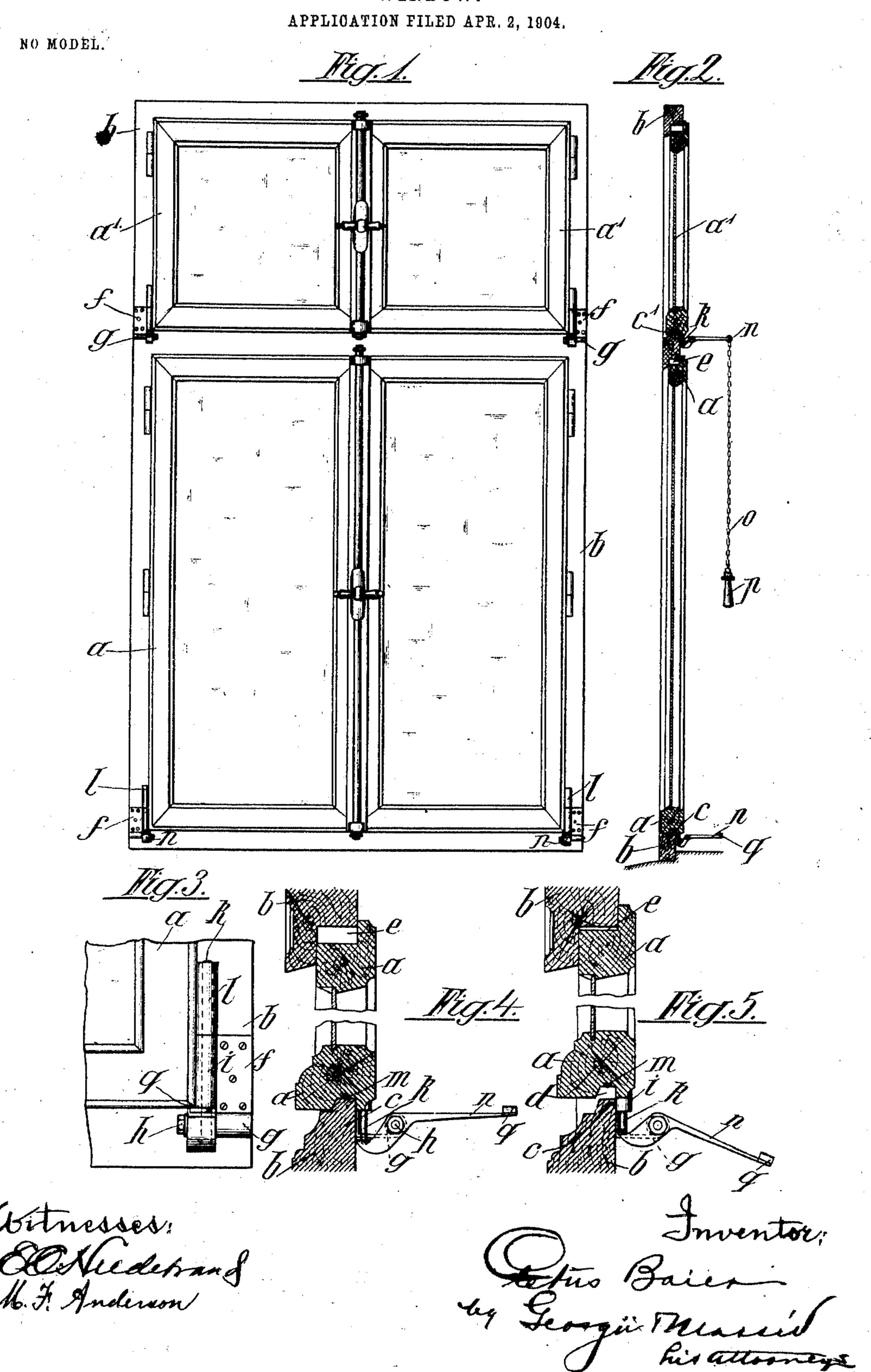
C. BAIER. WINDOW.



UNITED STATES PATENT OFFICE.

CLETUS BAIER, OF ROTTWEIL, GERMANY.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 776,983, dated December 6, 1904.

Application filed April 2, 1904. Serial No. 201,274. (No model.)

To all whom it may concern:

Be it known that I, Cletus Baier, a citizen of the German Empire, residing at Rottweil, Germany, have invented certain new and use-5 ful Improvements in Windows; 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.

My invention relates to windows, and has for its object the provision of means whereby a window may be made weatherproof and means for securing the window in its open position against accidental closing, as by drafts 15 of air and the like. I secure these objects by constructing the window sill or frame with a ridge or rib, the sash being provided with a corresponding groove arranged to fit closely 20 open the window, it is released from the frame by lifting sufficiently to clear the rib and is then swung as upon a hinge, and to hold in an open position the groove in the sash is engaged by a detent, the opening-lever serving this func-25 tion.

In the accompanying drawings is shown a preferred embodiment of my invention, in which—

Figure 1 is a front elevation of window con-3° structed according to the invention. Fig. 2 is a vertical section of the same. Fig. 3 is a view, on an enlarged scale, of a corner of the window. Fig. 4 is a detail, on a yet larger scale, of the extremities of the window in a 35 closed position; and Fig. 5 is a similar view

of the window ready to be opened.

As herein represented, the window-sash a rests upon the frame b, which is provided with an upwardly-extending rib c, taking into a 4º groove d, formed in the lower face of the sash, the sash a being cut away at the top, as at e, to permit of its being raised sufficiently to clear the rib in opening the window. A plate f is secured to the lower side of the frame 45 and projects horizontally to form a knuckle g, within which a pin h is secured. This plate also forms the lower leaf of the lower hinge to the sash and is provided with a vertical knuckle i, serving as a bearing for the pin k, 5° fixed in the upper leaf l. In order to insure |

a close fitting of the sash and frame, a packing is provided, which may be, as shown, in the form of a rubber tube m.

In order to open the window, it is first necessary to raise the sash a distance correspond- 55 ing to the depth of the groove and the height of the rib, and in order to do this a lever nis fulcrumed on the pin h, with its shorter arm lying beneath the lower end of the pin k and its longer arm extending horizontally. 60 A slight pressure upon the longer arm of the lever will suffice to raise the sash by the pin k, when it may be swung open. In a double window, as shown, the longer arm of the lever may be provided with a cord or chain o 65 and a handle p, by which it is readily operated.

A valuable feature of my invention is the arrangement for securing the sash in its open over the rib upon an interposed packing. To | position against closing. This is effected by providing the outer end of the longer lever- 70 arm with an upward projection or lug q, which engages the groove d in the lower edge of the sash when in its open position and retains the same, the weight of the window resting upon the shorter arm, holding the longer arm and 75 lug elevated. To close the window, the powerarm of the lever is depressed, releasing the sash, which is swung to a closed position and allowed to drop with the groove over the rib, thus insuring against accidental opening and 80 effectually excluding drafts and rain.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with a window-frame 85 having a projection, of a sash provided with a groove engaging therewith in the closed position, and a lever arranged to disengage the groove and projection, the lever being provided with means for engaging the sash in its 90 open position.

2. The combination, with a window-frame having a rib, of a sash provided with a groove engaging therewith in the closed position, and a lever arranged to disengage the groove and 95 projection, the lever being provided with a projection for engaging the groove of the sash in its open position.

3. The combination, with a window-frame having a rib, of a sash provided with a groove 100 engaging therewith in the closed position, a packing within the groove, and a lever arranged to disengage the groove and projection, the lever being provided with a projection for engaging the groove of the sash in its open position.

4. The combination, with a window-frame having an upward projection from its sill, of a swinging sash provided with a recess on its lower side engaging therewith in the closed position, and a lever fulcrumed to the frame and arranged to engage and lift the sash with one arm, the other arm of the lever provided with a projection for engaging with the recess of the sash in its open position.

5. The combination, with a window-frame having an upward projection from its sill, of

a swinging sash provided with a recess on its lower side engaging therewith in the closed position a rubber packing between the projection and recess, and a horizontal lever fulcrumed to the frame and arranged to engage and lift the sash with one arm, the other arm of the lever provided with a projection for engaging with the recess of the sash in its 25 open position.

In testimony whereof I affix my signature to this specification in the presence of two wit-

nesses.

CLETUS BAIER.

Witnesses:

A. B. DRAUTZ, WALTER SCHWAEBSCH.