No. 705,260. Patented July 22, 1902.

J. C. LODOR.

SASH FASTENER.

(Application filed Nov. 1, 1901.)

(No Model.) 2 Sheets—Sheet 1.

Fig. 1.

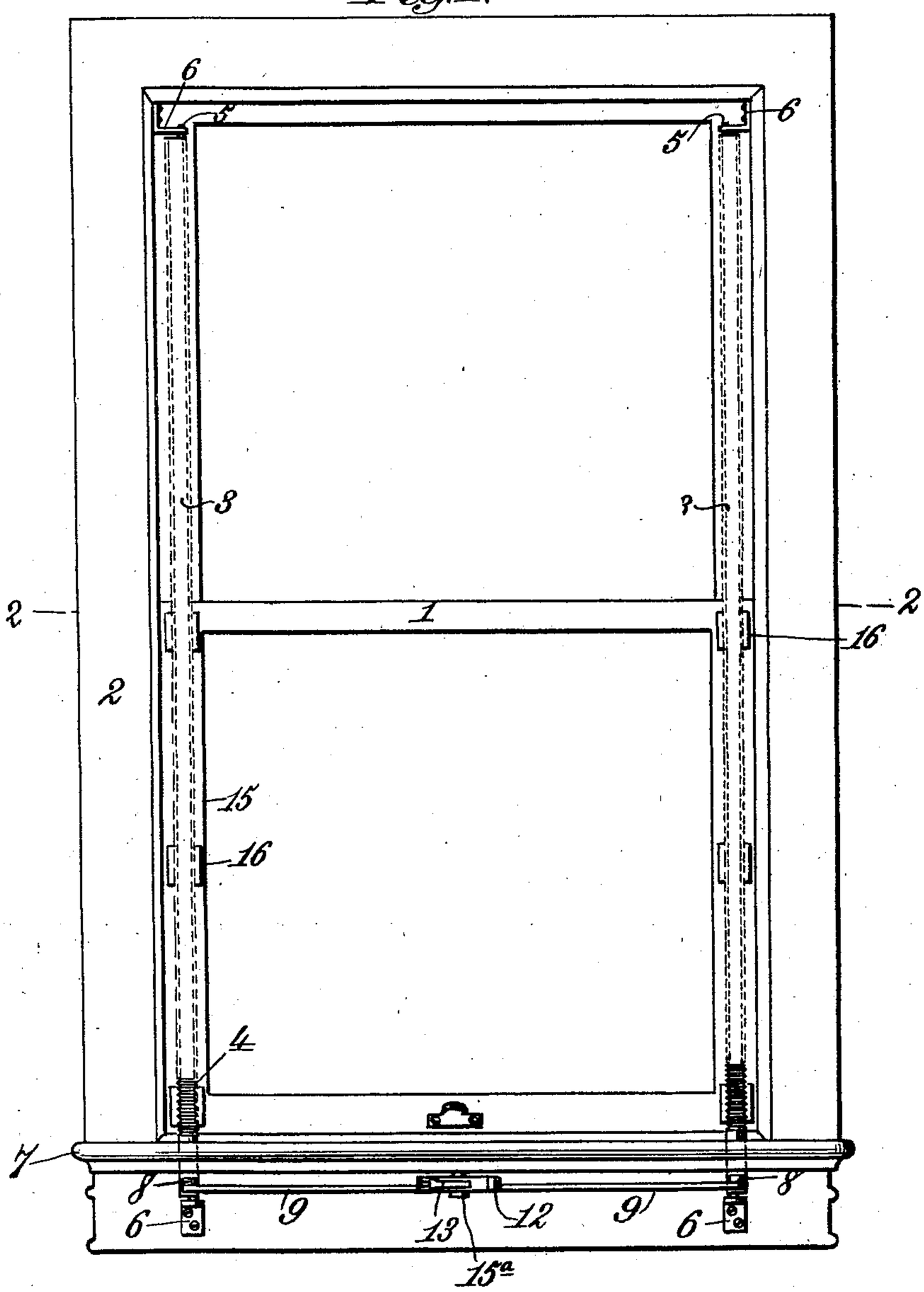
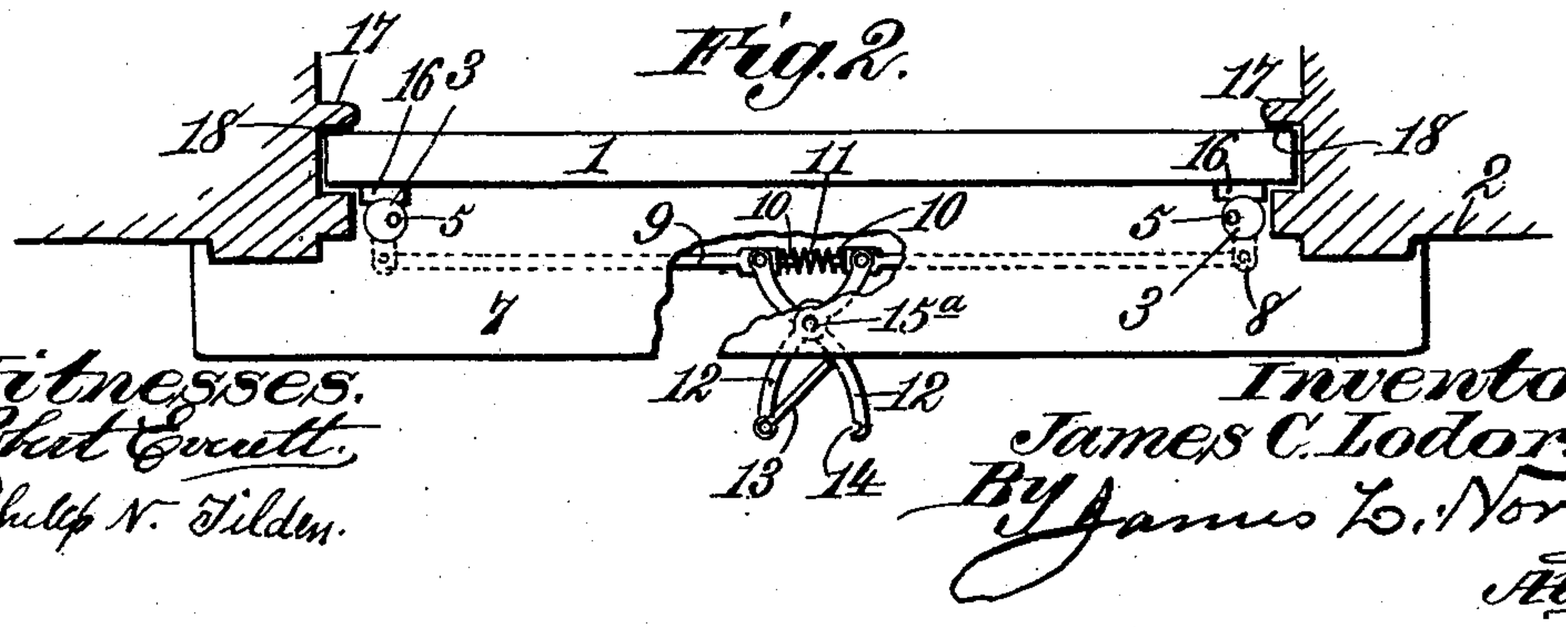


Fig. 2.



Witnesses.
Robert Ewell.
Philip N. Tilden.

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By James L. Norris.
Atty.

UNITED STATES PATENT OFFICE.

JAMES C. LODOR, OF WILMINGTON, NORTH CAROLINA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 705,260, dated July 22, 1902.

Application filed November 1, 1901. Serial No. 80,824. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. LODOR, a citizen of the United States, residing at Wilmington, in the county of New Hanover and State of North Carolina, have invented new and useful Improvements in Sash-Fasteners for Car and other Windows, of which the following is a specification.

This invention relates to sash-fasteners for car and other windows, and has for its object to provide a simple, inexpensive, and easily-operated fastener of the character referred to which will permit the window to be freely raised and lowered with the exertion of very slight force or power, which will effectually lock the window in any position to which it may be adjusted, which will securely hold the window against rattling in its frame, and by means of which the windows may be closed thoroughly dust, air, and water tight.

To these ends my invention consists in the features and in the construction, combination, and arrangement of parts hereinafter described, and particularly pointed out in the claims following the description, reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1 is a view in front elevation, showing my improved fastener applied to a car-window. Fig. 2 is a transverse horizontal sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a view similar to Fig. 1, showing a slightly-modified construction; and Fig. 4 is a sectional view taken on the line 4 4 of Fig. 3. Fig. 5 is a detail view of a portion of one of the eccentric-rods.

Referring to Figs. 1 and 2 of the drawings, the numeral 1 indicates a car-window sash, and 2 the frame in which it is arranged to slide, both sash and frame being of ordinary or any preferred construction. Arranged adjacent to the opposite sides of the window-frame 2 are two vertical rods 3, each being provided with parallel circumferential or annular ribs 4, preferably V-shaped in cross-section, or, in other words, the rods are circumferentially corrugated, the corrugations being preferably V-shaped. The opposite ends of each rod have formed thereon pivot projections or trunnions 5, said trunnions or pivots being in vertical alinement and each being arranged eccentrically to the vertical axis of the rod. The pivots or trunnions 5 are journaled in suitable bearings fixed to the sides of the sash-frame, the arrangement being such that the rods constitute cams or eccentrics. In the drawings I have shown the pivots or trunnions 5 journaled in angle-brackets 6, secured to the sides of the sash-frame 2, the lower brackets being shown arranged beneath the window-sill 7 and the lower ends of the rods 3 passing through said sill; but it will be obvious that brackets of any construction suitable for the purpose may be employed and that the lower brackets may be arranged on the upper side of or above the sill. On the lower end of each eccentric-rod is formed or fixed a radially-projecting lug 8, and to said lug is pivotally connected one end of a link or connecting-rod 9, the other end of said rod being reduced to form a shouldered tenon 10, as most clearly shown in Fig. 2 of the drawings. The two links 9 are disposed in alinement with one another, their adjacent tenoned ends being slightly separated, as shown, and fitted over the tenons 10 is a compressed coiled spring 11, that operates to force said links apart or in opposite directions. Pivotally connected to the inner end of each of the links 9 is a lever 12, said levers being crossed and pivotally connected together at their points of intersection in manner similar to a pair of tongs. The outer or free ends of the levers 12 are suitably shaped so that the two may simultaneously be grasped by the hand, and pivotally attached to one of said free ends is one end of a lever or latch 13, the other end thereof being adapted to engage a notch 14, formed on the inner side of the free end of the other lever, and thus hold the ends of said levers positively spread apart. The two levers may be conveniently pivoted together by a screw 15^a, which is screwed into the window-sill, and also serves to attach thereto the fastener-actuating mechanism described. Fitted in or attached to the opposite inner sides of the stiles 15 of the window-sash are pads or blocks 16 of rubber or other suitable yielding material, which are so arranged relatively to the eccentric-rods 3 that they will be engaged by the ribs of the latter when said rods are turned in the proper direction.

The operation of the window-fastening con-

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(No Model.) 2 Sheets—Sheet 2.

Fig. 3.

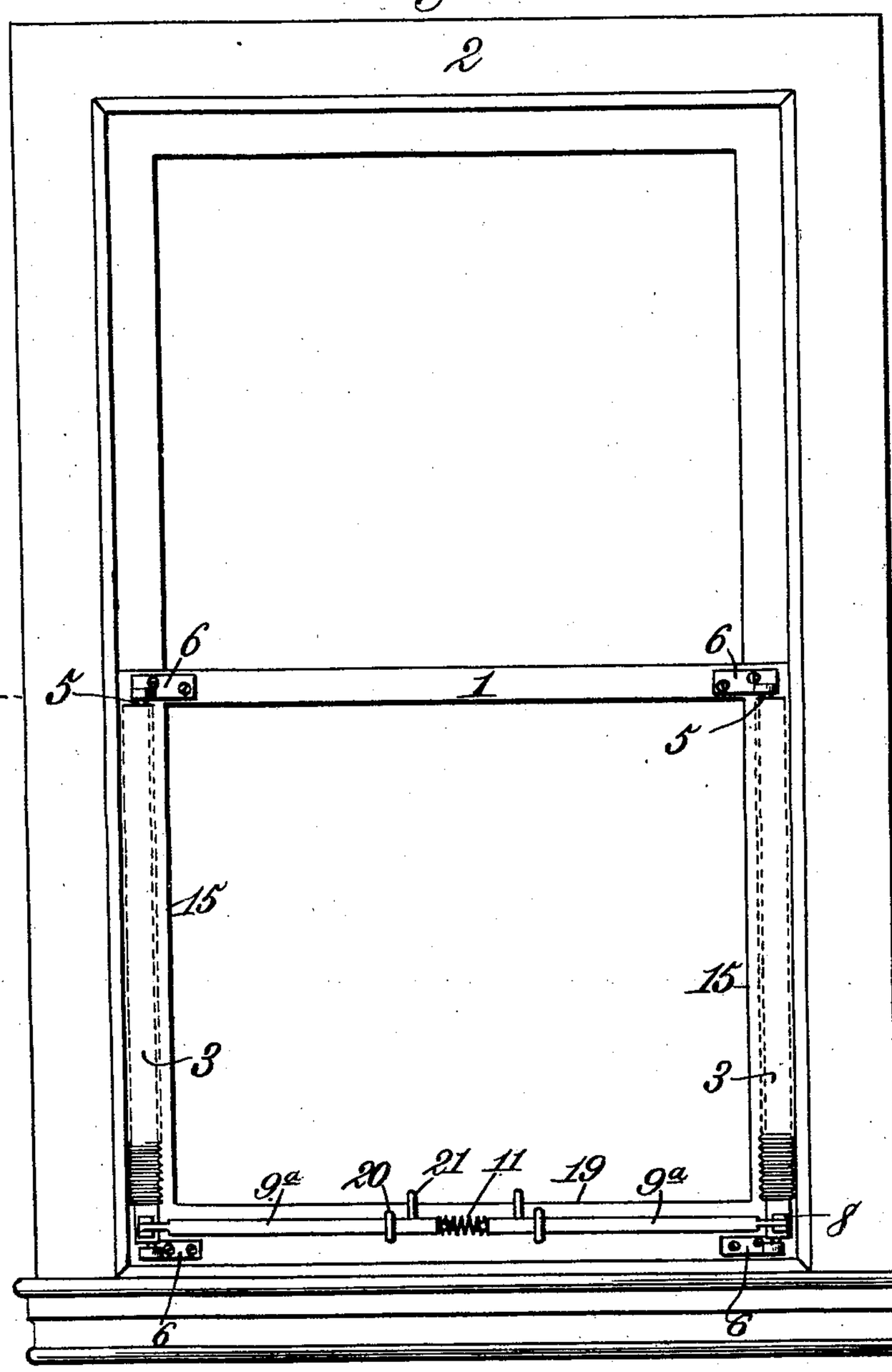


Fig. 5.

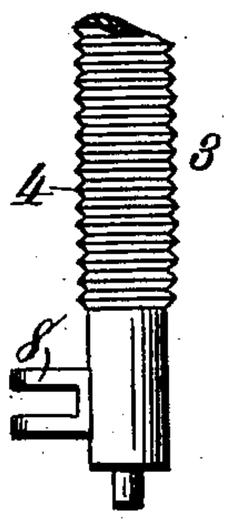
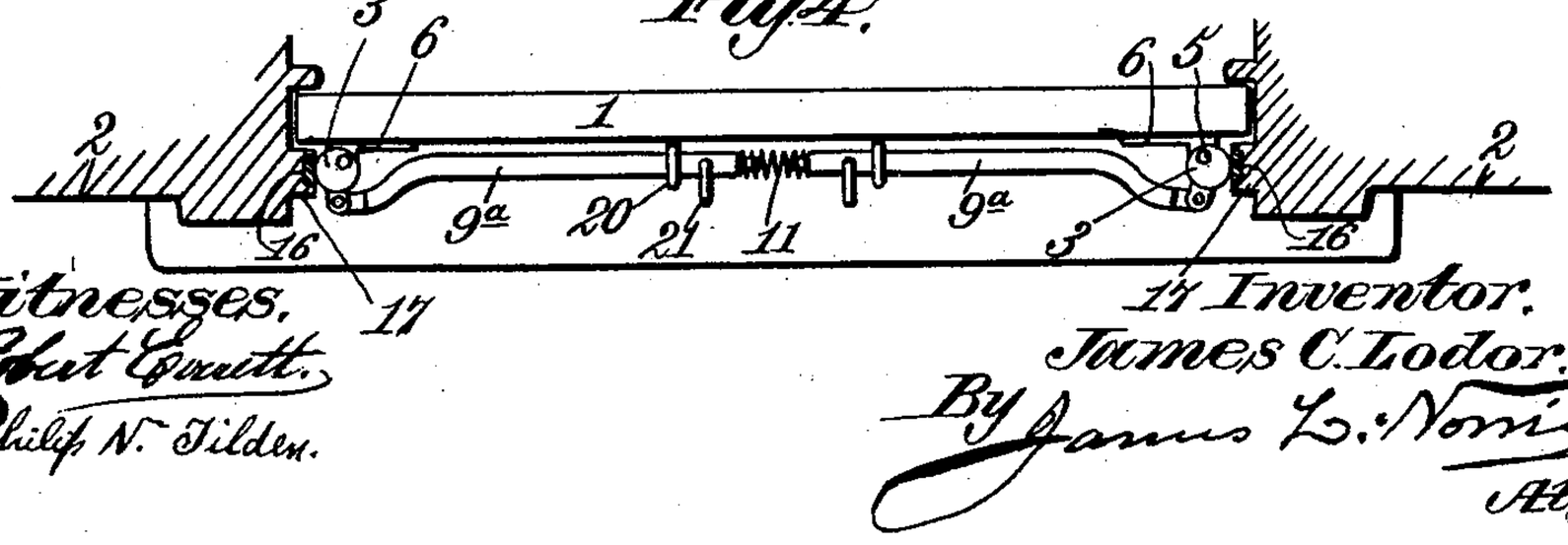


Fig. 4.



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J. C. LODOR.

ACTUATING DEVICE FOR LIDS OR COVERS.

(Application filed Aug. 12, 1901.)

(No Model.)

Fig. 1.

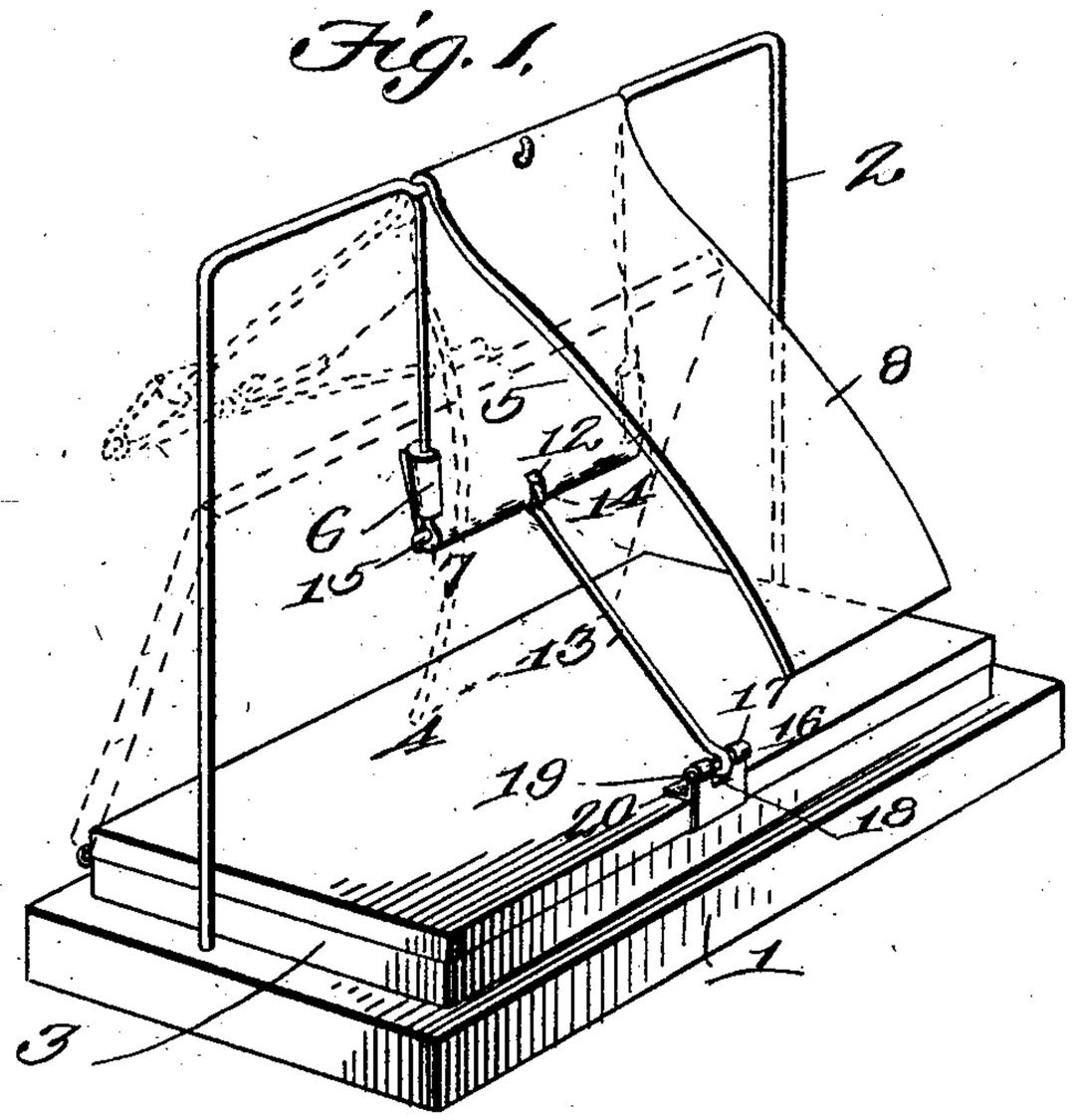

Fig. 2.

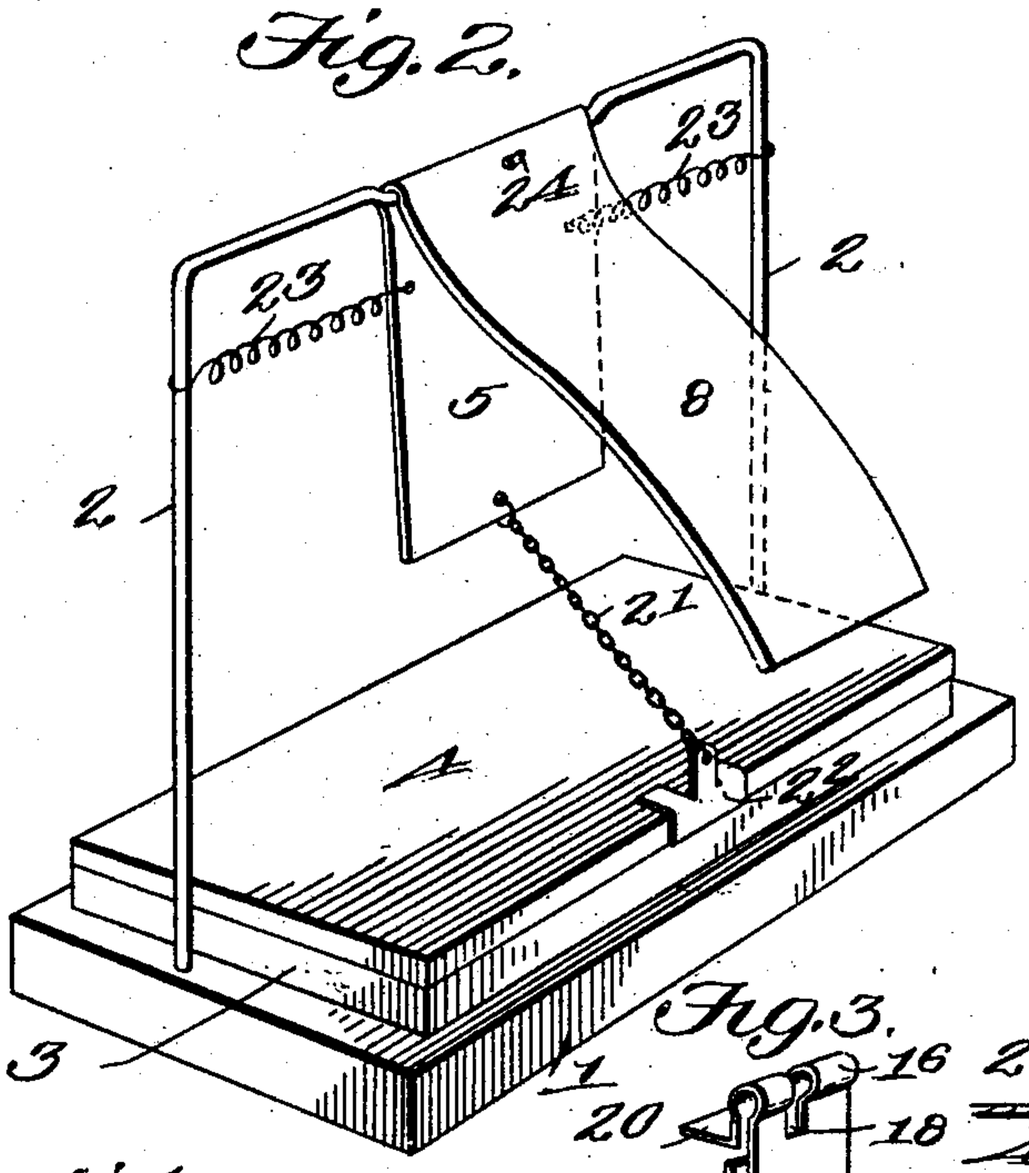

Fig. 3.

Fig. 4.

Fig. 5.

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