

(Model.)

G. M. JEWETT.

HINGE.

No. 344,967.

Patented July 6, 1886.

Fig 1

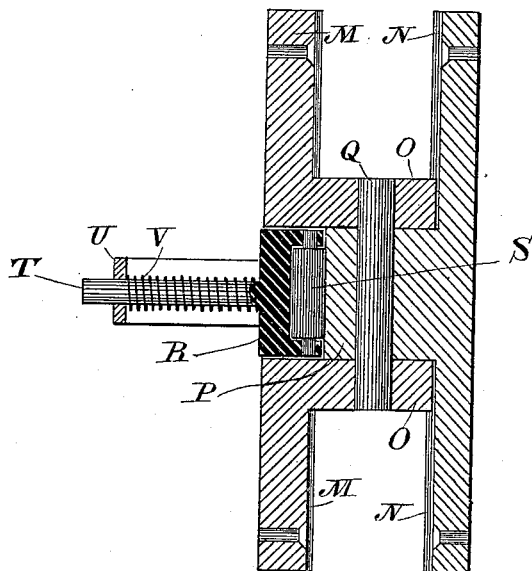
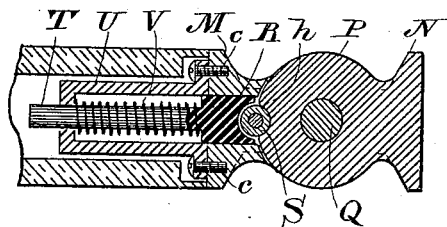


Fig 2



Witnesses

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HINGE.

SPECIFICATION forming part of Letters Patent No. 344,967, dated July 6, 1886.

Application filed October 5, 1885. Serial No. 178,974. (Model.)

To all whom it may concern:

Be it known that I, GEORGE M. JEWETT, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Hinges; 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 certain novel and useful improvements in double-acting spring-butts, and has for its object to provide such a device which shall work on a center and hold the door closed against any ordinary force; and with these ends in view my invention consists in a retaining-butt which shall arrest the swing of the door and hold the latter in a closed position.

In order that those skilled in the art to which my invention appertains may more fully understand its construction and operation, I will proceed to describe the same in detail, referring by letter to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a central vertical section of my improved butt, and Fig. 2 a cross-section of the same.

Similar letters denote like parts in both figures of the drawings.

M N are the leaves, having lugs O P, respectively, which are hinged together by the pintle Q, as shown at Fig. 2. The jamb-leaf M is cut away between its lugs to accommodate a block, R, in which is journaled a roll, S.

Formed with or secured to the block R is a stem, T, projecting rearward and passing through a housing, U, which latter is secured to said leaf by screws c.

V is a coil-spring placed around the stem and confined between the rear of the housing and the block, in order to cause the roll carried by said block to have a firm and constant bearing against the lug P. In this lug is formed a recess or channel, h, which conforms in cross-section to the curvature of the roll S, so that when this recess comes opposite to said roll the latter will be forced therein by the action of the spring V, and this being the position of these parts when the door is closed the latter will be firmly held as against accidental displacement.

In opening the door sufficient pressure must be brought to bear to force the roll out of the channel against the action of the spring, when it will bear against the edge of the lug, and as said edge is concentric with the pintle Q there will be no further resistance offered to the swinging of the door except that of the actuating-spring. When the door is released and allowed to swing by the action of the said spring, the said roll will as soon as the door has reached its closed position be forced within the channel h and securely hold the door as against any overswing.

The end accomplished by my improvement is of great importance, since, in heavy doors especially, the inertia will cause them to overswing, thereby often coming in violent contact with a person within reach of the door as it swings.

Prior to my invention spring-actuated butt-hinges have been constructed with exceedingly stiff springs, in order that the doors might successfully resist the violence of the wind. Of course this is of the greatest importance in hinges of this description; but it is obvious that the greater the tension is on the spring the farther the door will overswing and the greater will be the violence of a blow received from the door while swinging.

My improvement not only insures the door against the force of the wind, but against any overswing. I have not shown and described an actuating-butt, as my retaining-butt will operate with equal facility in combination with any actuating-butt.

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

The herein-described retaining-butt hinge, having in one of its leaves a spring-actuated spindle provided with a roll at its outer extremity, the other leaf being adapted to swing in constant contact with said roll, and provided with a channel or recess, into which the roll is forced by virtue of its spring action when the door has swung to a closed position, thereby affording a central stop for the door, substantially as described.

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

GEORGE M. JEWETT.

Witnesses:

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E. S. SUMNER.