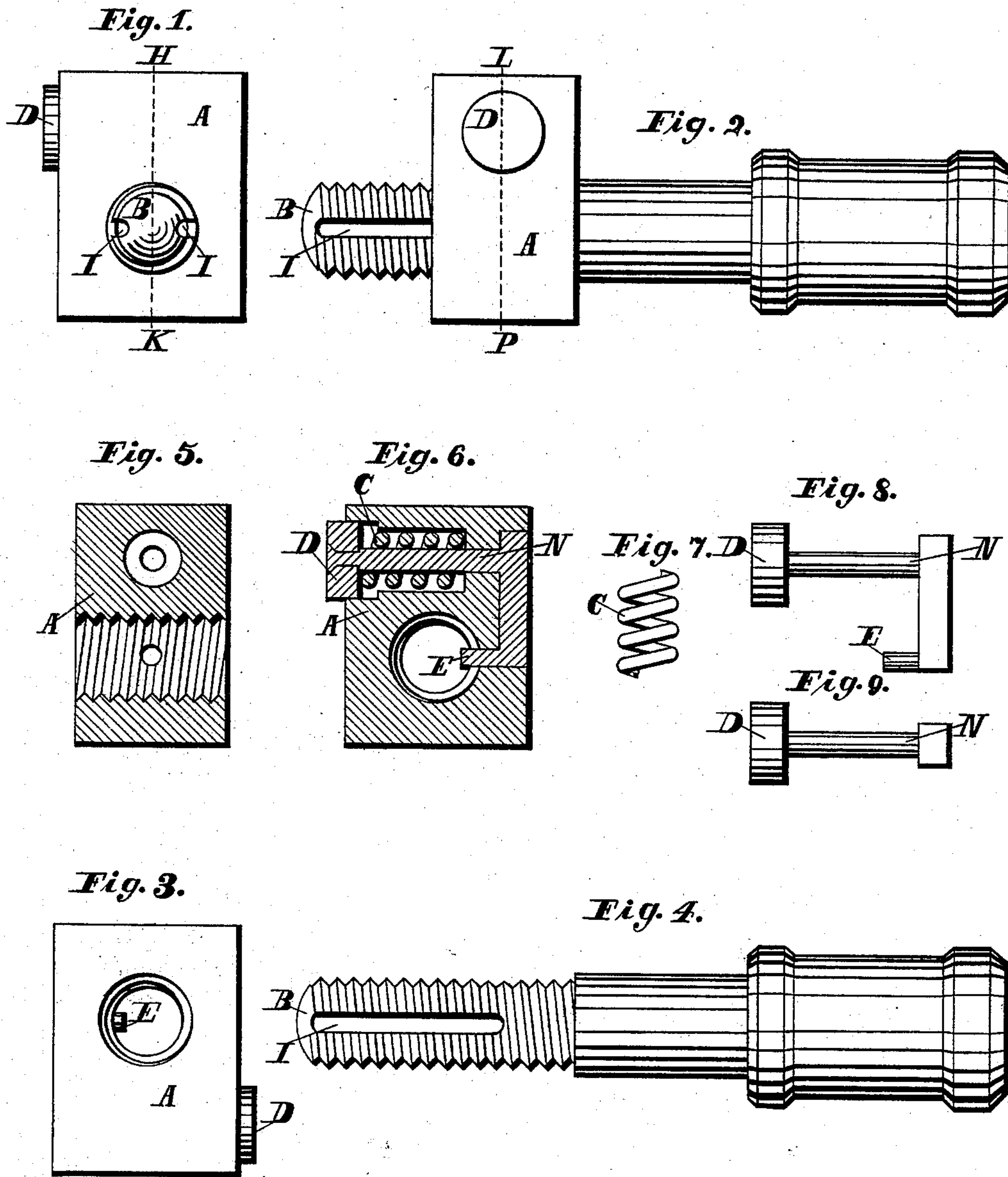


R. HAZLEWOOD.  
Nut-Lock.

No. 221,814.

Patented Nov. 18, 1879.



Witnesses:  
J.R. Carney.  
Elias Stilwell.

Inventor:  
Robert Hazlewood.

# UNITED STATES PATENT OFFICE.

ROBERT HAZLEWOOD, OF MOUNDSVILLE, WEST VIRGINIA.

## IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. **221,814**, dated November 18, 1879; application filed March 17, 1879.

### *To all whom it may concern:*

Be it known that I, ROBERT HAZLEWOOD, of the town of Moundsville, county of Marshall, and State of West Virginia, have invented a new and useful Device for Locking Nuts on Screws, of which the following is a specification.

The object of my invention is to provide a mechanical device that will securely lock a nut in its desired position on a screw, and also at the same time allow the nut to be easily screwed on or off when desired.

My invention consists in the arrangement whereby a projection of a key within the nut, operated by a spring, enters a longitudinal groove in the screw, and thus locks the nut.

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is an end view, and Fig. 2 a side view, of a screw and nut embodying my invention, the nut screwed on and locked. Figs. 3 and 4 are views, respectively, of the nut and screw, each separate and unscrewed from the other. Fig. 5 is a section of the nut on line H K without the key and spring. Fig. 6 is a section of the nut on line L P through the key and spring. Fig. 7 is a view of the spiral spring. Figs. 8 and 9 are, respectively, side and end views of the key.

Within the nut A is the key N, with a projection, E, and a thumb-piece, D, around the said key N. Under the said thumb-piece D is fitted a spiral spring, C. The screw B has one or more longitudinal grooves, I, into which the said projection E of the said key N fits, and locks the said nut A in its desired place on said screw B.

The operation of the device is as follows: In screwing on the nut the thumb-piece D of the key N is pressed in until the projection E of key N is withdrawn far enough not to interfere with the revolutions of the nut A on the screw B. The said thumb-piece D of said key N is held in this position by a wrench, or otherwise, and the nut screwed on, in the usual manner, as far as desired, when the pressure is removed from the said thumb-piece D of the said key N, and the spring C, pressing upon the under side of said thumb-piece D of said key N, pushes it back to its original position, causing said projection E of said key N to enter the longitudinal groove I of said screw B, thus locking said nut A in its desired position on said screw B.

To remove the nut, the said thumb-piece D of said key N has only to be pressed in and held there, as in putting it on, and the said nut A unscrewed in the usual manner.

What I claim is—

In a nut-lock, the combination of a screw-bolt having the groove I with the nut A, having an opening entirely through it to receive the key N, which is provided with the point E and thumb-piece D, and the spring C, the parts being arranged for operation substantially as shown.

ROBERT <sup>his</sup> × HAZLEWOOD.  
mark.

Witnesses:

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