

J. Dearborn,

Latch.

N^o 36,207,

Patented Aug. 19, 1862.

Fig. 1

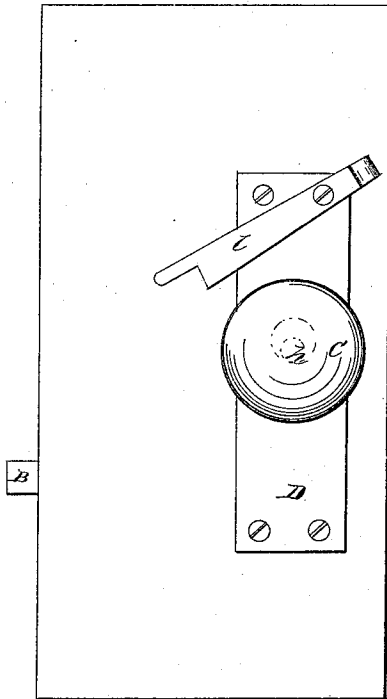


Fig. 2

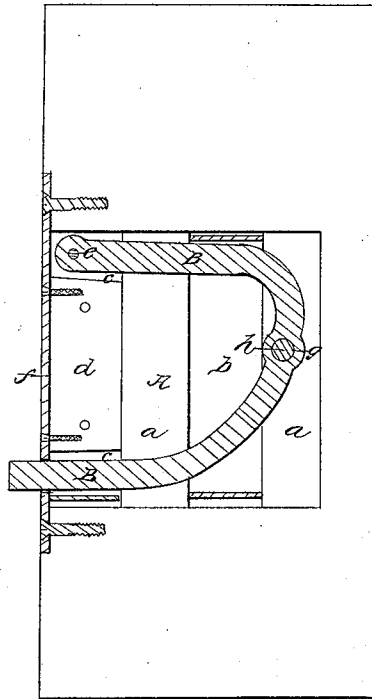


Fig. 3

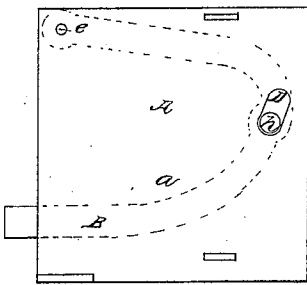
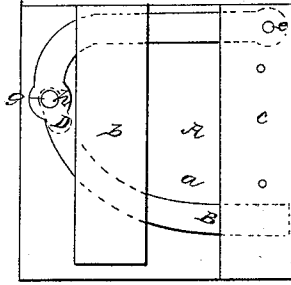


Fig. 4



Witnesses:

*Chas. Decker, Jr.
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Inventor:

Jonathan Dearborn.

UNITED STATES PATENT OFFICE.

JONATHAN DEARBORN, OF SEABROOK, NEW HAMPSHIRE.

IMPROVEMENT IN DOOR-LATCHES.

Specification forming part of Letters Patent No. 36,207, dated August 19, 1862.

To all whom it may concern:

Be it known that I, JONATHAN DEARBORN, of Seabrook, in the county of Rockingham and State of New Hampshire, have invented a new and useful Improvement in Door Bolts or Fasteners; and I do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 denotes a side elevation of a portion of a door having my invention applied thereto; Fig. 2, a vertical and longitudinal section of the same, while Figs. 3 and 4 denote side views of the lock-case.

The nature of my invention consists in a peculiar construction and arrangement of a self-operating lever with respect to the bolt-case and the spindle of the knob or knobs, whereby the said bolt is caused to operate in manner as will be hereinafter described.

It is a fact well known that the ordinary spring-bolts as applied to doors for maintaining them in a closed state are very objectionable on account of the liability of their springs becoming either broken or deranged. To so construct and apply the bolt to its case as to render the former positive in its movements and at the same time dispense with the use of a spring has been the object of my invention.

In the drawings, A denotes the bolt-case, which is constructed of metal, *a* being the main vertical plate, while *b* is an inclosing plate or guard, which surrounds the rear portion of the curved bolt and has each of its ends soldered or otherwise properly affixed to the plate *a*. The inner horizontal surface of the upper part of the guard may be so arranged as to serve as an stopper to the bolt when it has reached its limit of elevation. *c* represents another guard plate or bar, which is bent at its lower end, and is properly attached to the plate *a*. The said guard is firmly secured to the plate *a* by means of rivets passing through each of the plates *a* and *c*, and a bar, *d*, of wood, this latter being of a little greater width than that of the bolt B. The said bolt is made of a curved form, as seen in the drawings, it being so pivoted near its upper end, by means of a pin, *e*, which passes horizontally through the plates *a* and *c*, that it can play freely in vertical directions within its limit of motion. The lower end of the said bolt is formed with a vertical

bevel in the ordinary manner, and such end slides freely through a slot formed in the face-plate I, as seen in the drawings. The said face-plate is disposed at right angles to the plate *a*, and is secured to the block *d* by means of screws or rivets passing into or through the same. The said plate serves to confine the bolt-case to the door by means of screws passed through it in the ordinary manner. Through the central portion of the said curved bolt and transversely of the same a cylindrical or other proper-shaped hole, *g*, is made for reception of the spindle *h* of the knob or knobs C or C'. The said spindle may be formed with a male screw on each of its ends, to work in conjunction with a corresponding female screw formed in each of the said knobs; or the said spindle may be so formed as not to extend entirely through the door, but simply through one side of the door, the plate *a*, and into the bolt B, such construction being especially adapted for closets, &c.

D is a curved slot made vertically in the plate *a*, as seen in Fig. 3. This slot is of such length as will allow the spindle *h* to have a sufficient upward and downward movement either to withdraw the end of the bolt from its mortise in the doorway-frame or to project into the same, as circumstances may require.

D D' are two metallic plates placed, respectively, on each side of the door opposite the bolt-case, one of such plates being shown in side view of Fig. 1, each having a slot or hole made through it of a sufficient size to allow the spindle to have such vertical movements imparted to it as will either draw the locking end of the bolt into the case or force it out therefrom, as circumstances may require. Furthermore, in order to lock the door or prevent it from being opened after it may have been closed, I dispose on the face of the plate D, as seen in Fig. 1, a notched bar or dog, *l*, the same being pivoted so as to turn freely in vertical directions. The said notch is so formed in the bar *l* that when brought to bear upon the spindle *h* it shall retain such spindle in its lowest position, and thus prevent the retraction of the bolt B.

By my peculiar construction of the bolt B and its arrangement and suspension within the case, as set forth, the whole weight of the bolt operates to force the end of the bolt into its

locking-recess, and, besides this, the weight of the spindle and its knob or knobs also aid in forcing the bolt forward into its locking-recess.

From the above it will be seen that my improved bolt is so constructed and arranged that its own gravitating power shall force the lower end of the bolt into its locking-recess whenever it may be brought into line with the same. The superadded weight of the spindle and its knobs renders its forward locking movement certain. The curved form of the bolt I have adopted as being the most compact; but

it will be obvious that its form may be slightly modified and still retain the principle of my invention.

I claim—

My improved door-fastener, as made with its bolt-case A, its bolt B, its knob-shaft *h*, constructed and arranged with respect to each other and so as to operate substantially in manner as set forth.

JONATHAN DEARBORN.

Witnesses:

J. R. BAMPTON,
F. P. HALE, Jr.