

No. 770,042.

PATENTED SEPT. 13, 1904.

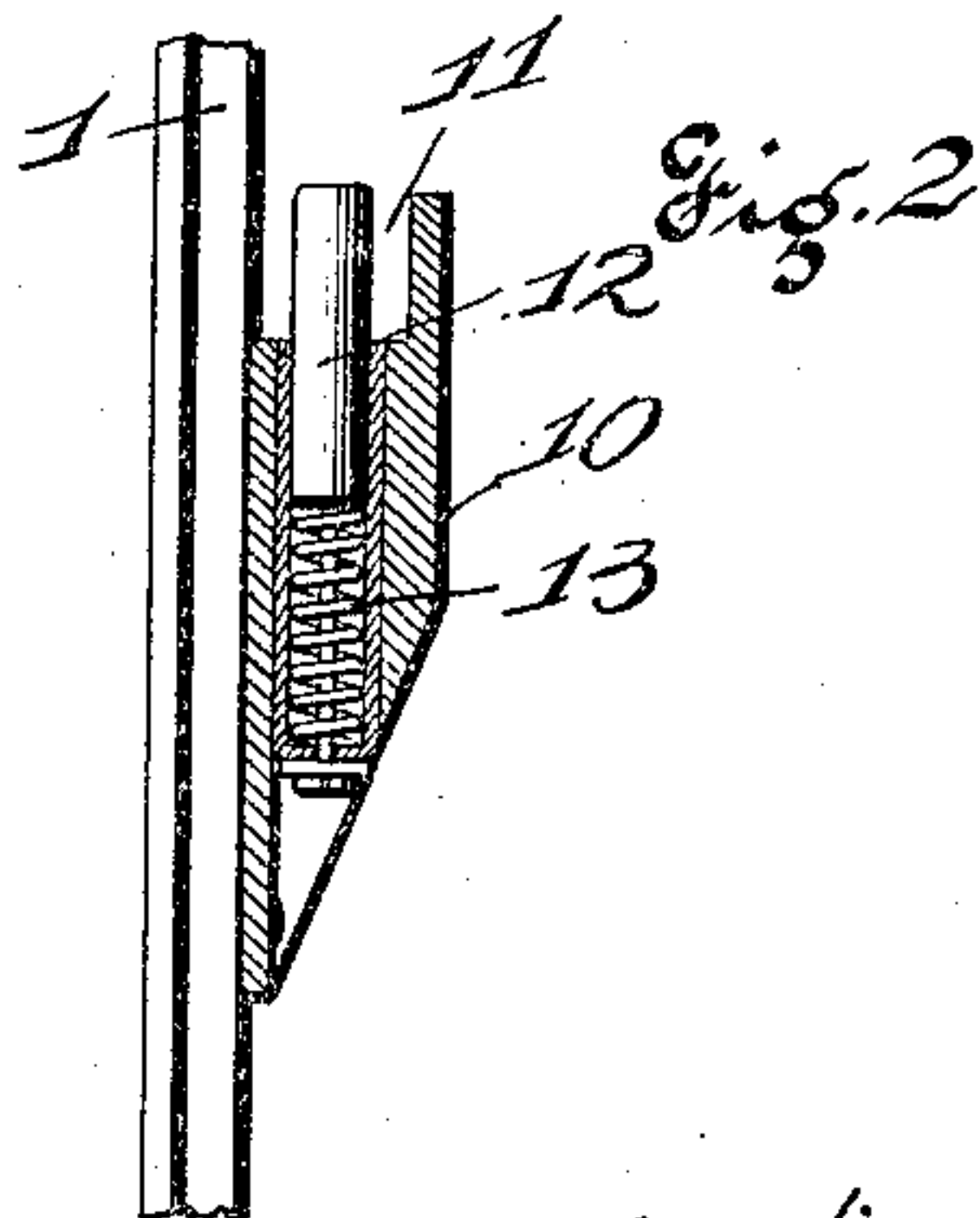
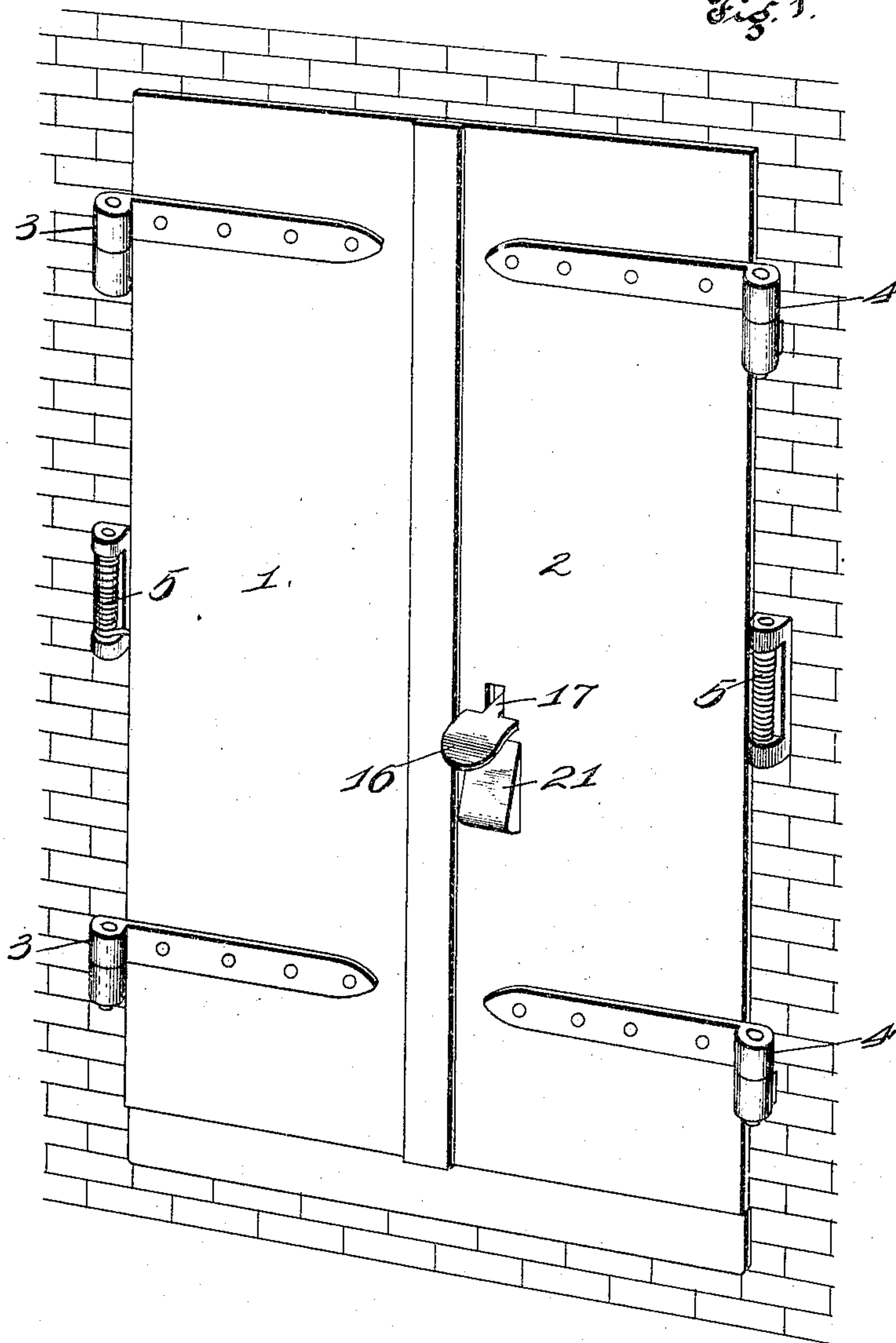
W. BECKMANN & W. BOHLE.
FIREPROOF SHUTTER.

APPLICATION FILED MAR. 1, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 3.

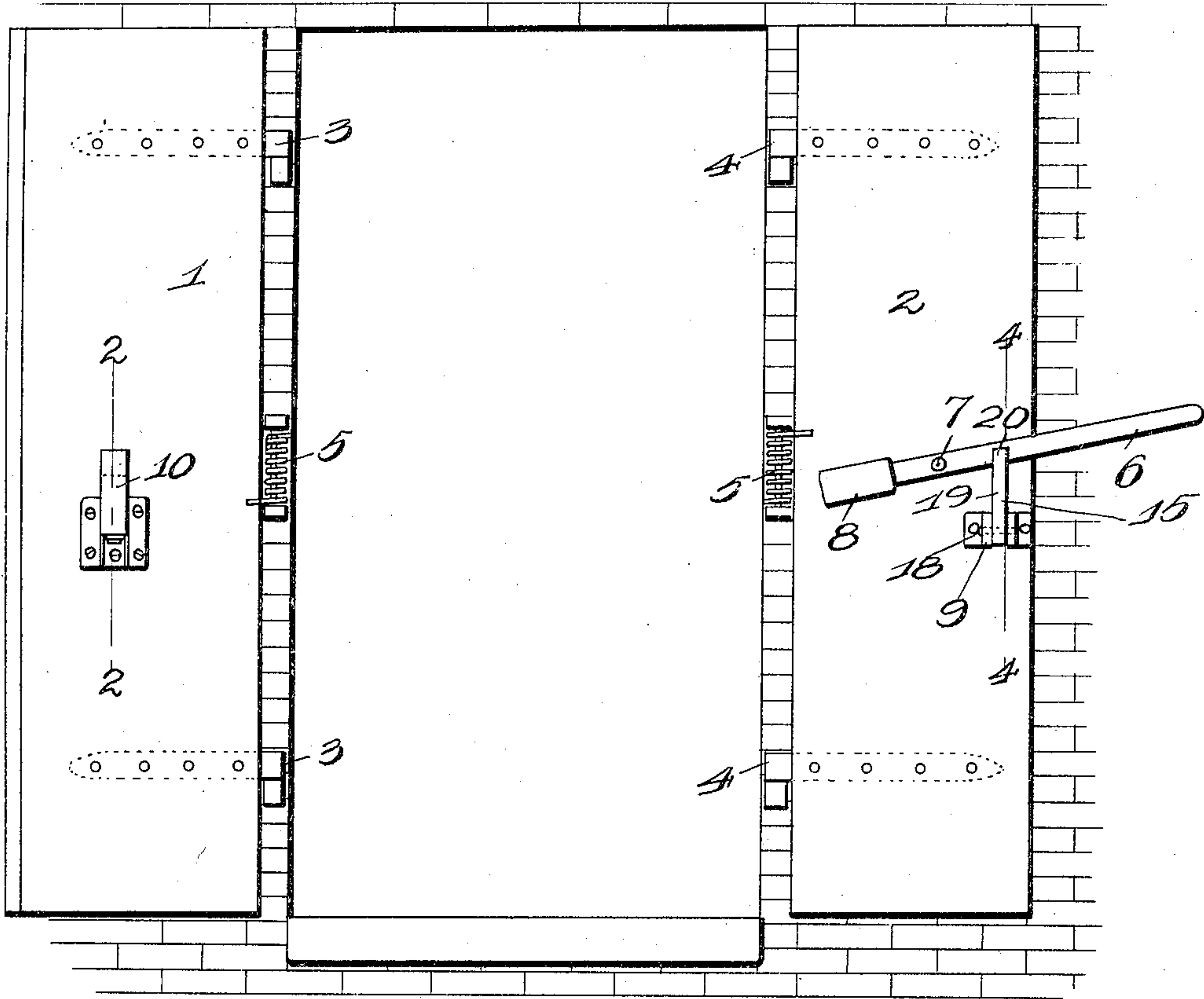
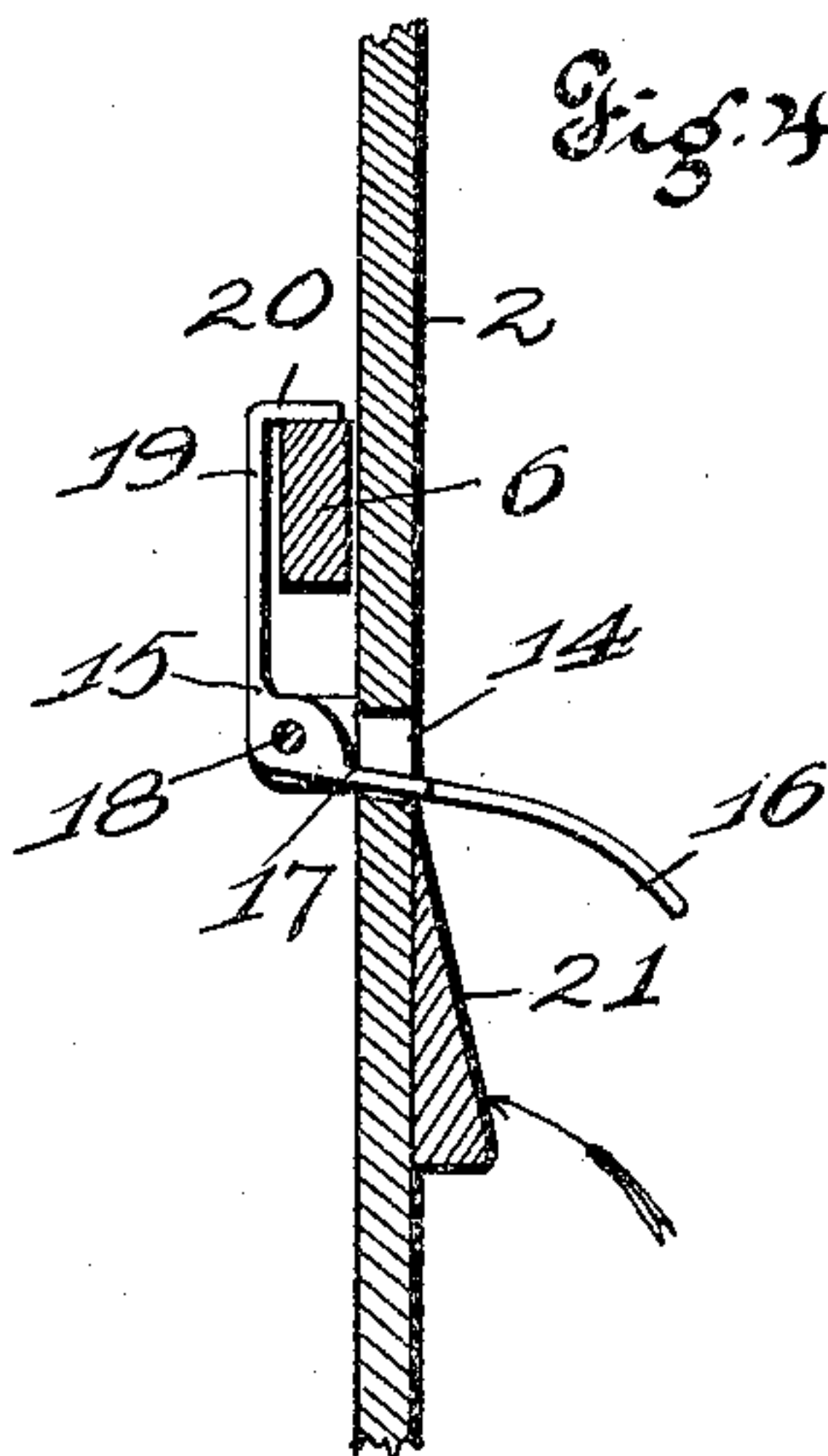


Fig. 4.



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UNITED STATES PATENT OFFICE.

WILLIAM BECKMANN AND WILLIAM BOHLE, OF ST. LOUIS, MISSOURI.

FIREPROOF SHUTTER.

SPECIFICATION forming part of Letters Patent No. 770,042, dated September 13, 1904.

Application filed March 1, 1904. Serial No. 196,108. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM BECKMANN and WILLIAM BOHLE, citizens of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Fireproof Shutters, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

Our invention relates to an improved fireproof shutter, and has for its object to provide a fireproof shutter capable of being opened by means of the impact of a stream of water thrown upon its outer side.

In the drawings, Figure 1 is a perspective view of the shutter of our invention in its closed position in place. Fig. 2 is a transverse mid-sectional view of one of the bar-sockets, taken along the line 2 2 of Fig. 3. Fig. 3 is a front plan view of a window provided with our improved shutter, the shutter being open. Fig. 4 is a transverse sectional view taken on the line 4 4 of Fig. 3, showing the latch in its closed position.

The shutter illustrated in the drawings is composed of the shutter-sections 1 and 2, which are respectively hinged in place by means of hinges 3 3 and 4 4. The inner sides of the shutter-sections 1 and 2 receive an outward thrust from the ends of the coiled spring 5, which springs are mounted upon the adjacent wall or window-casing in any suitable manner. In their locked position the sections 1 and 2 are held together by means of a bar 6, which is pivoted to the section 2 at the point indicated by the numeral 7 and one end of which is provided with a counterbalancing-weight 8, the other end projecting beyond the edge of the section 2. The section 2 upon its inner side is also provided with lugs 9, between which the latch 15 is pivotally mounted. Section 1 is provided with a vertical slotted member 10, having the slot 11, within which the vertical plunger 12 is mounted and normally held in position, as shown in Fig. 2, by means of a coiled spring 13. The section 2 is provided with an opening 14, through which the latch 15 passes. The latch 15 is in the form shown in section in Fig. 4, being provided upon

its outer extremity with a shield 16, which is contracted at its inner end to an arm 17, which passes through the opening 14. The latch 15 is mounted within the lugs 9 by means of a pin 18, and from the point where it is pivoted is a vertical arm 19, angulated at its upper extremity to form the catch 20.

The weight of the counterbalance 8 is such that the bar 6 is normally in a vertical position, with the weight 8 at the bottom. When the shutters are to be closed, they are drawn together and the upper end of the bar 6 is deflected toward the section 1. When the end of this bar 6 comes in contact with the plunger 12, some force must be exerted upon the bar to depress the plunger 12 so that the lower surface of the bar may rest upon the lower edge of the slot 11. When the bar has attained this position, the latch 15 is adjusted by depressing the shield 16 until the catch 20 engages with the upper surface of the bar 6 to hold said bar in position as shown in Fig. 4.

Upon the outer face of the section 2 the deflector 21 is provided, being in the form shown in perspective in Fig. 1 and in transverse vertical mid-section in Fig. 4. The function of the deflector 21 is to assist in directing a stream of water projected upon it upwardly and outwardly against the lower side of the shield 16. The shield 16 being forced upwardly by means of an impact of such a stream of water carries the catch 20 inwardly and out of contact with the bar 6, releasing said bar, the end of which, resting in the slot 11, is thrown upwardly by the plunger 12, which is actuated by the spring 13. The outward thrust of the coiled springs 5 then opens the sections 1 and 2 outwardly to the position indicated in Fig. 3.

We claim—

1. A fireproof shutter, comprising two shutter-sections, a bar pivotally mounted upon the inner side of one of the said shutter-sections, a latch for the said bar pivotally mounted through the said shutter-section, a shield mounted upon the outer end of the latch, the bar being provided with a counterbalancing-weight, whereby the bar is revolved to a vertical position, when released by the latch, substantially as described.

2. A fireproof shutter, comprising two shut-

ter-sections, a bar pivotally mounted upon the inner side of one of the said shutter-sections, a latch for the said bar pivotally mounted through the said shutter-section, a shield
5 mounted upon the outer end of the latch, the bar being provided with a counterbalancing-weight, whereby the bar is revolved to a vertical position, when released by the latch, and a plurality of springs whereby the shutter-
10 sections are thrust outwardly when the bar is released, substantially as described.

3. A fireproof shutter, comprising two shutter-sections, a bar pivotally mounted upon the inner side of one of the said shutter-sections,
15 a latch for the said bar pivotally mounted through the said shutter-section, a shield mounted upon the outer end of the latch, a deflector mounted beneath the shield, the bar being provided with a counterbalancing-weight,
20 whereby the bar is revolved to a vertical position when released by the latch, substantially as described.

4. A fireproof shutter, comprising two shutter-sections, a bar pivotally mounted upon the inner side of one of the said shutter-sections, 25
a latch for the said bar pivotally mounted through the said shutter-section, a shield mounted upon the outer end of the latch, a deflector mounted beneath the shield, the bar being provided with a counterbalancing-weight, 30
whereby the bar is revolved to a vertical position, when released by the latch, and a plurality of springs whereby the shutter-sections are thrust outwardly when the bar is released, substantially as described. 35

In testimony whereof we have signed our names to this specification in presence of two subscribing witnesses.

WILLIAM BECKMANN.
WILLIAM BOHLE.

Witnesses:

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