# J. Feldman,

## Door and Shutter Bolt

No. 46,891. Patented Mar. 21, 1865.

Fig. 1

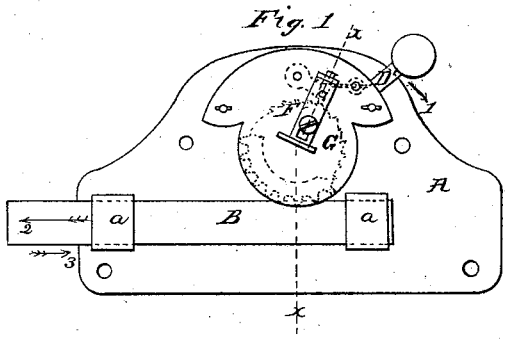



Fig. 2

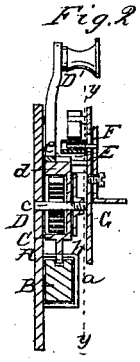



Fig. 3

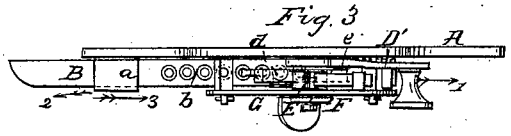
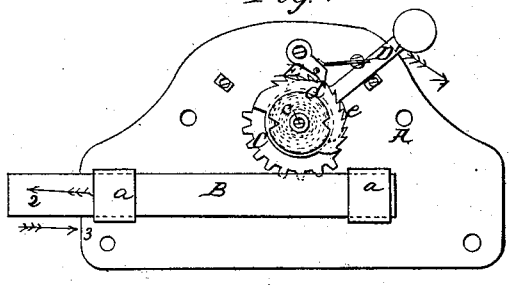



Fig. 4




Witnesses:

M. M. Spinner
C. L. Topliff

Inventor:

J. Feldman

# UNITED STATES PATENT OFFICE.

JULIUS FELDMAN, OF NEW YORK, N. Y.

## BOLT FOR DOORS AND SHUTTERS.

Specification forming part of Letters Patent No. 46,891, dated March 21, 1865.

*To all whom it may concern:*

Be it known that I, JULIUS FELDMAN, of the city, county, and State of New York, have invented a new and Improved Bolt for Doors, Shutters, &c.; 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, in which—

Figure 1 is a front or face view of my invention; Fig. 2, a transverse section of the same, taken in the line *x x*, Fig. 1; Fig. 3, a plan or top view of the same; Fig. 4, a section of the same, taken in the line *y y*, Fig. 2.

Similar letters of reference indicate like parts.

This invention relates to a new and useful improvement in slide-bolts, such as are applied to doors, shutters, &c., to serve as a fastening for the same.

The invention consists in applying to the class of bolts aforesaid certain mechanism, hereinafter fully shown and described, whereby they will, by a very simple adjustment or manipulation of a certain part, be shoved back automatically free from or out of the eye or loop into which they pass to secure the door or other article to which they are applied in a closed state.

In the accompanying drawings, A represents a plate to which guides *a a* are attached and which the bolt B is fitted and allowed to slide freely as usual. This bolt B has a rack, *b*, at one end of it, and this rack may be a sunken one if desired. Into the rack *b* a pinion or part pinion, C, gears, the axis *c* of which is attached to plate A, and to the axis *c* the inner end of a coil-spring, D, is secured, the outer end being connected to a cylindrical case, *d*, which encompasses the spring, and which forms the body or main portion of the part pinion C, said case *d* having ratchet-teeth *e* at its side opposite to that where the pinion-teeth are formed. The axis *c* is a fixed one, the case *d* turning upon it, and to case *d* there is attached a handle, D′, through which the case, and consequently the part pinion and ratchet, are turned.

E is a pawl which engages with the ratchet-teeth *e* of the case *d*, as shown clearly in Fig. 4, and to this pawl E there is connected a slide, F, which is at the outer side of a plate, G, the latter being attached to plate A.

From the above description it will be seen that by moving the handle D in the direction indicated by arrow 1, the bolt B will be shoved or moved in the direction indicated by arrow 2, and into the eye or loop which causes the door, shutter, or other article to which the bolt is applied to be securely fastened. This moving or turning of the case *d* in order to throw the bolt in the direction described winds up the spring D, which is retained by the pawl E catching into the ratchet-teeth *e*, said pawl also holding the bolt B.

In order to unbolt the bolt or allow it to be thrown back free from the eye or loop in the direction indicated by arrow 3, the slide F is actuated so as to free the pawl E from the ratchet-teeth *e* when the spring D immediately performs said work.

Thus by this simple arrangement or application of parts to the bolt the latter may be readily operated, while the improvement will not add greatly to the expense of manufacture.

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

The application to a slide-bolt for doors, shutters, &c., of a pinion, ratchet, spring, and pawl, to operate in the manner substantially as and for the purpose herein set forth.

J. FELDMAN.

Witnesses.

M. M. LIVINGSTON,

C. L. TOPLIFF.