A. Westcott,

Door Bolt.

No. 46,740 Patented Mar. 7, 1865.

Fig. 1

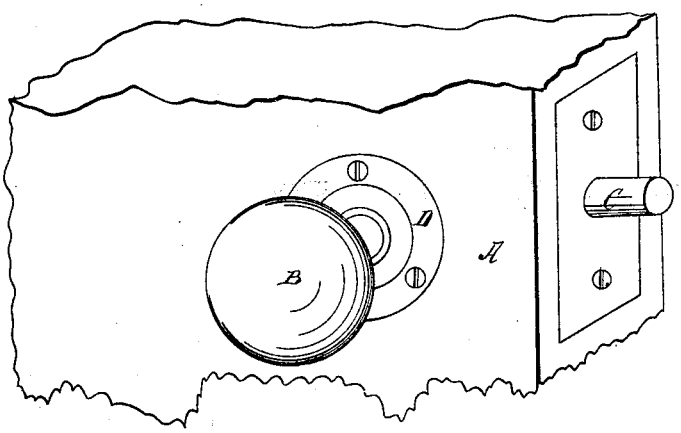


Fig. 2

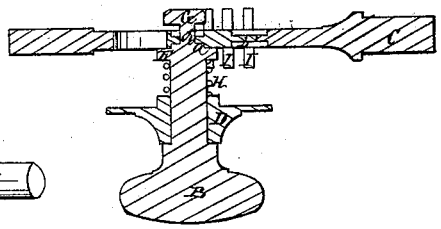
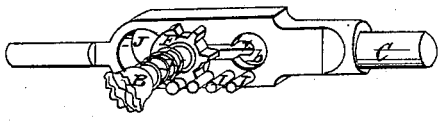


Fig. 3



Witnesses:
S. H. Nash
C. L. Spaulding

Inventor:
Amos Westcott

UNITED STATES PATENT OFFICE.

AMOS WESTCOTT, OF SYRACUSE, NEW YORK.

IMPROVEMENT IN BOLTS FOR DOORS.

Specification forming part of Letters Patent No. **46,740**, dated March 7, 1865.

To all whom it may concern:

Be it known that I, AMOS WESTCOTT, of Syracuse, in the county of Onondaga and State of New York, have invented a new and useful Improvement in Door-Bolts; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and the letters of reference marked thereon.

The nature of my invention consists in a new and improved mode of fastening the bolt securely when it is moved out, and also when it is drawn back.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In Figure 1, A represents a portion of the door with the bolt attached; B, the knob; D, the face-plate firmly screwed to the door, and *c* the bolt thrown out as when the door is bolted. The bolt *c* is moved back and forth by turning the knob B, and the mode in which this is done is more clearly shown in Fig. 3, in which D represents a portion of the face-plate; F, a small cog-wheel, which gears into the teeth or pins I I, projecting from the side of the bolt *c*, and this cog-wheel is firmly fastened to the shaft of the knob.

H represents a spiral spring passing around the shaft of the knob, one end pressing against the cog-wheel F, and the other end against the inner side of the face-plate D, and at all times tending to force the cog-wheel F up against the side of the bolt *c*.

At a point in the shaft of the knob B, corresponding to the center of the door, is a neck or groove, which is fitted to move easily in the slot *x* in the bolt *c*. This neck or groove is more clearly shown by K, Fig. 2. It will be readily seen that when the knob is turned the cog-wheel F will also be turned, and its cogs, acting upon the teeth or pins I I, will move the bolt *c* back and forth, the neck or groove moving in the slot *x*, Fig. 3.

I now come to the method of fastening the bolt when it is thrown out and when it is drawn back.

In Fig. 2, *a* represents a projection of the shaft of the knob B beyond the inner face of the cog-wheel F, and this projection fits into a circular hole in the side of the bolt C, (marked *b*.) There are two of these holes in the side of the bolt *c*—one at each end of the slot—one of which is more clearly shown at *b*, Fig. 3, and these holes are so placed in the side of the bolt *c* that when the bolt is thrown out the projection *a*, Fig. 2, will fall into one of the holes, and when the bolt is drawn back it will fall into the other. This projection *a*, Fig. 2, is forced to fall into these holes when the bolt *c* is in the right situation by the action of the spiral spring H, Fig. 3, tending to force the cog-wheel F against the side of the bolt *c*. When this projection *a* is in either one of these holes, the bolt can neither be thrown out or drawn back—in short, cannot be moved at all—because the neck of the shaft of the knob cannot move in the slot *x*, Fig. 3, of the bolt *c*. In order to move the bolt *c* when thus fastened, all that is necessary is to draw the knob a little from the door, which draws the projection *a*, Fig. 2, out of the hole in the side of the bolt, when the bolt can be moved by turning the knob. The two sides of the bolt *c*, Fig. 2, are made alike, so that the bolt can be used as a right or left hand bolt, as may be desirable.

I do not claim as my invention the manner of moving the bolt by means of the knob, cog-wheel, and teeth or pins projecting from the side of the bolt; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The method of fastening the bolt when the same is thrown out, and also when it is drawn back, substantially as above described.

2. The use of the spiral spring or other similar device, in combination with the projection *a*, Fig. 2, and the holes in the side of the bolt, substantially as and for the purposes above described.

AMOS WESTCOTT.

Witnesses:

E. G. SPAULDING,

S. M. NASH.