H. B. Middaugh.

Spring Hinge.

No. 90,769. Patented Jun. 1, 1869.

Fig. 1.

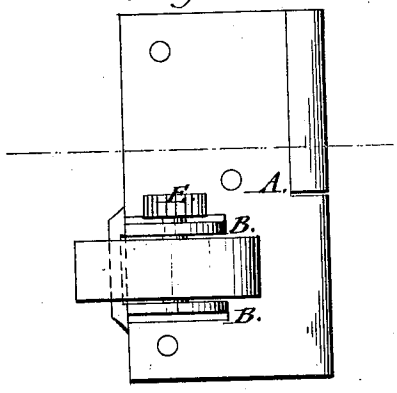
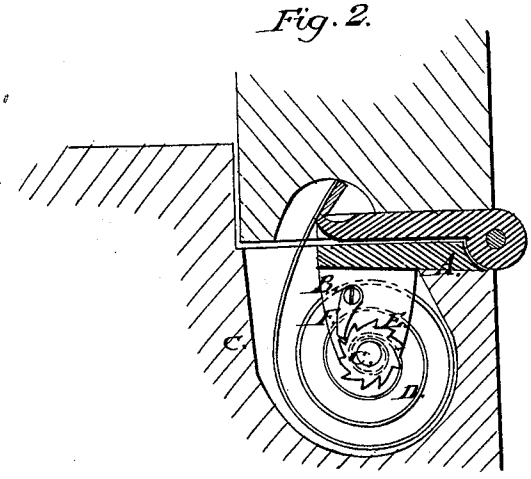


Fig. 2.



WITNESSES:

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Letters Patent No. 90,769, *dated June* 1, 1869.

IMPROVED SPRING-HINGE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, H. B. MIDDAUGH, of Mansfield, in the county of Tioga, and State of Pennsylvania, have invented a new and improved Spring-Hinge; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in spring-hinges, designed to hold the door either in an open or closed position.

It consists in the attachment of the spring to the hinge, so that, as the door is swung open to a sufficient distance, one end of the spring will slip from one leaf of the hinge, as hereinafter more fully specified.

Figure 1 represents a side elevation of a hinge, with my attachment, and

Figure 2 represents a horizontal section of the same, as applied to a door.

Similar letters of reference indicate corresponding parts.

A represents the leaf to be secured to the jamb.

It is provided with brackets B, supporting an axle, C, to which one end of a flat spring, D, is secured.

I prefer to arrange the said axle to turn, and provide thereon a ratchet-wheel, E, in which a pawl, F, fixed to the bracket, may work to hold the spring under any degree of tension.

The other end of the spring is connected to the edge of the leaf to be secured to the door, in such a manner as to be released when the door springs open to its fullest extent, or nearly so.

To provide room for the spring on the rear of the hinge, the jamb is recessed, as shown at G, and the door may have a slight recess, H, for the end of the spring.

By this arrangement the door may be held either in the closed or open position, as when it is swung back far enough to bring the point of connection of the free end of the spring with the leaf, beyond a line passing through the axis of the hinge, to the axle of the spring, the action of the said spring will be to keep the door in an open position, as will be readily understood.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The coiled spring D, secured at one end to the axle C, which carries the ratchet-wheel E, and has its bearings in the brackets B B, formed upon the leaf A of the hinge, and provided with the pawl F, the free end of said spring being adapted to catch over the edge of the leaf of the hinge, secured to the door in such a manner as to be released when the door is swung open to its fullest extent, or nearly so, as herein shown and described, for the purpose specified.

H. B. MIDDAUGH.

Witnesses:

LYMAN BEACH, Jr.,

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