

B. STEINMAN.  
 DEVICE FOR CLOSING GATES AND DOORS.  
 APPLICATION FILED MAR. 10, 1908.

899,920.

Patented Sept. 29, 1908.

2 SHEETS—SHEET 1.

Fig. 1.

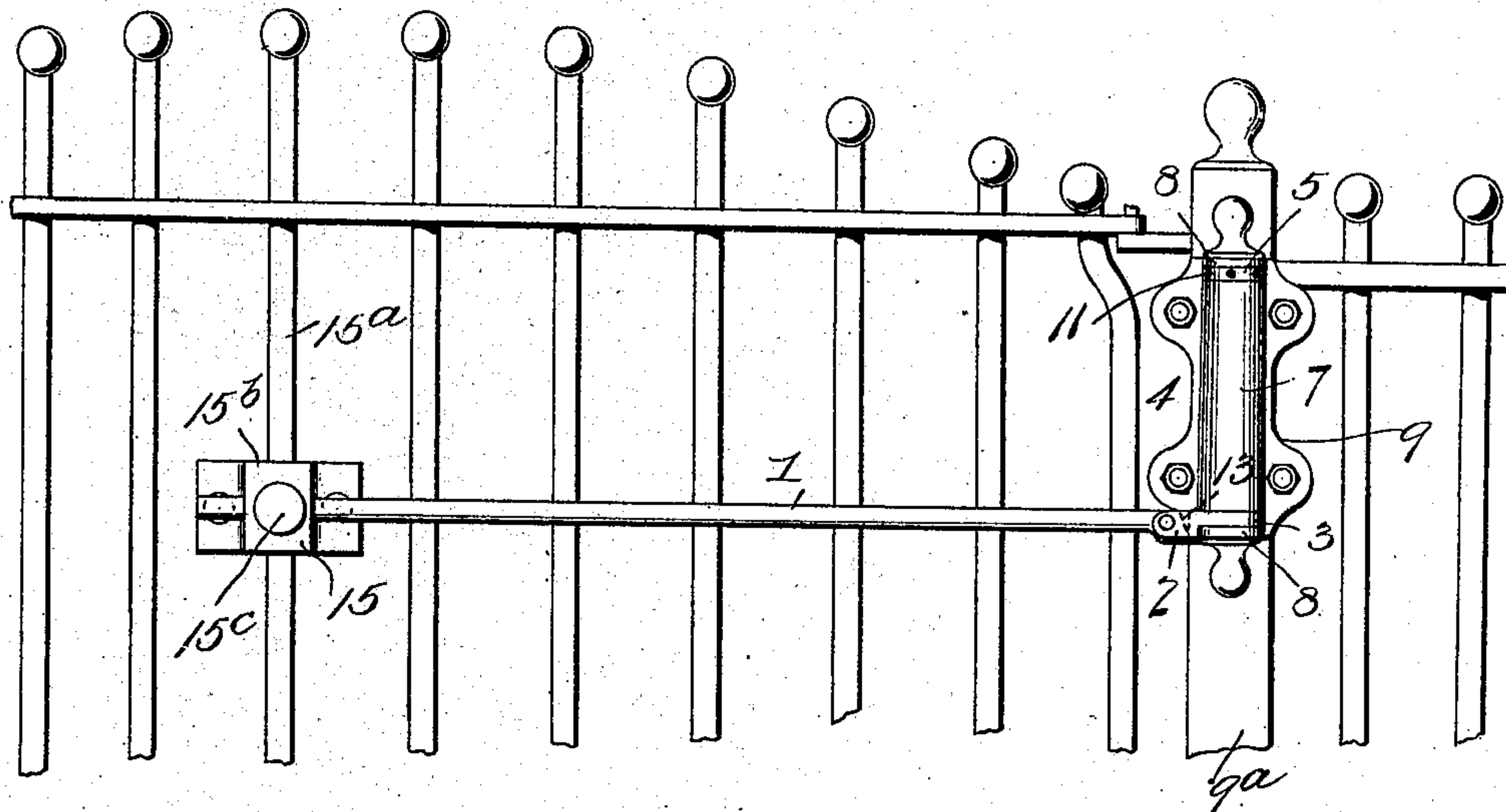
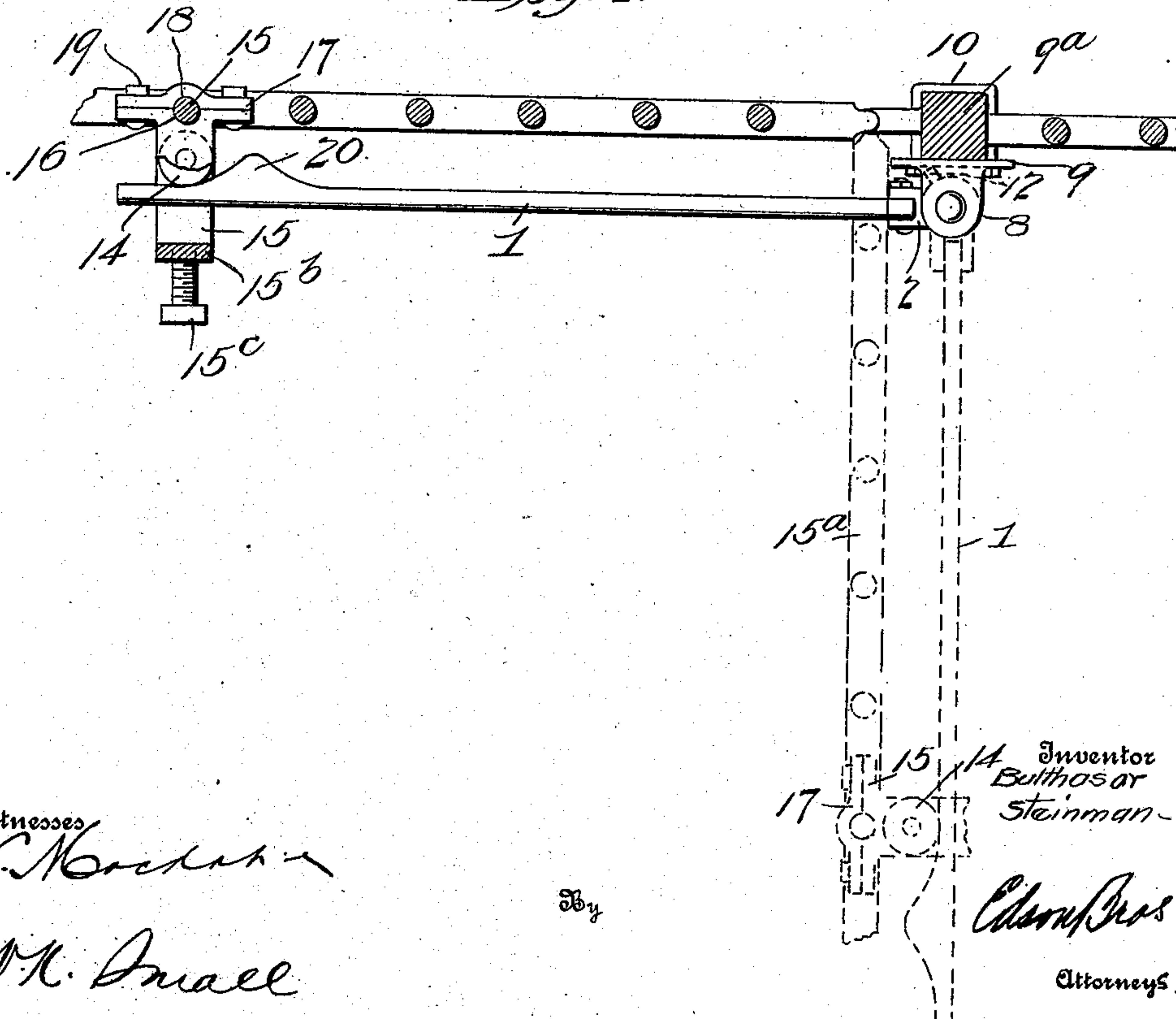


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3.

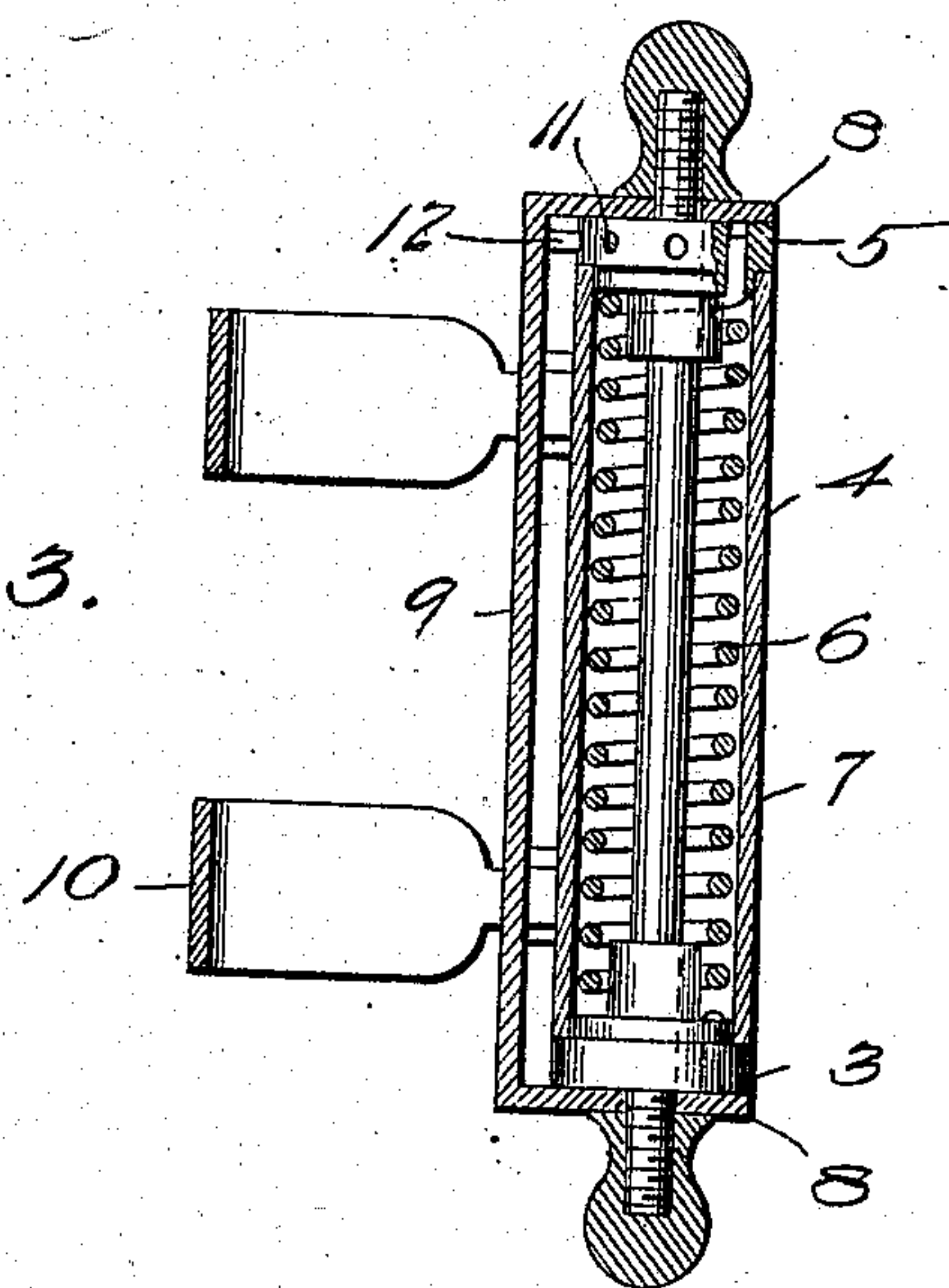
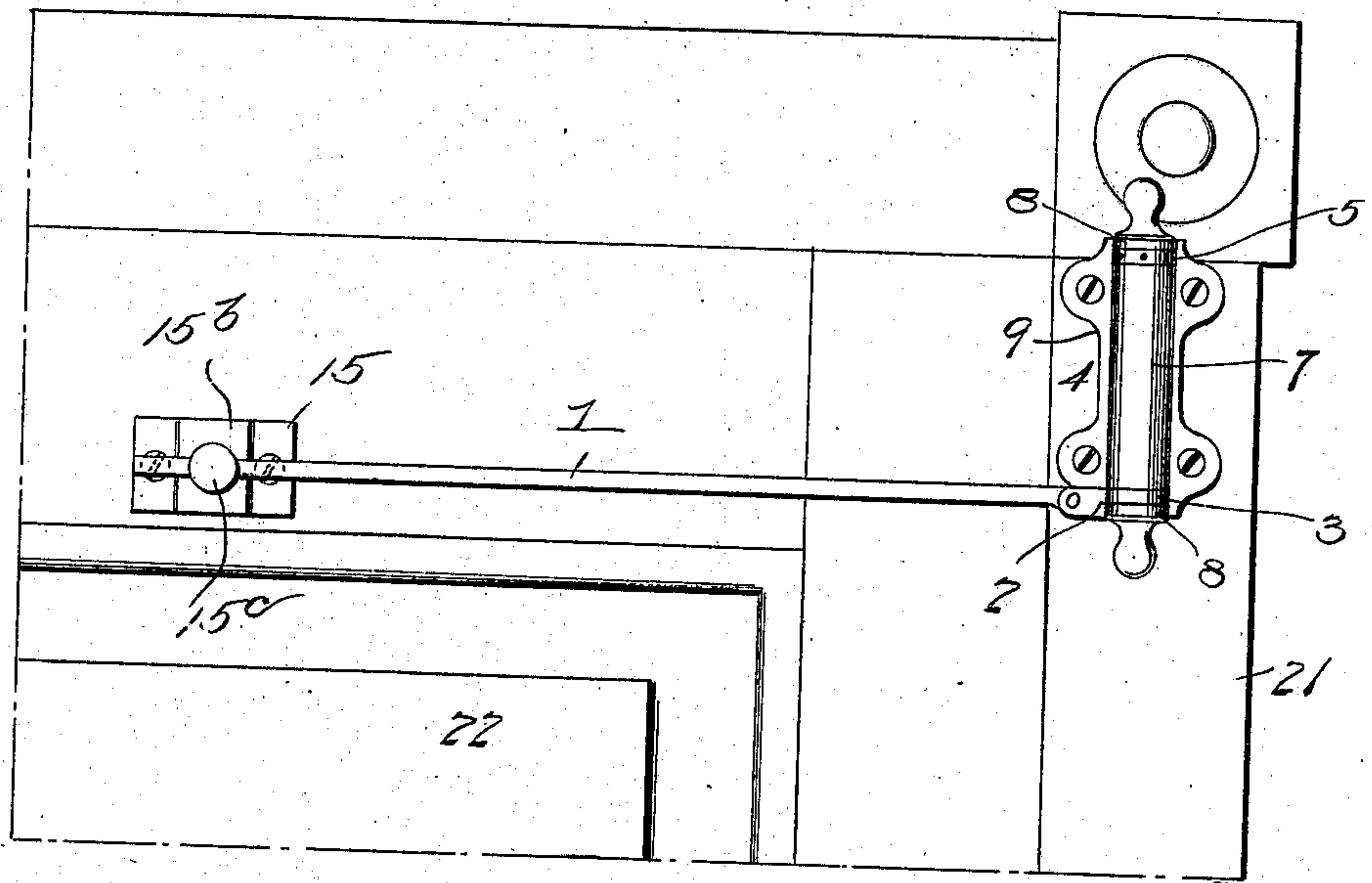


Fig. 4.



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# UNITED STATES PATENT OFFICE.

BALTHASAR STEINMAN, OF SCRANTON, PENNSYLVANIA.

## DEVICE FOR CLOSING GATES AND DOORS.

No. 899,920.

Specification of Letters Patent.

Patented Sept. 29, 1908.

Application filed March 10, 1908. Serial No. 420,196.

*To all whom it may concern:*

Be it known that I, BALTHASAR STEINMAN, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Closing Gates and Doors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to devices for closing gates and doors.

It has for its object to produce a device of this nature which is very simple in construction and easy to operate, may be quickly changed from an operative to an inoperative position without removing any of the parts and which will effectively close a gate or door without slamming.

The invention consists broadly in the use of a bearing arm mounted on a spring member secured to a gate post and having a broad V-shaped lateral extension near its outer end, said arm adapted to bear against a roller secured to a gate or door and said V-shaped extension adapted to pass over said roller as said gate or door is closed. The closing arm is preferably pivoted to the spring member whereby the device may be folded into compact form for storage and transportation.

The invention further consists in the features of construction and combinations of parts hereinafter described and specified in the claims.

In the accompanying drawings, illustrating the preferred embodiment of my invention: Figure 1 is an elevation of a gate equipped with my closing device. Fig. 2 is a horizontal section showing the closed position of the gate in solid lines and its open position in dotted lines. Fig. 3 is a detailed section of the spring member, and Fig. 4 is an elevation showing my invention applied to a door.

Referring more particularly to the drawings, 1 designates the bearing arm which is pivoted between the ears 2 on the lower spring holder 3 of the spring member 4. Said spring member comprises, in addition to the lower spring holder, an upper spring holder 5, a coiled spring 6 having its ends engaging said spring holders, a tubular casing 7 and a pintle extending through all of said parts.

Said pintle also extends through openings in the projecting lugs 8 of a bracket 9 which is secured to the gate post 9<sup>a</sup> by clips 10. The upper spring holder 5 is provided with a series of radial sockets 11 to receive a stop pin 12 adapted to bear against the bracket 9 whereby the tension of the spring may be regulated. The lower spring holder is movably seated in the spring casing and the spring, as explained above, is connected to said movable holder and the adjustable fixed holder 5.

The bearing arm 1 is pivoted between the ears 2 in such a manner that it is adapted to be folded into more convenient form for storing and shipping. The pivot end of said arm is provided with a beveled shoulder or stop 13 which limits its downward movement to a horizontal position. Said arm engages a flanged or grooved roller 14 mounted on a bracket 15 secured to one of the upright metal pickets of the gate 15<sup>a</sup>. The rod is retained in engagement with said roller by a cross piece 15<sup>b</sup> on the bracket. An adjusting screw 15<sup>c</sup> is mounted on said cross piece. The gate may be held open at any desired angle by simply screwing the screw down upon said arm. Said roller carrying bracket is preferably provided with a groove 16 in its rear face to receive the picket while a supplemental plate 17, also grooved at 18, clamps said picket to the bracket by means of connecting bolts 19.

Near its outer end, the bearing rod is formed with a rearwardly extending V-shaped lateral extension 20. This V-shaped extension is located so that it will pass over the roller on the gate as said gate is being closed, as shown in Fig. 2, and prevents it from slamming. When the gate is open the spring is wound up and exerts its greatest pressure. As the gate closes some of the tension of said spring is expended in causing the roller to travel up the side of the V-shaped extension. By the time said roller has reached the apex of said extension and begins to travel down the other side thereof the spring has become almost entirely unwound and the pressure exerted thereby is so small that the gate will not slam.

My closing device may be applied to a door as shown in Fig. 4 by merely doing away with the clips 10 and supplemental plate 17 and securing the brackets 9 and 15 directly to the door jamb 21 and door 22, respectively, by screws or their equivalents.

The operation of the device as applied to



the door is the same as when applied to the gate as above described.

I claim:

1. The combination, with a spring member adapted to be mounted on a fence post or door jamb, and a roller adapted to be fastened on a gate or door, of an arm operatively connected to the spring mounted in said member and adapted to engage said roller, said arm having a V-shaped lateral extension adapted to pass over said roller as the gate is being shut by said arm.
2. The combination, with a spring member adapted to be mounted on a fence post or door jamb, and a roller adapted to be fastened on a gate or door, of an arm operatively connected to the spring mounted in said member and adapted to engage said roller, said arm having a V-shaped lateral extension adapted to pass over said roller as the gate is being shut by said arm, and means to retain said arm in engagement with said roller.
3. The combination, with a spring member adapted to be mounted on a fence post or door jamb and a roller carrying bracket adapted to be fastened on a gate or door, of an arm operatively connected to the spring mounted in said member and adapted to engage the roller, said arm having a V-shaped lateral extension adapted to pass over said roller as the gate is being shut by said arm, said bracket provided with a cross piece which confines said arm between it and said roller.
4. The combination, with a spring member adapted to be mounted on a fence post or door jamb and a roller carrying bracket adapted to be fastened on a gate or door, of an arm operatively connected to the spring mounted in said member and adapted to

engage said roller, said arm having a V-shaped lateral extension adapted to pass over said roller as the gate is being shut by said arm, and means mounted on said bracket to clamp said arm whereby the gate or door may be held open at any desired angle.

5. The combination, with a spring member adapted to be mounted on a fence post or door jamb and a roller carrying bracket adapted to be fastened on a gate or door, of an arm operatively connected to the spring mounted in said member and adapted to engage the roller, said arm having a V-shaped lateral extension adapted to pass over said roller as the gate is being shut by said arm, said bracket provided with a cross piece which confines said arm between it and said roller, and a set screw mounted on said cross piece and adapted to grip said arm whereby the gate or door may be held open at any desired angle.

6. The combination, with a spring member mounted on a bracket secured to a fence post by clips, a roller mounted on a bracket provided with a groove in its back, and a supplemental plate also having a groove and clamping one of the pickets of a gate in said grooves, of an arm operatively connected to the spring mounted in said member and adapted to engage said roller, said arm having a V-shaped lateral extension adapted to pass over said roller as the gate is being shut by said arm.

In testimony whereof, I affix my signature, in presence of two witnesses.

BALTHASAR STEINMAN.

Witnesses:

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CONRAD C. MAYER.