

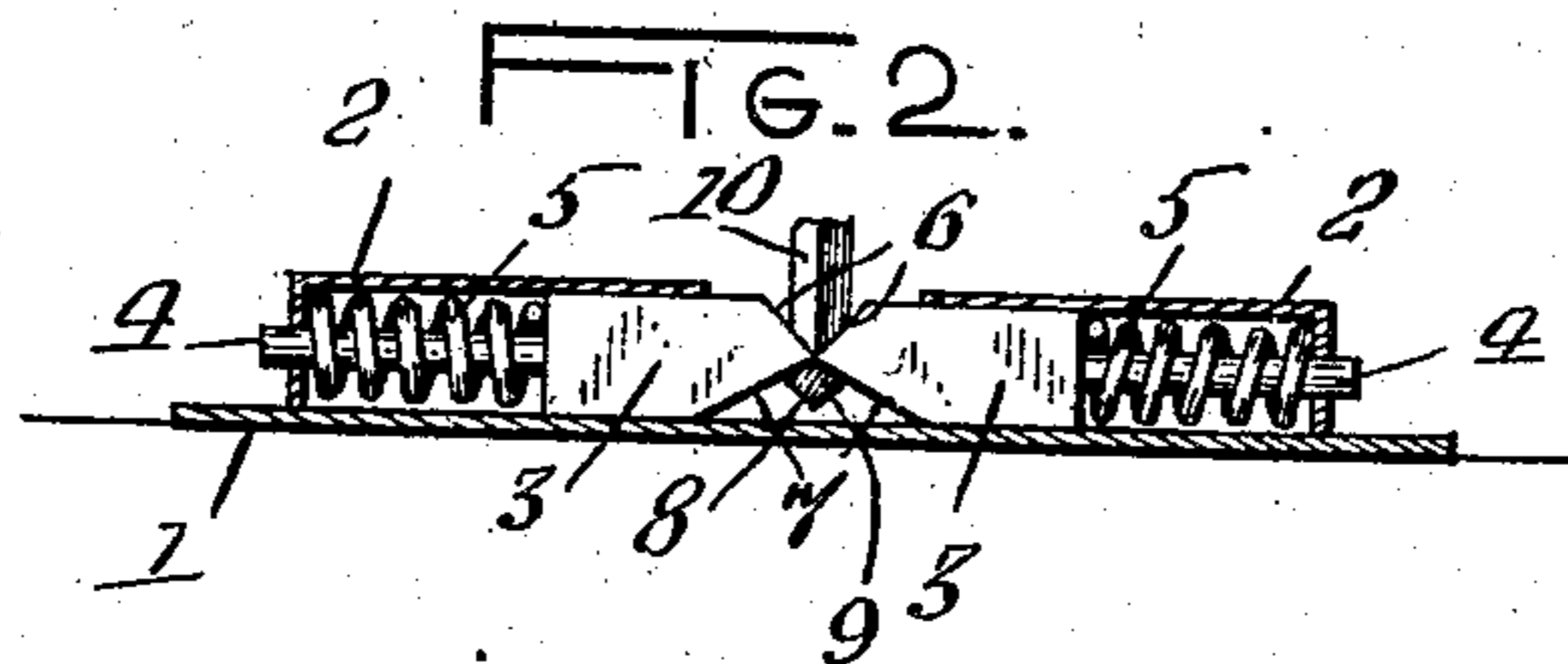
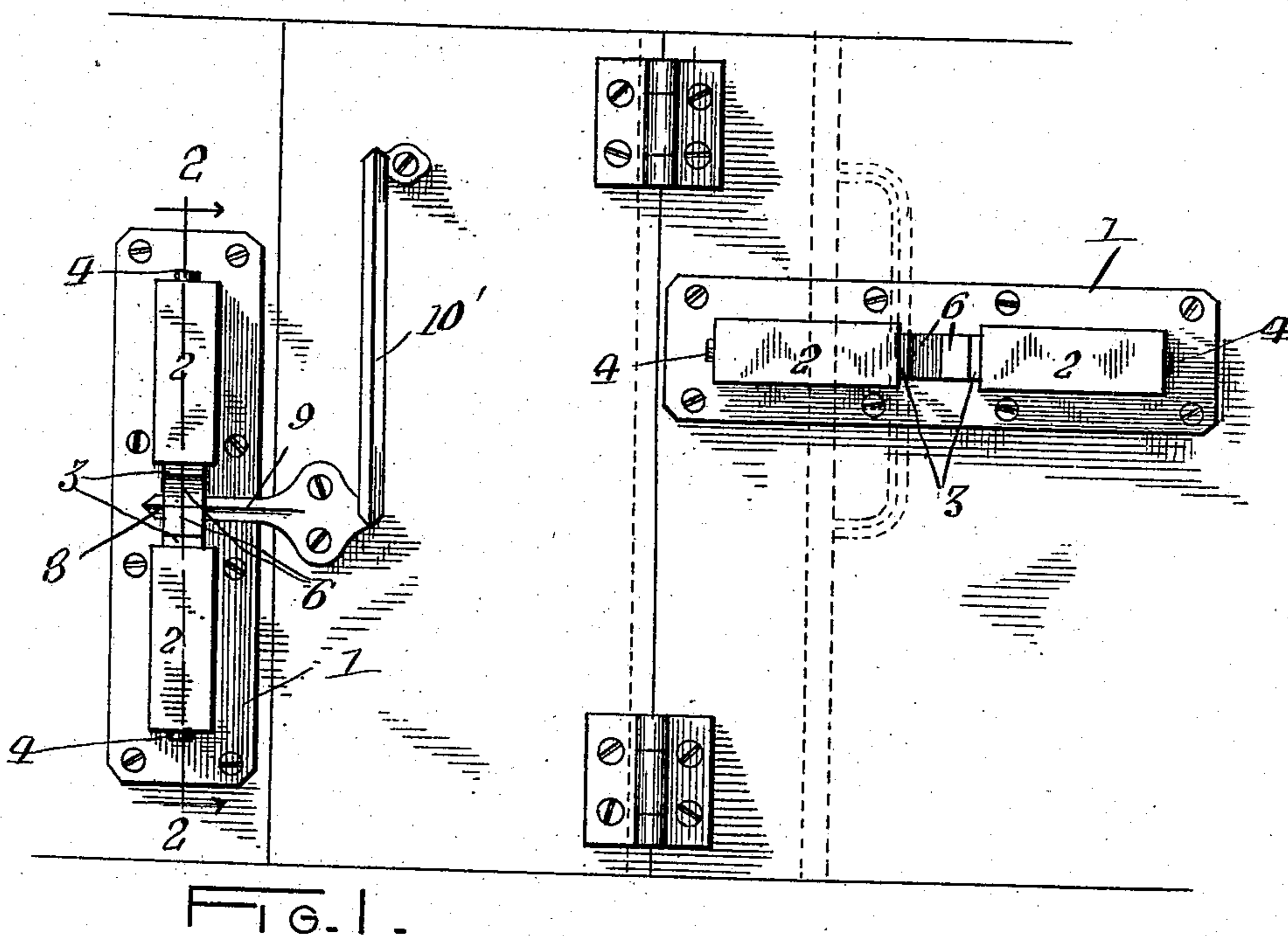
H. HOLFORD.

LATCH.

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915,962.

Patented Mar. 23, 1909.



Witnesses:

Eugene M. Slaney
W. S. Babcock

Henry Holford
Inventor,

By *Marion Marion*

Attorneys

UNITED STATES PATENT OFFICE.

HENRY HOLFORD, OF WINNIPEG, MANITOBA, CANADA.

LATCH.

No. 915,962.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed April 25, 1908. Serial No. 429,120.

To all whom it may concern:

Be it known that I, HENRY HOLFORD, a subject of the King of Great Britain, residing at Winnipeg, in the county of Selkirk, Province of Manitoba, Canada, have invented certain new and useful Improvements in Latches; and I do hereby declare that the following is 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.

The present invention relates to door latches and particularly to the automatic or self acting class of such devices.

Broadly speaking, it comprises plungers adapted to engage over a tongue of a latch, a tongue to operate said plungers and to be engaged and yieldingly held by them, and guides for the plungers.

In order to more clearly disclose the construction, operation and use of the invention, reference should be had to the accompanying drawings forming part of the present application.

Throughout the several views of the drawings like reference characters designate the same parts.

In the drawings: Figure 1 is a plan view of the invention showing its application; and, Fig. 2 is a cross section on line 2—2 of Fig. 1, looking in the direction of the arrow.

Referring to the drawings in detail, 1 indicates a plate on which are mounted box-like guides 2 in which move the plungers 3 having guide rods 4 adapted to pass freely through openings in the bottom of the guides 2. The plungers 3 are held forward, or in operative position, by means of the coil springs 5 which are disposed on the rods 4 and are normally under compression between the rear of the plunger head and the end of the plunger guide.

The plungers are provided with beveled

ends 6 and 7, the inclination of the bevel 6 being sharper than that of the bevel 7. Consequently, when the inclined face of the bevel 8 of the tongue 9 comes in contact with the inclined face of the bevel 6 it will not require so much force to separate the plungers as when the similar and reverse inclined face of the bevel 10 of the same comes in contact with the more gradual inclination of the bevel 7. Thus, it will be easy to close and catch the door to which the tongue 9 is secured, while it will be comparatively difficult to open it. The inclination of the faces of bevels refers to their angular positions relatively to the base plate.

If it is desired to securely catch the door in an open position as well as in a closed position, a second set of plungers is secured to the wall or framework in such position that it will lie in the path of the backward swing of the door handle 10', the door handle being formed with beveled edges corresponding to the edges of the tongue 9 and adapted to operate the plungers of the second set in the same way as the tongue 9 operates the plungers 3 of the first set.

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

A latch of the character described comprising a base plate, guides thereon, plungers mounted therein and each having an upper and a lower bevel face, the upper bevel face having a sharper inclination relatively to said base plate than the lower, and a tongue adapted to coöperate with said plungers.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

HENRY HOLFORD.

Witnesses:

WM. HOLFORD,
D. S. SINCLAIR.