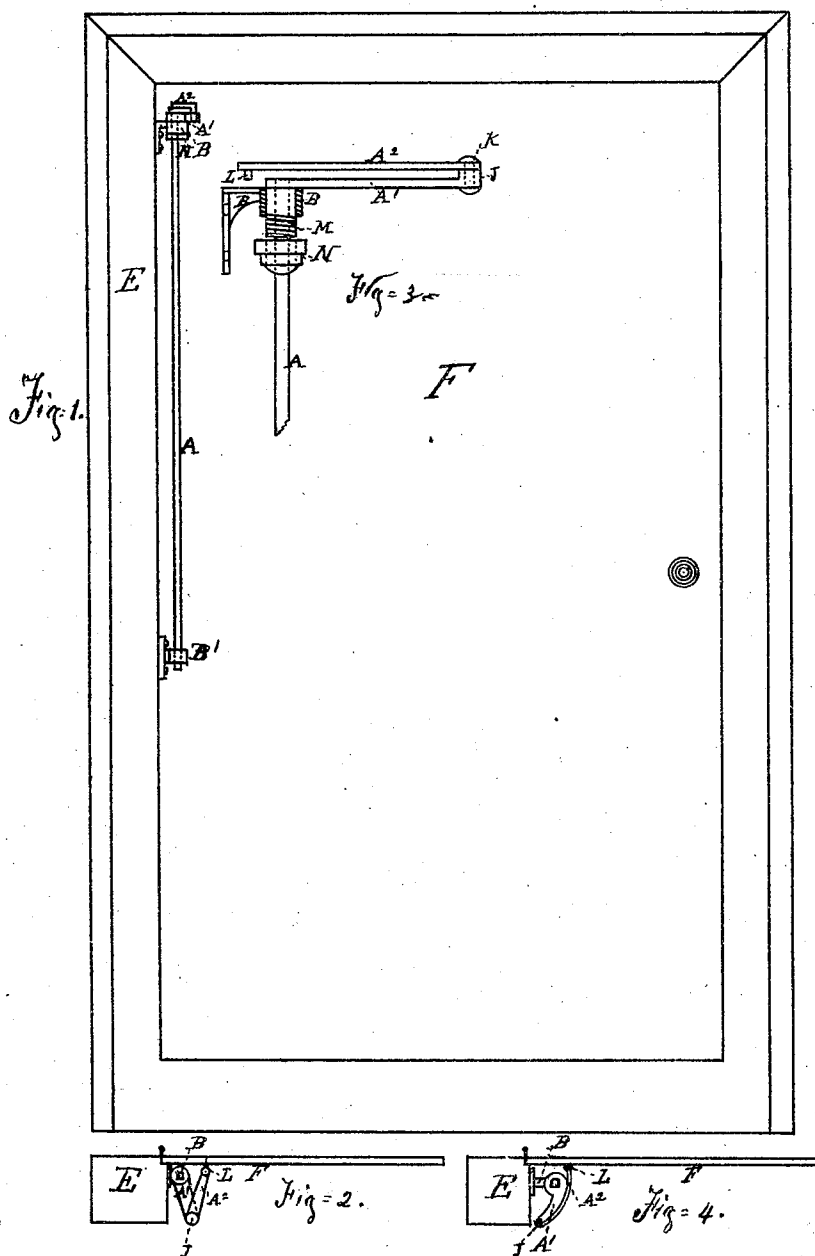


C. W. SALADEE.

Improvement in Springs for Doors and Gates.

No. 123,843.

Patented Feb. 20, 1872.



Witnesses.

C. B. Saladee

C. A. Saladee

Inventor.

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UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF ST. CATHARINE'S, CANADA, ASSIGNOR TO HIMSELF
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IMPROVEMENT IN SPRINGS FOR DOORS AND GATES.

Specification forming part of Letters Patent No. 123,843, dated February 20, 1872.

SPECIFICATION.

Be it known that I, CYRUS W. SALADEE, of St. Catharine's, in the Dominion of Canada, have invented certain Improvements in Torsion-Springs for Closing Doors and Gates, of which the following is a specification embodying my invention:

In the drawing, Figure 1 is a face view of a door and casing, showing the torsion-spring A secured to the casing E by means of the brackets B and B'. Fig. 2 is a top view of the spring-connections, clearly showing the position of the arms A¹ and A² as connected to the top of the torsion-spring and to the door F. Fig. 3 is an enlarged view of the devices for connecting the torsion-spring with the door.

B is a bracket, which is secured to the door-casing, as seen in Fig. 1. A¹ is the lower arm, and upon the inner end of which is formed, at right angles with the arm, the stud M, which is made to pass through a corresponding hole in the head of the bracket B, and is of sufficient length after passing through the bracket to receive the screw-nut N, and which latter prevents the stud M of the arm A¹ lifting up out of the bracket when in operation. Through the center of the stud M is made a square hole, and into which the top end of the torsion-spring A is rigidly secured by means of a corresponding square being formed on that end of the spring. The upper arm A² has one end pivoted to the outer extremity of the lower arm A¹, as seen at K J, Fig. 3, and the other end of the upper arm A² has a pin, L, formed upon the under side, which latter hinges into

a corresponding eye secured to the door, as is more plainly seen in Fig. 2. The lower end of the torsion-spring A is rigidly secured to the bracket B' by a square hole and corresponding square upon the end of the spring, and which lower bracket is also firmly secured to the casing of the door on a line with the upper one, and so that while the lower end of the spring is being rigidly held to the casing at that point the upper end is permitted to rotate with the stud M of the lower arm A¹ as the door is opened and closed.

By reference to Fig. 2 it will be understood that as the door is opened the point at L will move away from the bracket B of the spring, and as it closes it will approach the bracket again, and thus hold the door firmly closed.

The arrangement of the parts A¹, B, M, and N in combination with the top of the torsion-spring A are not limited in their application to the frame E and door F by means of the upper arm A², as shown in Figs. 1, 2, and 3; but may apply equally well in combination with any other mode of connecting the lower arm A¹ to the door, as may be seen by Fig. 4; but

What I especially claim as my invention, and desire to secure by Letters Patent, is—

The combination of the arm A¹, with or without the upper arm A², stud M, bracket B, screw-nut N, with the torsion-spring A, substantially as and for the purpose set forth.

CYRUS W. SALADEE.

Witnesses:

E. DAVIS,
EDM. F. BROWN.