

J. S. RAPSON.
WINDOW SASH FASTENER.
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907,525.

Patented Dec. 22, 1908.

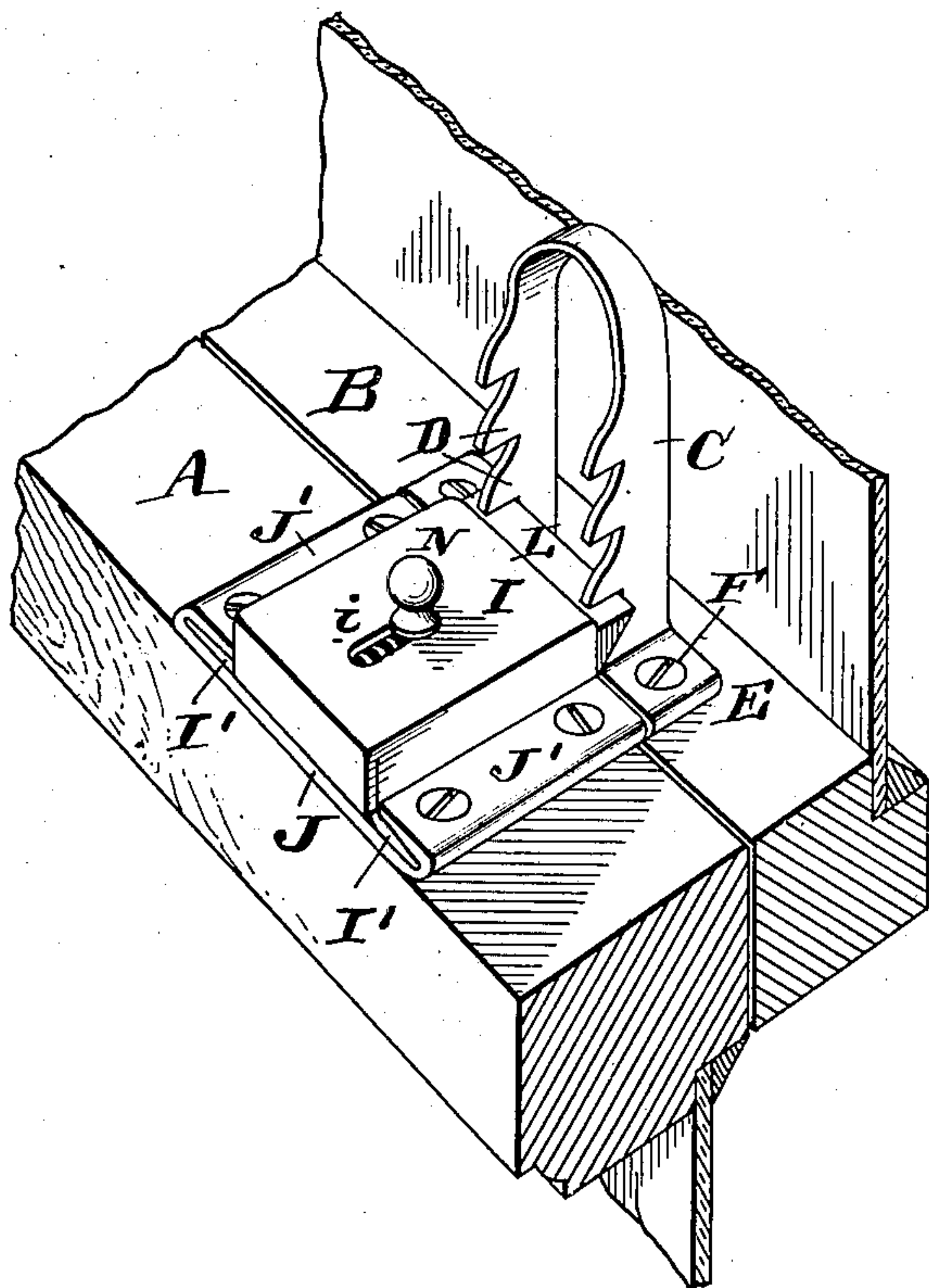


FIG. 1

FIG. 3

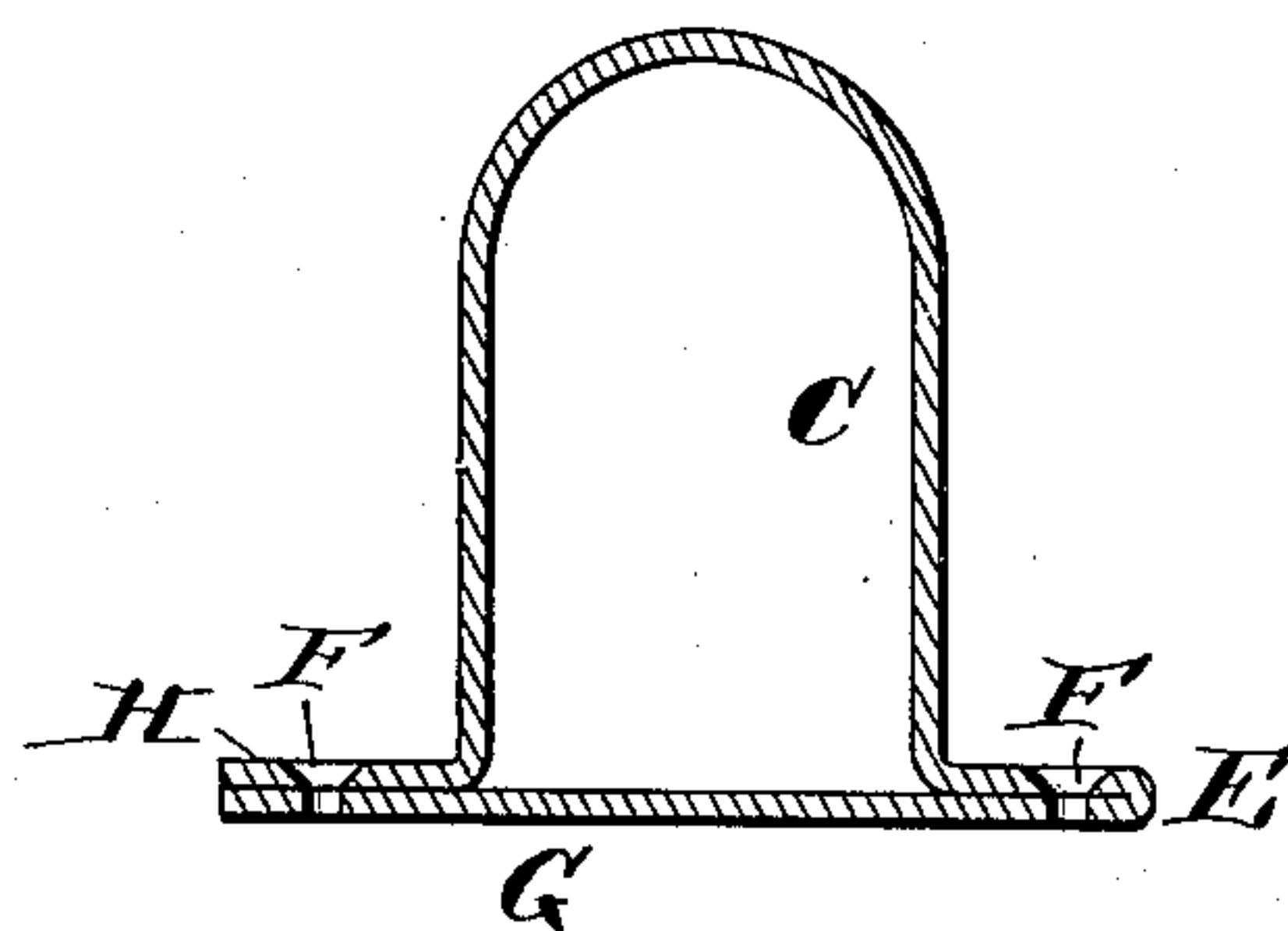


FIG. 4

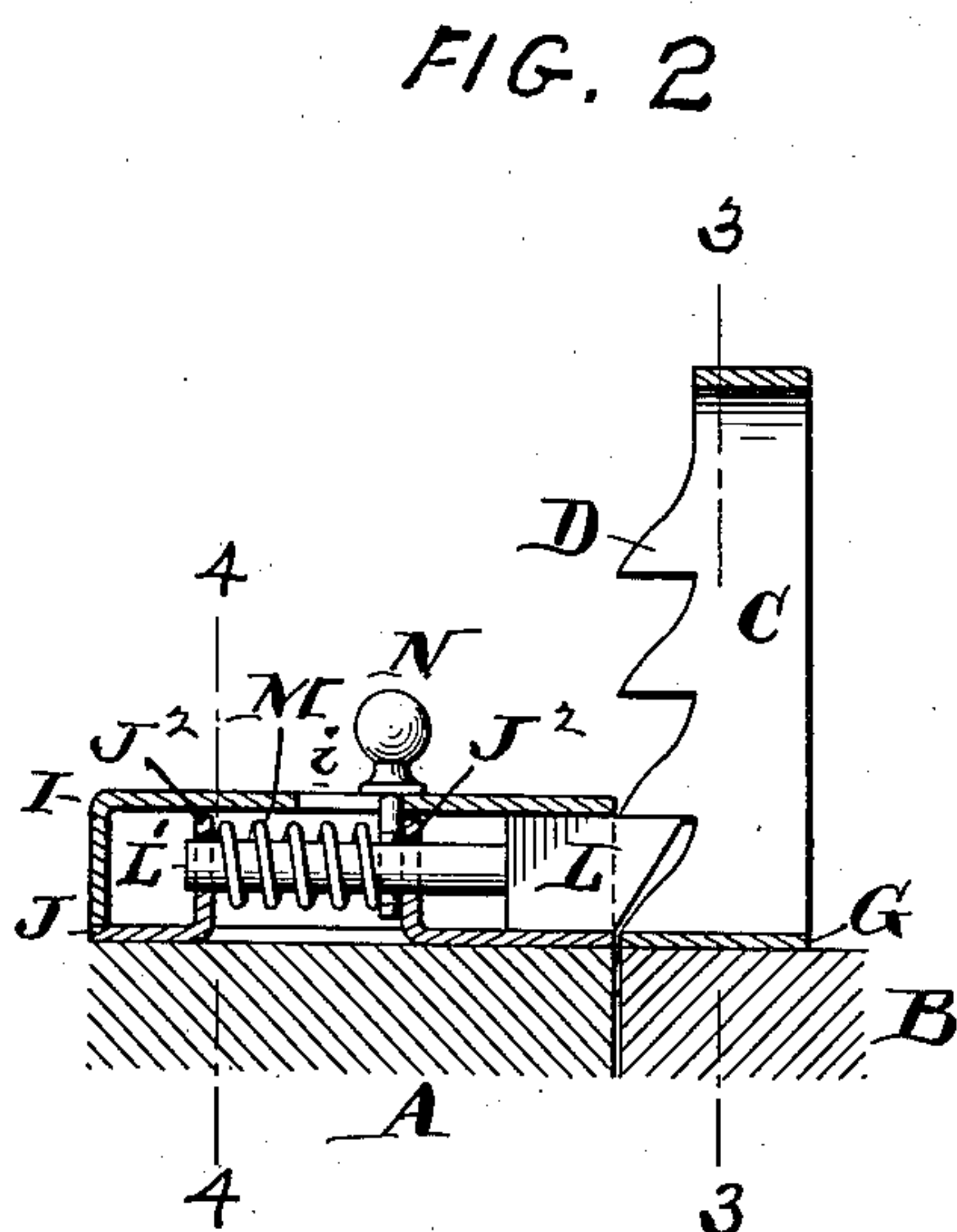
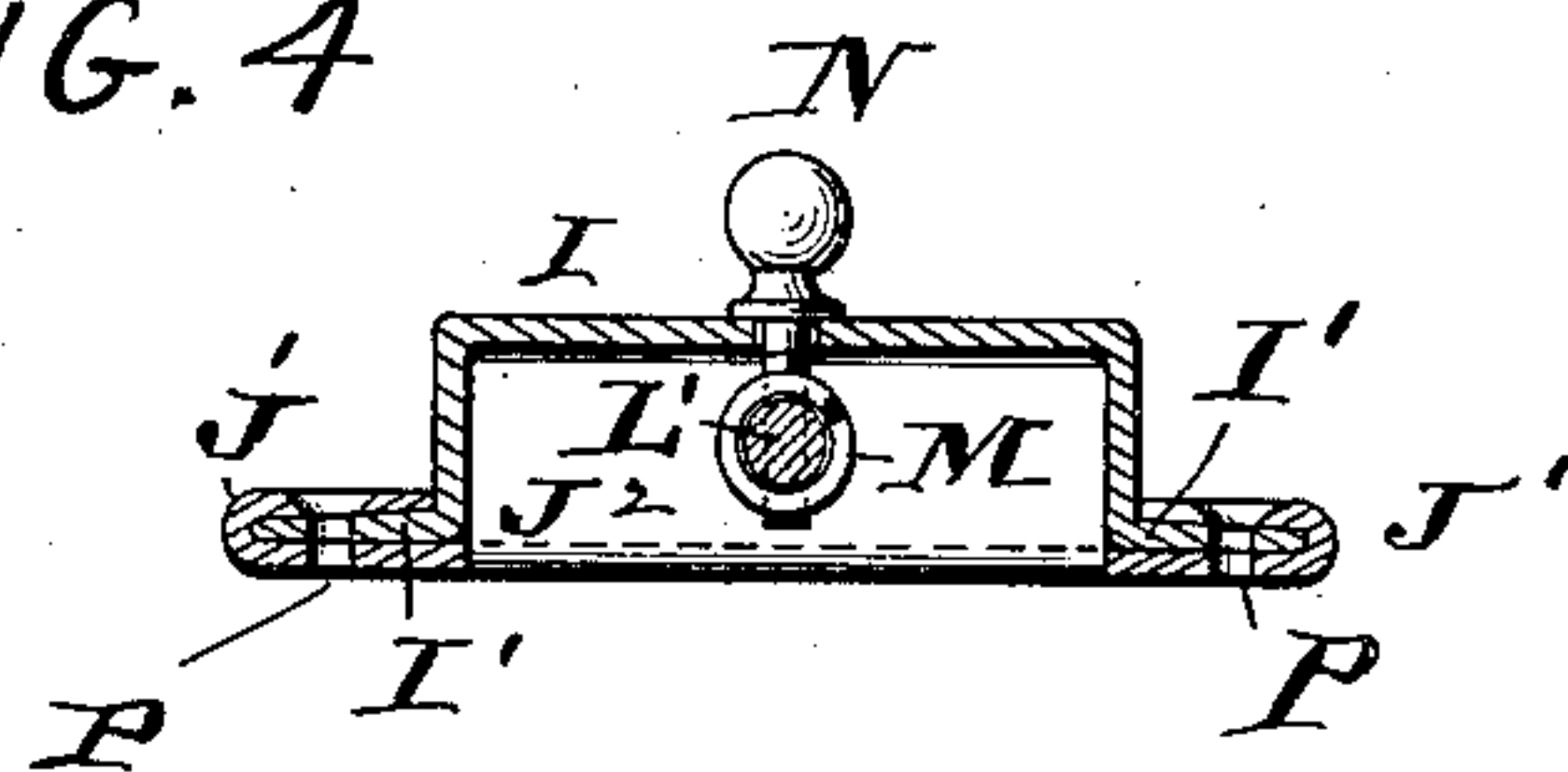


FIG. 2

Witnesses
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JOHN S. RAPSON, OF ELKINS PARK, PENNSYLVANIA.

WINDOW-SASH FASTENER.

No. 907,525.

Specification of Letters Patent.

Patented Dec. 22, 1908.

Application filed July 31, 1907. Serial No. 386,421.

To all whom it may concern:

Be it known that I, JOHN S. RAPSON, of Elkins Park, county of Montgomery, and State of Pennsylvania, have invented an Improvement in Window-Sash Fasteners, of which the following is a specification.

My invention has reference to window-sash fasteners and consists of certain improvements which are fully set forth in the following specification and shown in the accompanying drawings, which form a part thereof.

My object is to provide a construction of fastener whereby either window-sash may be left slightly open for ventilating purposes while at the same time insuring the locking of the sashes against further opening.

My invention consists of a sash fastener comprising a spring bolt adapted for attachment to one sash and combined with a multiple-toothed keeper adapted for attachment to the other sash and with either tooth of which the bolt engages.

My invention also consists in forming the sash fastener above specified of sheet metal in certain form illustrated and hereinafter described.

My invention further comprehends details of construction which, together with the features above specified, will be better understood by reference to the drawings, in which:—

Figure 1 is a perspective view of a window-sash fastener embodying my invention; Fig. 2 is a sectional side elevation of the same; Fig. 3 is a cross section of the keeper on line 3—3 of Fig. 2; and Fig. 4 is a cross section of the spring bolt part of the fastener on line 4—4 of Fig. 2.

A is the lower window-sash and B the upper sash. C is the keeper and is preferably made of sheet metal in the form shown. The body part is bent in inverted U-shape and provided with the teeth D, two or more in number. The lower ends of the body C are bent outwardly to form feet or flanges E H, and preferably, the flange E is continued by bending backward an under plate G which may extend entirely across the keeper and under the other flange H thereof. Screw holes F may be formed through the flange portions E H G, as shown for the screws by which the keeper is attached to the sash. While I have shown this keeper of sheet metal in the arch form it is to be understood that I do not confine myself thereto as

it may be of any metal cast or otherwise provided it is furnished with multiple engaging parts for the spring-actuated bolt or locking part. L is the spring-actuated bolt and is guided within a suitable case adapted to be secured to the other sash. This bolt L is provided with a shank L' guided in portions J² of the base plate J of the case and is forced outward by a coil spring M surrounding the shank and pressing at one end against one of the portions J² and at the other end against the knob N extending upwardly from the shank. The knob N in striking against the other portion J² of the case limits the outward movement of the bolt L under the action of the spring M. The under forward surface of the bolt L is beveled so as to freely work down over the teeth D of the keeper but so as to engage the said teeth when attempt is made to raise the sash.

The case for the spring bolt is preferably made of sheet metal and is made in two parts one fitting over the other. The under part or base J is provided with the two upwardly extending guide portions J² before referred to and also with the lateral grooved side portions J'. The top plate I is made box-shaped and is provided with side flanges I' which slide into the grooved portions J' of the base plate. Screw holes P are formed through the engaging parts J' I' for screws by which to attach the case to the lower sash A. By making the parts J² equal to the width of the top part I it braces the box form of said part and makes it very strong and locks the engaging flanges I' in the grooves J'. The top plate is provided with a slot i through which the knob N extends whereby the bolt L may be operated in unlocking the window-sashes.

It is evident that while the case for the spring bolt may be made most advantageously of stamped sheet metal, it may, nevertheless, be made of cast metal and in any suitable shape desired.

The operation of the sash fastener will now be understood. In the position shown in Figs. 1 and 2, the window-sashes are fully closed and locked. If from any cause either the upper sash or the lower sash does not fully close, then the spring bolt L automatically engages whichever tooth D of the keeper which happens to be immediately above it and in that manner locks the sashes even though not fully closed. Ordinarily, the

middle tooth is the one engaged under the last specified conditions. In cases when both the upper and lower sashes were not fully closed the upper tooth will be the one engaged by the bolt. This would also be the case where, for ventilation, one of the sashes was purposely left open to a slight extent.

My invention obviates dangers of unlocked windows from carelessness or defective working and permits ventilation with locked windows.

While I have shown the sash fastener in the form I have found it excellently adapted for commercial use, I do not limit myself to the details thereof, as these may be modified without departing from the spirit of my invention.

Having now described my invention what I claim as new and desire to secure by Letters Patent, is:—

1. In a sash fastener, the combination of a keeper formed of two upright sheet metal portions having their flat surfaces substantially parallel and united at the top and having their forward edges formed with ratchet teeth, and a locking device arranged upon that side of the keeper adjacent to the ratchet teeth and provided with a wide spring actuated bolt extending across both of the upright portions of the keeper and engaging the teeth thereof.

2. In a sash fastener the keeper, combined with the locking bolt device consisting of a sheet metal case comprising the base J having the upwardly extending guide flanges J² and grooved side flanges J' and the box part I fitting over the base and having the side flanges I' sliding into the grooved side flanges of the base, combined with a bolt L fitting the case and having the shank L' guided in the flanges J² thereof, and a spring M surrounding the bolt shank and resting against one of the guide flanges J² as an abutment.

3. In a sash fastener, a locking device for one sash having a spring actuated bolt, combined with a keeper for the other sash consisting of sheet metal bent into arch form with flanges at the bottom for the attaching screws and having a plurality of ratchet teeth directed toward the locking device for cooperating with the bolt of the locking device.

4. In a sash fastener, a locking device for one sash, combined with a keeper for the other sash consisting of sheet metal bent into arch form with flanges E H and a base plate G integral with the end of flange E and extending under both flanges for the attaching screws and having a plurality of engaging teeth D for cooperating with the bolt of the locking device.

5. In a sash fastener a keeper, combined with a locking device comprising a sheet metal base having the edges bent over to form parallel grooves, a spring actuated bolt supported in the sheet metal base, and a sheet metal cover plate inclosing the bolt and having side flanges fitting into the grooves of the base and also retaining the bolt in position, the said base and cover plate having corresponding holes for attaching screws.

In testimony of which invention, I have hereunto set my hand.

JOHN S. RAPSON

Witnesses:

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R. M. KELLY.