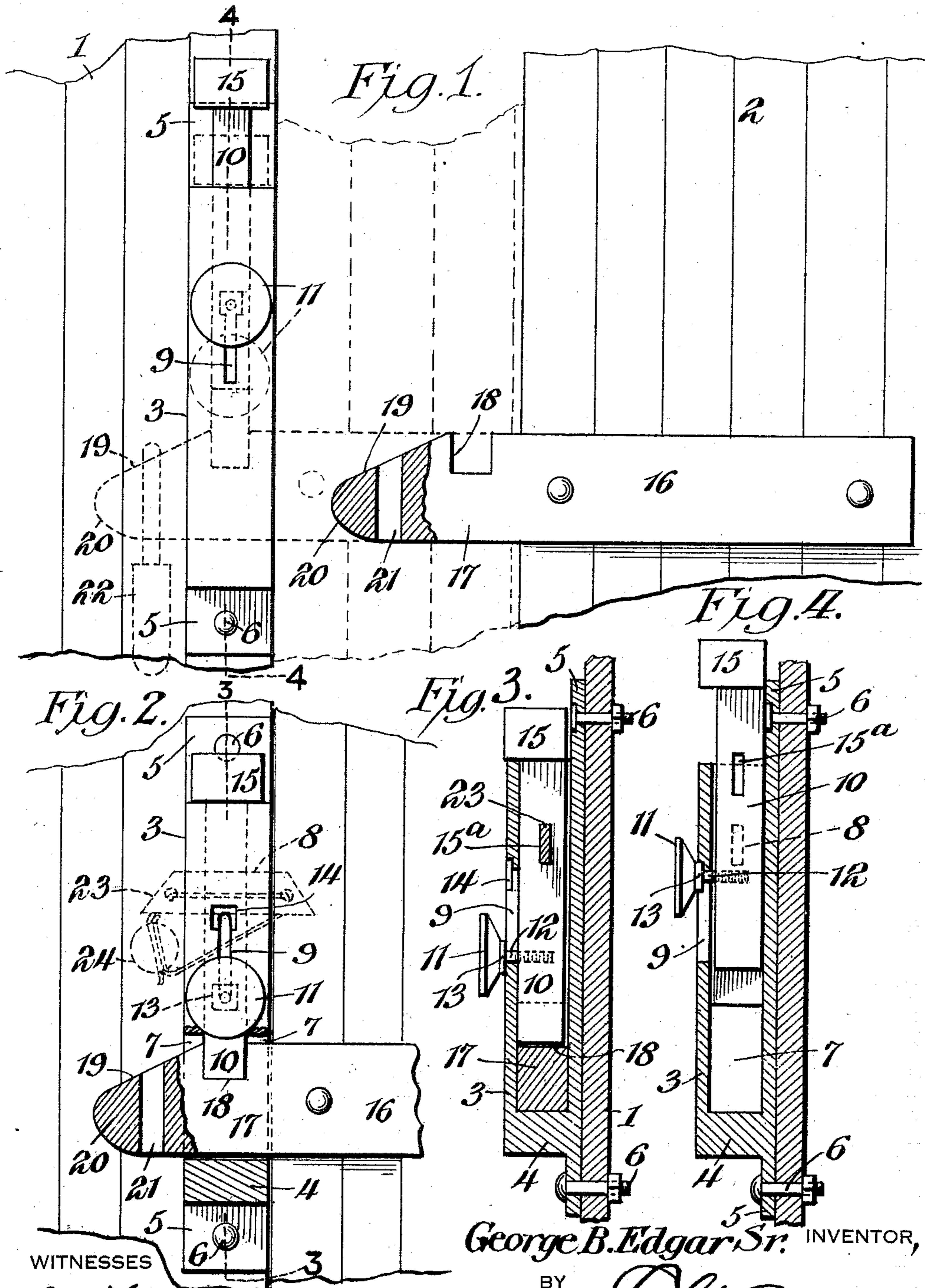


995,232.

Patented June 13, 1911.

2 SHEETS—SHEET 1.



WITNESSES

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2 SHEETS—SHEET 2.

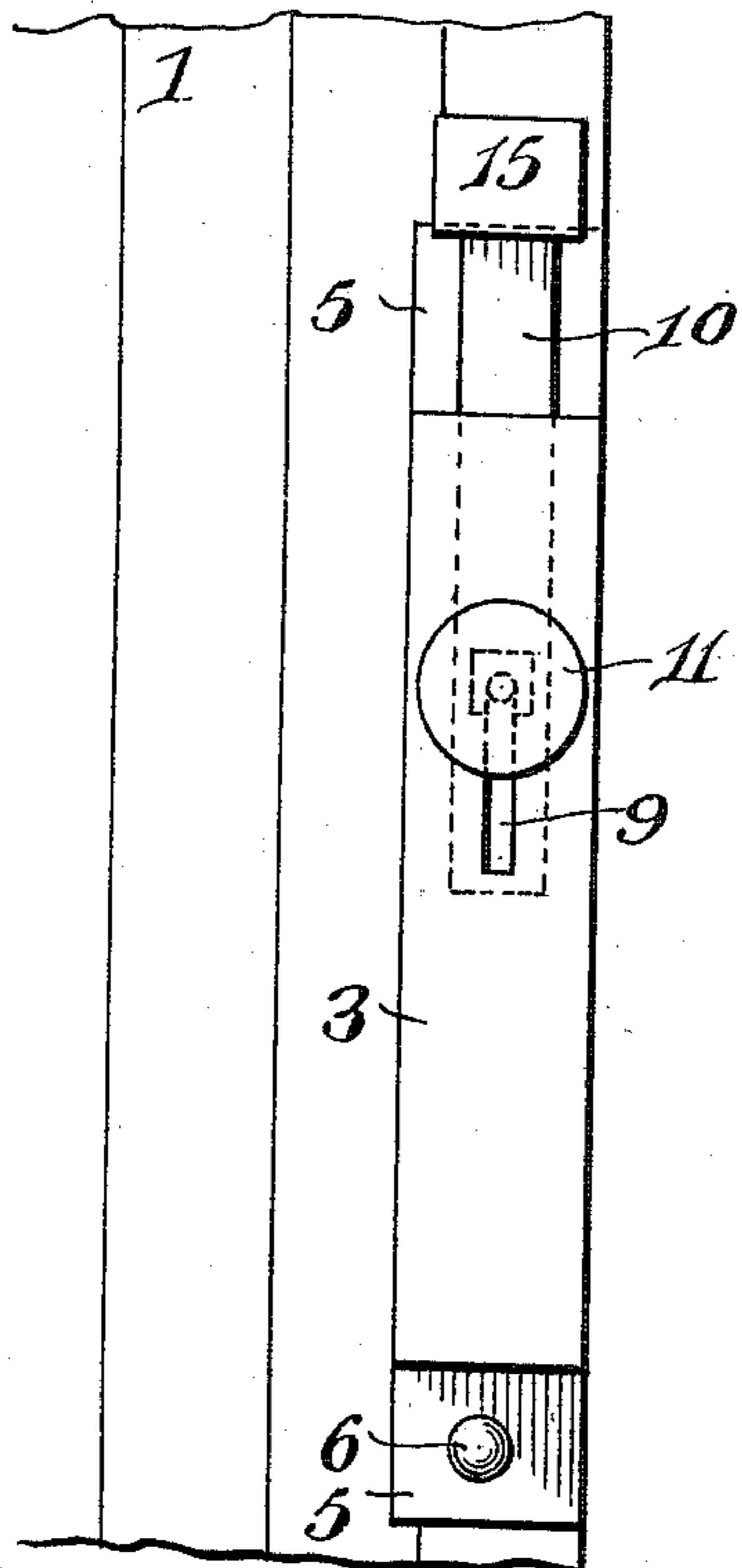


Fig. 5.

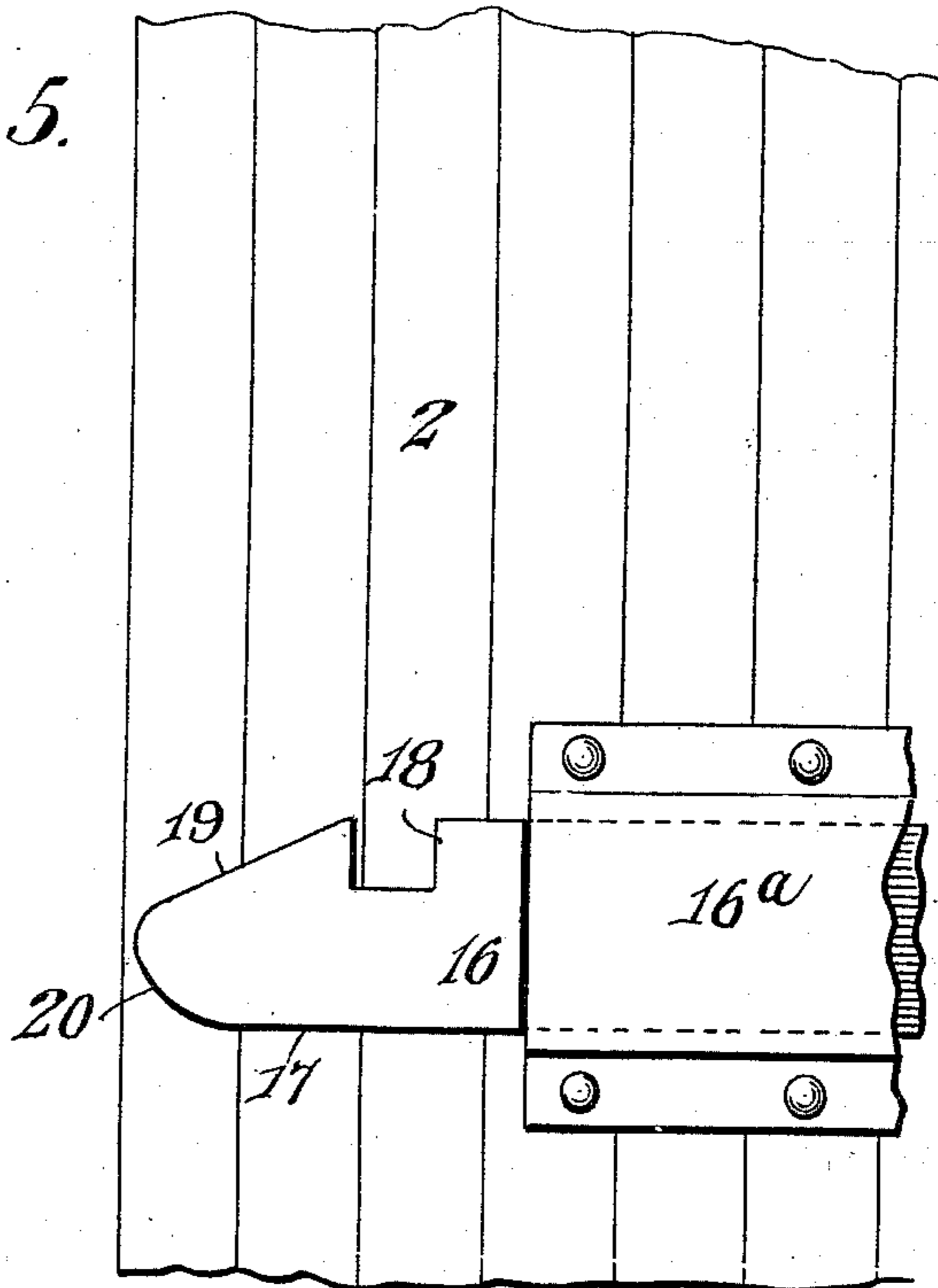
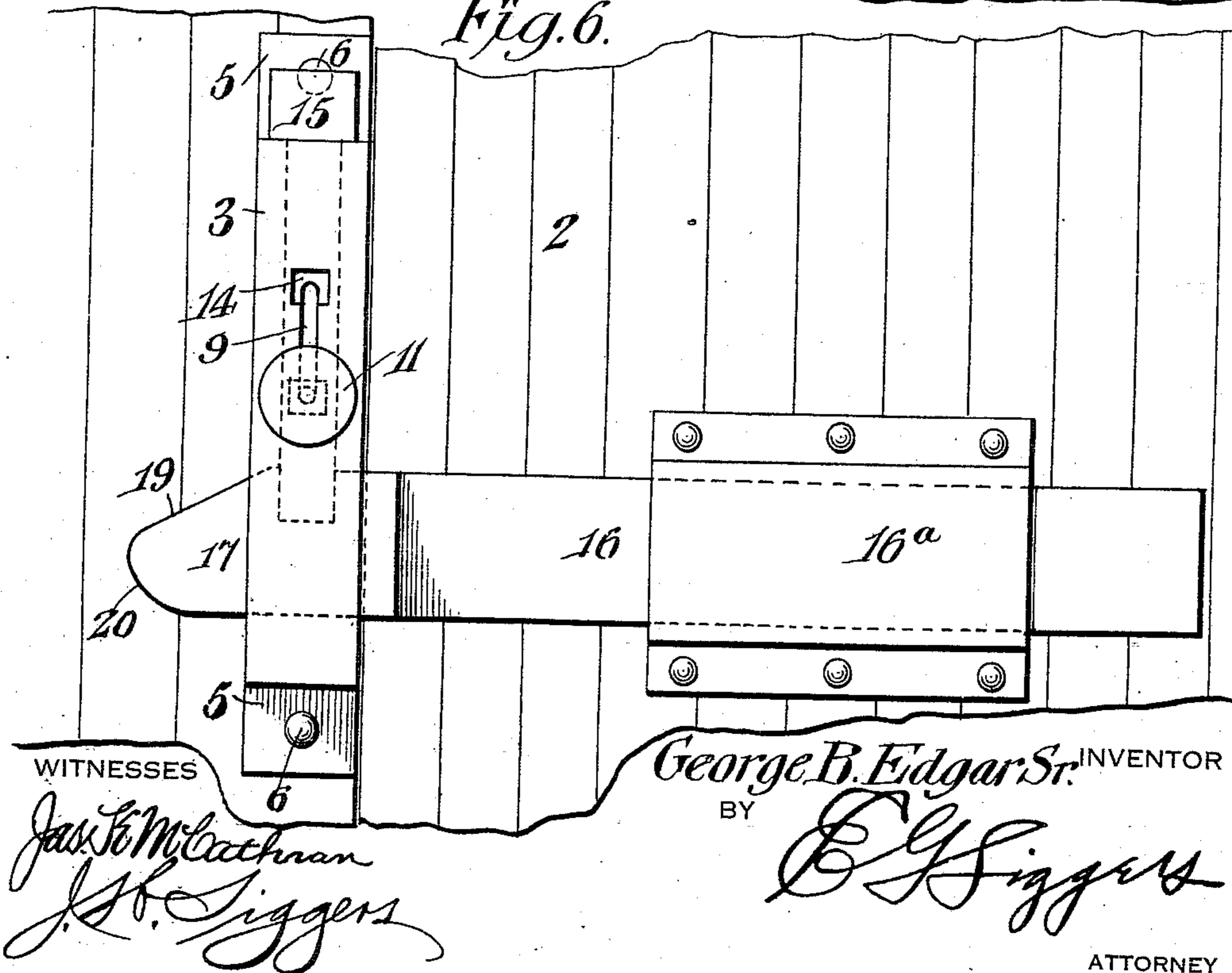


Fig. 6.



WITNESSES

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# UNITED STATES PATENT OFFICE.

GEORGE B. EDGAR, SR., OF IOLA, KANSAS.

## CAR-DOOR FASTENER.

995,232.

Specification of Letters Patent. Patented June 13, 1911.

Application filed October 27, 1910. Serial No. 589,480.

*To all whom it may concern:*

Be it known that I, GEORGE B. EDGAR, Sr., a citizen of the United States, residing at Iola, in the county of Allen and State of Kansas, have invented a new and useful Car-Door Fastener, of which the following is a specification.

This invention has reference to improvements in car door locks and its object is to provide a lock of the gravity type of simple but strong and efficient construction, which may be readily moved to the open position and which will be there held, to return to the locking position by the action of gravity on being jarred by the impact of the closing door.

The invention will be best understood from a consideration of the following detailed description taken in connection with the accompanying drawings forming a part of this specification, with the understanding, however, that the invention is by no means confined to the exact construction shown, since it is susceptible of various changes or modifications so long as the salient features of the invention are retained.

In the drawings Figure 1 is an elevation with parts in section of the improved car door lock, with the car in a partly open position and the lock member also in an open position; Fig. 2 is an elevation with parts in section and broken away showing the structure in locked position; Fig. 3 is a section on the line 3—3 of Fig. 2; Fig. 4 is a section on the line 4—4 of Fig. 1; Figs. 5 and 6 are elevations similar to Figs. 1 and 2, showing the car door equipped with a sliding hasp.

Referring to the drawings, there is shown a portion 1 of a car of the box type, and a portion 2 of a car door such as is used in connection with the box type of car. Fast to the body of the car, adjacent the outer opening, is a socket member 3, open at one end and closed at the other, the closed end being designated at 4. The socket member is provided at the ends with ears 5 for the passage of bolts 6, by means of which the socket member is made fast to the car body. Traversing the end walls of the socket member, adjacent the closed end 4, are alined passages 7, and between these passages and the open end of the socket member, the said walls are pierced by other passages 8, also

in alinement one with the other. The outer or front wall of the socket member is formed with a longitudinal slot 9. Within the socket member there is housed a latch bolt 10 shown as of rectangular form in cross section and the interior of the socket member is similarly shaped so that the latch bolt may slide longitudinally of the socket member within the latter, but because of the contour of the latch bolt and the interior of the socket member, the latch bolt is held from rotation. Secured to the latch member is a knob 11, having a stem 12, extending through the slot 9, and threaded into the latch bolt 10, but it would be an obvious expedient to rivet the stem 12 in the latch bolt instead of screwing it thereinto. At the junction of the knob 11 and stem 12, there is formed an enlargement 13, and at the upper end of the slot 9, the socket member being arranged with the open end uppermost, there is a depression 14 of a size to receive the enlargement 13 of the stem 12, while the remainder of the slot 9 is of a width to permit the passage of the stem 12, but not of the enlargement 13. At the upper end of the latch bolt 10 there is formed a head 15 which may add to the weight of the latch bolt and at the same time has sufficient lateral extension to act as a stop for the downward movement of the latch bolt, by engagement with the upper ends of the walls of the socket 3. The latch bolt is traversed by a passage 15<sup>a</sup>, which when the latch bolt is in the lowermost position alines with the passages 8.

Rigidly secured to the car door is a hasp 16, having one end 17 projecting beyond the edge of the door in position to traverse the openings 7 in socket member 3. The end 17 of the hasp is formed on the upper edge with a notch 18 of a size and shape to receive the lower end of the bolt 10, and from this notch to the free end of the hasp, the upper edge is beveled as indicated at 19, while the extreme end 20 is rounded. Extending through the end 17 of the hasp, from the bottom to the beveled edge 19, is a passage 21 located between the notch 18 and the rounded end 20. The passage 21 is designed to receive a suitable lock indicated in dotted lines at 22 in Fig. 1, and the passages 8 and 15, when in alinement, are designed to receive a seal bar indicated in dotted lines at

23 in Fig. 2, and this seal bar will furthermore be provided with the usual lead seal 24, also indicated in dotted lines in Fig. 2.

When it is desired to lock the car door for transportation, the door is closed so that the end 17 of the hasp is in traversing relation to the socket member by way of the passages 7, and the latch bolt 10 is lowered until its lower end is seated in the notch 18, with the upper end 15 resting on the upper end of the socket member. Now by introducing the seal bar 23 and securing the same by the seal 24, the car door is closed against tampering in the usual manner since the door can not be opened without breaking the seal. As a further precaution, the lock 22 may be applied, and as this lock 22 may be a padlock, the hasp thereof will traverse the passage 21. Usually, however, the lock 22 is employed after the seal has been broken and it is desirable to shift the car from point to point in the yards.

Let it be assumed that the car has arrived at its destination and it is desired to open the door; the seal is broken and the bar 23 is removed, and then the bolt 10 is raised until the enlargement 13 is seated in the depression 14, the bolt having a loose enough fit in the socket to permit the seating of the enlargement 13 in the depression 14. The weight of the bolt 10 will hold it in an elevated position by the engagement of the enlargement 13 in the depression 14 against accidental displacement, but when the car door is closed, the impact of the door against the frame surrounding the door is sufficient to jar the enlargement 13 out of the socket 14 and the bolt will immediately gravitate to the lowered position until arrested by the engagement of the end 15 with the socket member. Should, however, the bolt become displaced and fall prematurely, the beveled edge 19 will engage under the lower end of the bolt and cause the same to move upwardly until the notch 18 is brought into coincidence with the bolt when it will fall into the latter in locking relation to the hasp 16. If it is desired to seal the car, then a sealing bar 23 and lead seal 24 are applied by way of the passages 8 and 15<sup>a</sup>. By providing a temporary locking means for the bolt when in its elevated position, the operator may readily use both hands to slide the door open and oftentimes the use of both hands for this purpose is imperative. At the same time, the bolt will gravitate into the socket 18 when the door is closed whether the bolt be still in an elevated position or whether it has previously dropped to the lowered position.

Instead of mounting the hasp rigidly on the door it may be slidably mounted. This construction is shown in Figs. 5 and 6.

What is claimed is:—

1. A car door lock provided with a grav-

ity bolt and a support for the bolt for holding the same temporarily in the elevated position, said bolt being movable laterally for escape from said support.

2. A car door lock comprising a socket member adapted to be secured to a car body adjacent the door opening, said socket member being provided near its lower end with traversing passages, a hasp mounted on the car door in position to move through the socket member by way of the passages there-through, a gravity bolt in the socket member movable into and out of operative relation to the hasp and also movable laterally with respect to the socket member, and locking means for the bolt for temporarily retaining it in an elevated position and responsive to release the bolt on the lateral movement of the latter in one direction.

3. A car door lock comprising a socket member adapted to be secured to a car body adjacent the door opening, said socket member being provided near its lower end with traversing passages, a hasp mounted on the car door in position to move through the socket member by way of the passages there-through, a gravity bolt in the socket member movable into and out of operative relation to the hasp and also movable laterally with respect to the socket member and locking means for the bolt for temporarily retaining it in an elevated position, said temporary locking means comprising a manipulating member for the bolt, provided with an enlargement and a matching depression formed in the socket member in the path of the enlargement when the bolt is in an elevated position.

4. In a car door lock a socket member, a gravity bolt movable along and also laterally with respect thereto, and a manipulating member carried by the gravity bolt and provided with an enlargement, the socket member being provided with a slot for the passage of the manipulating member, with a depression at one end of the slot for receiving the enlargement of the manipulating member.

5. In a car door lock a socket member having one end open and the other end closed and provided through the sides near the closed end with matching passages and through the sides between the said passages and the open end with other matching passages, said socket member also having a longitudinal slot through its outer wall, a gravity bolt adapted to the socket member and provided with an enlarged head operating as a stop for limiting the movement of the bolt by the action of gravity, said bolt having a passage therethrough matching the second named passages through the socket member when the bolt is in the lower position, and a manipulating knob having a stem in traverse relation to the slot in the

front wall of the gravity member, said manipulating member having an enlargement, the front wall of the socket member having a depression for the reception of said enlargement, and a hasp having one end beveled and back of but adjacent to the beveled end provided with a notch, said hasp also having a passage through its beveled end.

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

GEORGE B. EDGAR, Sr.

Witnesses:

GEO. B. EDGAR, Jr.,

D. M. MELVIN.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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