(No Model.)

C. C. A. BAUERCAMPER

SASH FASTENER.

No. 552,884. Patented Jan. 14, 1896.

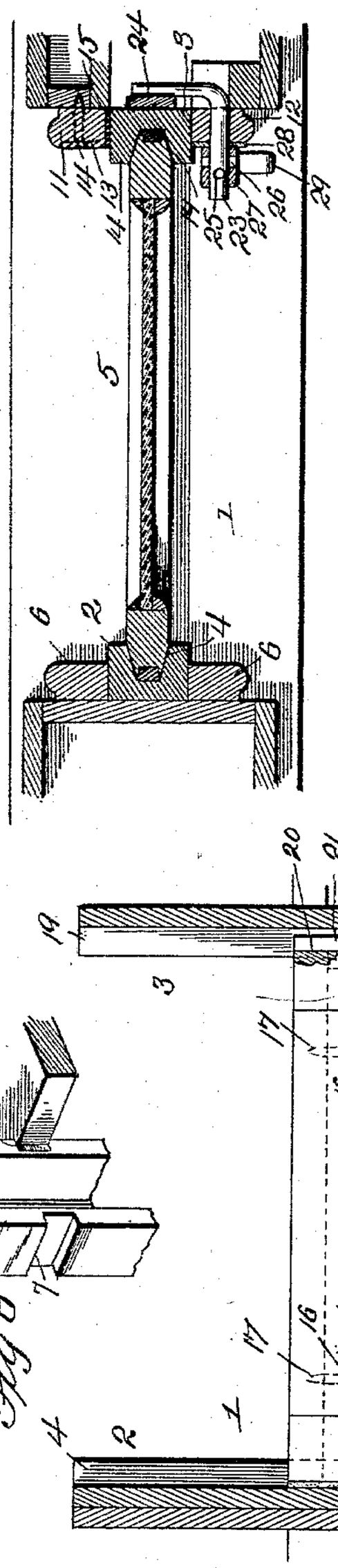

Fig. 2.

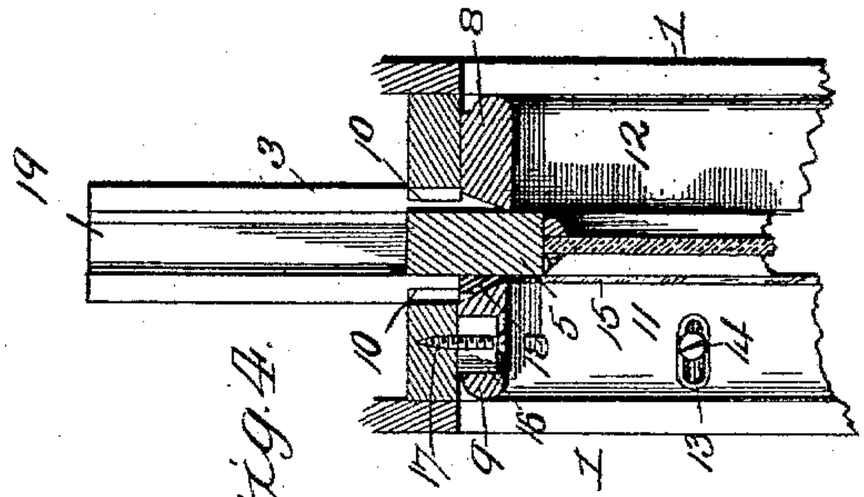

Fig. 4.

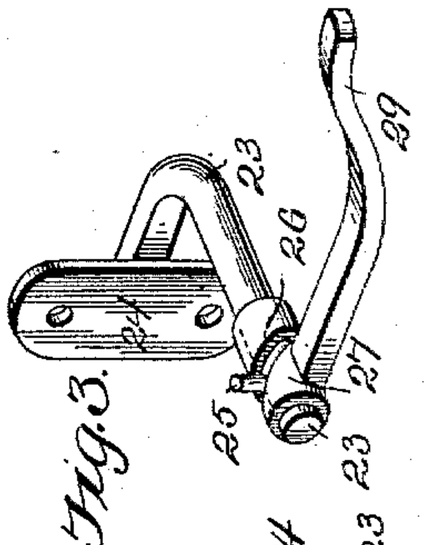

Fig. 3.

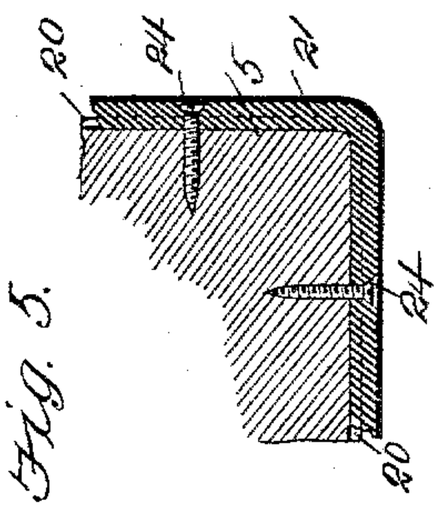

Fig. 5.

Fig. 6.

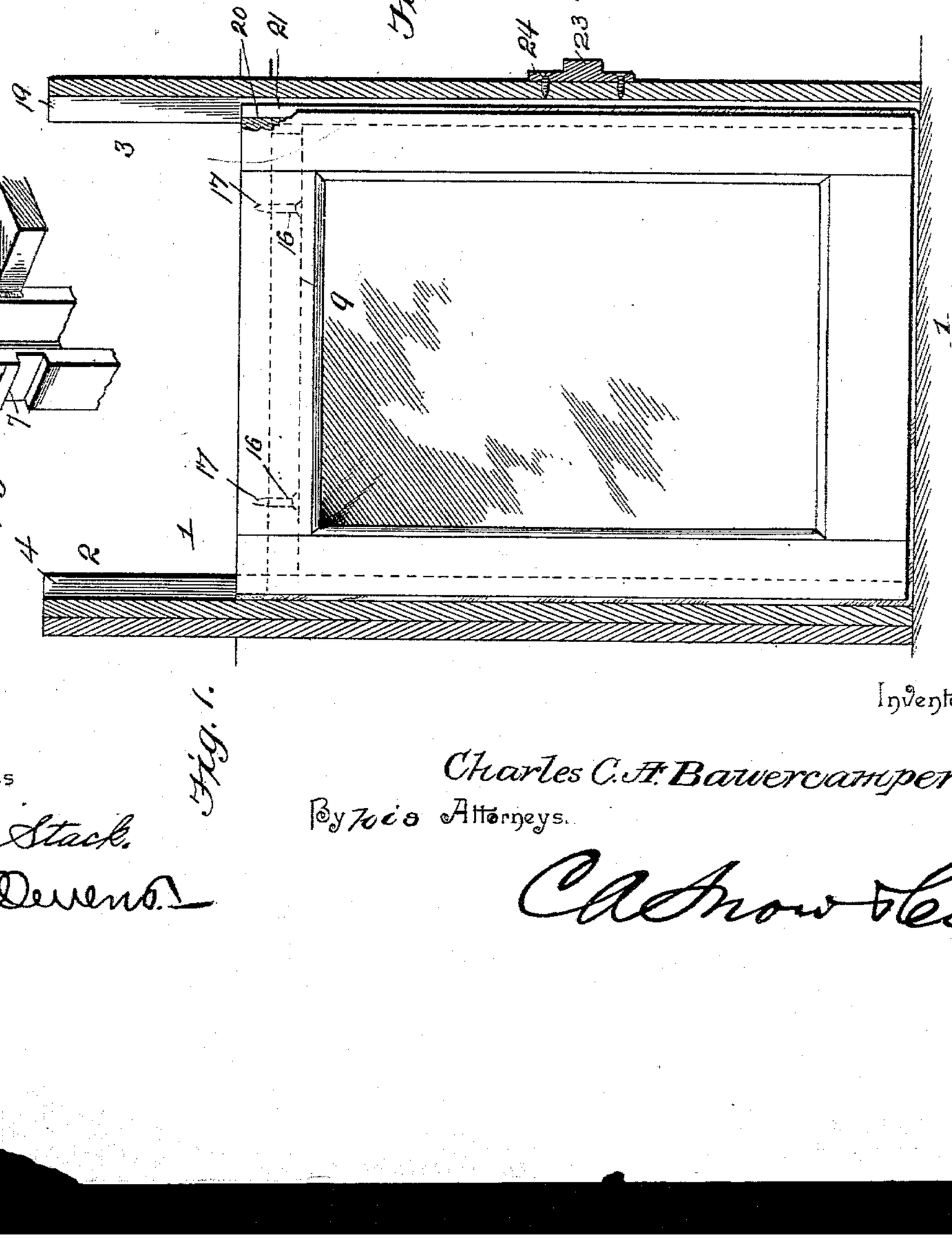

Fig. 1.

Witnesses

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CHARLES C. A. BAUERCAMPER, OF GOTHENBURG, NEBRASKA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 552,884, dated January 14, 1896.

Application filed November 27, 1894. Serial No. 530,144. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. A. BAUERCAMPER, a citizen of the United States, residing at Gothenburg, in the county of Dawson and State of Nebraska, have invented a new and useful Sash-Fastener, of which the following is a specification.

This invention relates to an improvement in sash-fasteners wherein a clamping or pawl-engaging device operating under the influence of a screw is provided, or wherein the clamping or pawl-engaging device consists in a spirally-grooved member combined with a member having a stud thereon and fitted within the groove, through the medium of which motion is transmitted to the sash-securing device. Now the object of my invention is to apply this principle to an improved clamping device which I have devised, and to make it possible to effectively clamp the window-sash either closed or in any position which may be desired. The clamping device proper consists of a vertically-extending and grooved cleat mounted in the window-frame and so as to receive in its groove the edge of the window-sash. This cleat is movable in a horizontal line, and is connected to the device referred to above, so that it may be moved in such a manner to the end that it may bind against the sash and effect the securing thereof.

The invention also consists in various details of construction and minor combinations running through the entire device, all of which will be fully described hereinafter and finally embodied in the claims.

In the drawings, Figure 1 represents a vertical section of a window-frame having my improvements applied thereto; Fig. 2, a cross-section taken horizontally through the movable clamping-cleat and through the devices for operating the same; Fig. 3, a perspective view showing the cleat-operating devices detached from their attendant parts; Fig. 4, a detail section showing the means for slidably mounting the upper end of the cleat; Fig. 5, a sectional view in illustration of a modification and showing a modified arrangement of the rubber packing-strips of my invention; Fig. 6, a detail perspective view of the rigid cleat.

The reference-numeral 1 indicates the frame of the window to which my improvements are shown as applied, and this is of the usual or any preferred construction, and has at each side thereof a cleat, designated by the numerals 2 and 3, respectively. The cleat 2 is rigidly secured in place and forms, or rather operates, as the usual window-beads, it being formed with a groove 4 extending longitudinally on its inner side and in which the window-sash 5 is arranged, as will be better described hereinafter.

6 indicates the window-beads proper, which are adjacent to the cleat 2. These are rigidly secured in place, one on each side of the cleat 2, and operate to hold the same rigid. The cleat 3 is also provided with beads, and these will be described hereinafter in connection with the description of said cleat. The upper portion of the cleat 2 has formed therein, and on each side thereof, the notches 7, which receive portions of the window-frame and whereby the cleat is further secured in place. The top beads 8 and 9 are arranged so that their adjacent ends will bear against the cleat 2 and still further assist in holding it rigid.

The groove 4 of the cleat 2 tapers from its outer to its inner side, and this is provided so that the correspondingly-tapered side of the sash 5 will be capable of fitting therein, and will be held snugly in place.

The cleat 3 is the hereinbefore-referred-to cleat, which is mounted so as to be capable of transverse movement, and this movement is limited by means of the notches 10, which are formed in the upper portion of the cleat 2, and at each side thereof, and which receives portions of the window-frame. Here also the top beads 8 and 9 are arranged to engage the cleat 2, but this engagement does not take place until the cleat has moved as far inward as possible, said top beads being rather for limiting the movements of the cleat than for stopping them.

11 and 12 indicate, respectively, the beads for the cleat 3, and these are arranged one at

each side of the cleat and are adapted to engage the same so as to prevent the passage of air. The bead 12 is rigidly secured at the inner side of the window-frame and bears against the cleat 3, while the bead 11 is also rigidly but adjustably secured at the outer side of the window-frame. This adjustable securing of the bead 11 is effected by means of the transversely-elongated slots 13, in which the screws 14 respectively operate. By these means the cleat may be advanced upon the window-sash, or moved away from it, as the conditions of the operation may require. 15 indicates a strip of rubber, which is secured to the inner edge of the bead 11 and which is arranged to bind against the cleat 3, so as to make a tight connection between said cleat and the bead 11. The top bead 9 being the outer bead, is also made adjustable, and this is effected by means of the slots 16 and screws 17, similar to the slots 13 and screws 14, both in form and function. The inner side of the cleat 9 is beveled so as to form an inwardly-projected portion, the lower edge of which engages with the sash 5. This beveled portion of the bead 9 is adapted to co-operate with the rubber strip 18, which is also beveled and oppositely from the bevel of the bead 9, and which is secured to the outer side of the sash 5, at the upper side thereof. By these means the parts may be effectively engaged and made to form a secure joint or connection.

The cleat 3 is formed with a groove 19, which is similar to the groove 4, and which is shaped as said groove, so as to receive the correspondingly-tapered side of the window-sash. By means of this corresponding taper in the grooves 4 and 19 and in the sides of the window-sash a tight joint is effected between the parts, and the said parts made capable of a complete disconnection upon the slightest movement of the cleat 3, since every portion of the grooves must disengage from the window-sash as soon as the cleat is moved. By this construction I produce increased efficacy at the connection without decreasing the ease of disconnection.

Formed in the bottom and at each side of the window-sash is the groove 20, which extends around these three sides, and which receives the rubber strip 21, said strip being countersunk therein, so that but a portion of it will be exposed. This strip is adapted to engage with the bottom of the window-frame and with the cleats 2 and 3, and to thereby form a complete connection between the parts. The preferred method of securing the strips 21 in place is by gluing them, but Fig. 5 shows a second method which is, perhaps, just as effective. This method consists in forming in the strips countersunk screw-openings 24, whereby screws may be employed, and whereby the heads thereof may be sunk below the surface of the strip so as not to interfere with the operation of the latter.

The devices for moving the cleat 3 will now be described. These consist in a rod 23, passed horizontally through the middle of the bead 12 and through the adjacent portion of the window-frame to a point outward from the cleat 3, where it bends at right angles to the main portion and proceeds inwardly and horizontally to a point directly rearward of the cleat 3, where it is rigidly secured to the plate 24, which is in turn rigidly secured to the rear side of the cleat 3 and at the middle thereof. The inner end of the rod 23 is projected beyond the bead 12, and is provided at said inner end with an upwardly-projecting and radial stud 25. This stud is fitted within a spiral slot 26, formed in the sleeve 27, which sleeve rotatably embraces this rod 23 and bears at its outer end against the plate 28, said plate being rigidly secured to the bead 12 and serving to receive the strain of the sleeve 27. Rigidly secured to or formed integral with the sleeve 27 is the arm 29, which is provided to manipulate the device, and which is capable of swinging with the cleat, as will be understood. Thus it will be seen that upon the rotary movement of the sleeve 27 the rod 23 will be moved in and out of forcible contact with the cleat 3, causing said cleat to be moved correspondingly and to be clamped against the sash 5 or disconnected therefrom. Thus it will be seen that by means of my invention the window-sash may be securely held in any position, and that the cleat 3 being forcibly pressed against the rubber strip 21 will make it impossible for the window to be raised surreptitiously, or without releasing the cleat. It will also be seen that the window-sash may be held at any position by the operation of the cleat 3, and by raising it and subsequently clamping the cleat against it, all of which will be understood. The cleats 2 and 3 are extended slightly above the top of the window-frame so as to guide the sash in its movements upwardly, and so as to hold the same steady and secure when raised.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having described the invention, I claim—

1. The combination with a window frame or casing, of a sash movable vertically therein, a cleat lying against one side of the sash and capable of movement transversely so as to engage and disengage the sash, and positive means for moving said cleat into engagement with the sash with an unyielding pressure, substantially as described.

2. The combination with a window-frame, of a window-sash movable vertically therein, a cleat located at one side of the window-sash and extending the entire height of the window-frame, said cleat being movable toward and from the window-sash and capable of binding against the same, a rod connected to the cleat

and having a stud thereon, and a spirally grooved sleeve embracing the rod and receiving the stud in its groove, the sleeve being engaged with the window-frame and being capable of moving the rod so as to clamp the cleat in engagement with the window-sash, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CHARLES C. A. BAUERCAMPER.

Witnesses:
E. J. SPAULDING,
A. V. CARLSON.