

(No Model.)

H. E. CAPRON.
SASH FASTENER.

No. 548,695.

Patented Oct. 29, 1895.

Fig. 1.

Fig. 2.

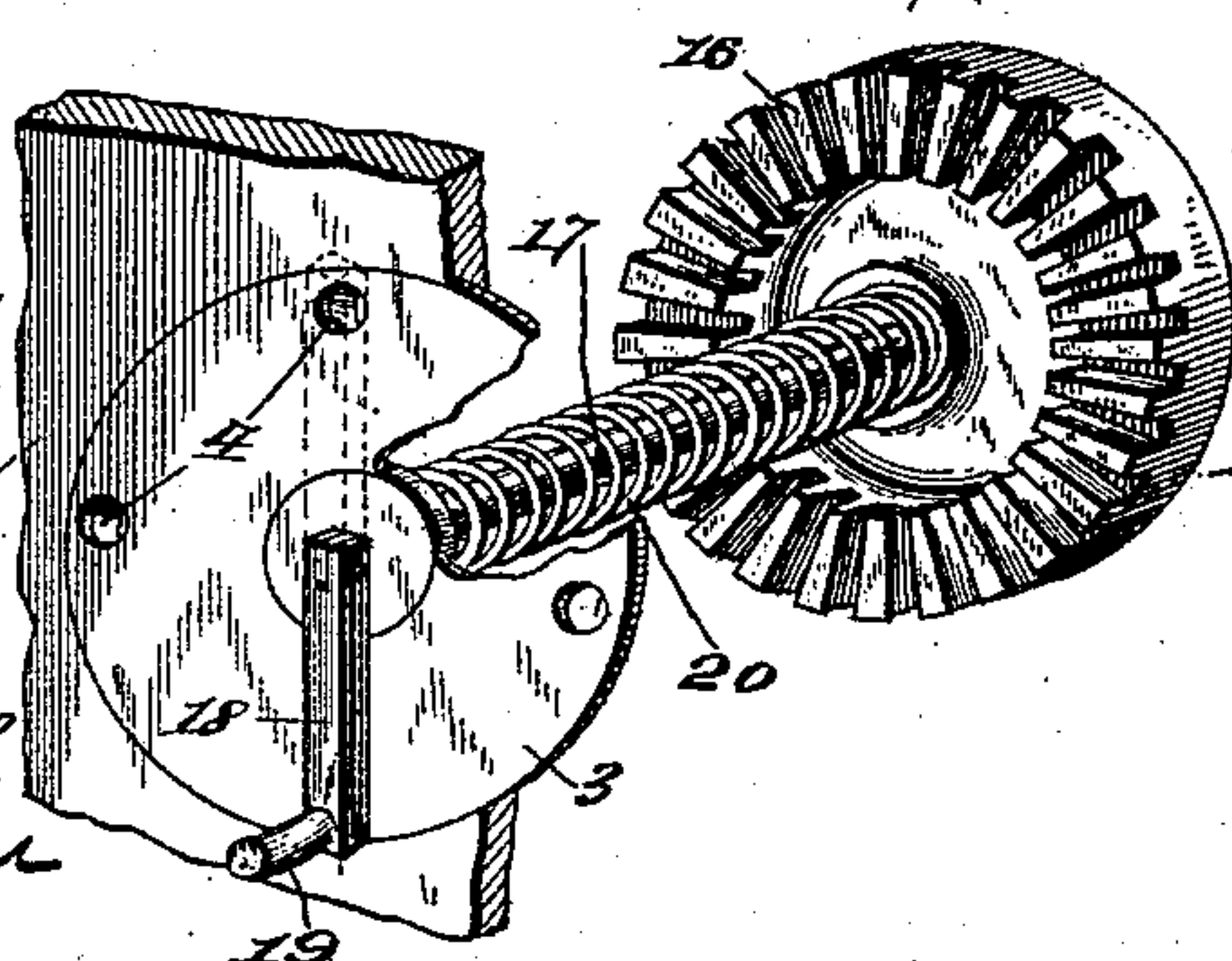
Fig. 3.



Fig. 4.

Fig. 5.

Witnesses
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UNITED STATES PATENT OFFICE.

HENRY E. CAPRON, OF PINKHAMTON, COLORADO, ASSIGNOR OF ONE-HALF TO CHARLES J. BICKEL, OF SAME PLACE.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 548,695, dated October 29, 1895.

Application filed June 20, 1895. Serial No. 553,436. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. CAPRON, a citizen of the United States, residing at Pinkhamton, in the county of Larimer and State of Colorado, have invented certain new and useful Improvements in Window-Fasteners; 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 improvements in devices for raising and lowering window-sashes, the object of the same being to provide simple mechanism to be operated by hand whereby the window-sashes may be raised or lowered and adjusted and locked in any desired position.

The invention consists of a window-frame having suitable recesses or grooves for the reception of the sashes and a casing formed below the sashes, in which a part of the operative mechanism of my device is located. Both sashes are provided with extensions upon their lower outer sides, and the outer edges of said sashes have secured to them rack-bars, which engage pinions upon the outer end of a pair of transverse shafts mounted in suitable bearings in the casing below the window-frame, which shafts are actuated through cog-wheels whose central shafts project out through the casing, and provided with handles on the outer ends thereof, which handles are adapted to be bent over at their points of connection with the shafts of the cog-wheels, so that their projecting end may be inserted in slots or openings in the outside of said casing.

The invention is clearly illustrated in the accompanying drawings, in which—

Figure 1 represents a front elevation of my device shown applied. Fig. 2 is a similar view of the same with the front of the casing removed. Fig. 3 is a vertical section on the line *xx* of Fig. 2. Figs. 4 and 5 are detail perspective views.

Like reference-numerals indicate like parts in the various views.

The window-frame 1 is of the usual form of construction, except as hereinafter described. Below the window-frame is formed a casing

in which is located part of the operating mechanism of my device. The said casing has a removable cover 2, formed with metallic disks or plates 3 3 thereon, each of which is provided with a series of perforations 4 4, as clearly shown in Figs. 1 and 4. On the inside of the cover 2, within the said casing, is mounted in suitable bearings a pair of parallel shafts 5 and 6, the shaft 5 having pinions 7 on its outer ends and the shaft 6 being provided with similar pinions 8 upon its ends. The pinions 7 7 mesh with rack-bars 9 9 upon the extensions 10 10 of the upper sash 11, and the pinions 8 8 mesh with similar rack-bars 12 12 upon the extensions 13 13 of the lower sash 14.

The sashes 11 and 14 fit the frame 1 in the usual manner, and the extensions 10 and 13 thereon project downwardly in the casing below said window-frame. The shaft 5 is further provided with pinions 15, which may be integral with the pinions 7, which are engaged by a cog-wheel 16 on the inner end of an operating-shaft 17, as clearly shown in Fig. 4. The shaft 17 of the cog-wheel 16 projects outwardly through an opening in the cover 2 and one of the plates or disks 3 thereon. Similar operating mechanism is connected with the shaft 6. Pivotaly connected to the outer end of the shaft 17 is handle-bar 18, having a handle 19 upon its outer end. Surrounding the shaft 17 is a coiled spring 20, which, acting against the squared end of the handle-bar, tends to hold the same in any one of its adjusted positions.

The operation of but one sash will be described, as both sashes are actuated in the same manner. The window-sash 11 being in its upper position, by turning the handle-bar 18 the cog-wheel 16 is rotated, and through it and the pinions 15 the shaft 5 is turned in its bearings. The pinions 7 upon the outer ends of the shaft 5, acting in engagement with the rack-bars 9 on the outer ends of the sash 11, force said sash downwardly. When the desired height has been reached, the handle-bar 18 is turned upon its pivotal connection with the shaft 17, so that the handle proper 19 fits one of the perforations 4 in the disk 3. The window is thereby securely held in place. A reverse action to that just described will raise the sash 11.

Having thus described the invention, what is claimed as new is—

5 The combination with a window frame having a casing below the same, whose cover is provided with disks each having a series of perforations therein, of an upper and lower window sash each having extensions from its outer edges, rack bars thereon, a pair of parallel shafts mounted in suitable bearings in
10 said casing each provided with pinions at its ends which engage the teeth of the racks, on the upper and lower sashes respectively, a pair of cog wheels engaging the pinions on said shafts, respectively, a handle bar pivot-

ally connected to the outer end of the shaft 15 of each of said cog wheels and projecting through an opening in said cover, each of said handle bars being provided with a handle upon its outer end, and a spring surrounding the shaft of said cog wheel, substantially as 20 and for the purpose set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HENRY E. CAPRON.

Witnesses:

PLESANT BAIN,
RUPERT H. ORTIZ.