found desirable, said screws, after passing through the slots, entering the side of the window-frame, thereby holding the bead thereto and at the same time admitting of its adjustment to or from the 70 window-sash. The movement of the bead D is controlled by means of a cam E, provided with a crank-handle F for operating it, said cam passing through a hole d in the bead and preferably retained in place by a suitable 75 screw e, passing through the cam and hole in the bead and into the side of the windowframe, the hole in the bead having a suitable bushing f. By turning the cam E a quarterrevolution in the proper direction the bead D 80 will recede from the sash B a sufficient distance to admit of the sash moving easily in the window-frame, as shown in Fig. 2 of the drawings, thereby removing all friction and enabling the sash to be easily raised or low- 85 ered to any desired point and held there by turning the cam in the opposite direction, which will force the bead in frictional contact with the sash sufficient to firmly hold it in its adjusted position. The bead when oper- 90 ated has a movement in a diagonal direction, moving downward or upward, as the case may be, the same distance as it moves toward or away from the sash. Although when the bead is brought tightly against the sash it will hold 95 it closed against being raised by any one upon the outside; but to provide an additional security the stop C is employed, which, in connection with the crank-handle F of the cam, will form a perfect lock, as shown in 100 Fig. 1 of the drawings, the catch, or what I preferably term a "stop," striking against the crank-handle should any attempt be made to raise the window from the outside.

Having now fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination, with the bead D, having diagonal slots a and screws or other fastenings passing through the same to fasten or hold the bead in position, of the cam E, provided with a suitable handle for operating it, said cam passing through a hole in the bead and held in position by a screw or other like fastening, substantially as and for the purpose set forth.

2. The stop C and the adjustable bead D, in combination with the cam E, provided with a crank-handle F, acting in connection with 15 the stop to lock the sash closed, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the pres-

ence of two witnesses.

JOHN BLOCHER.

Witnesses:
J. D. Sitts,
Louis Trottuon.