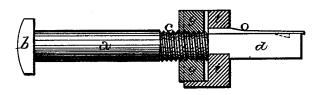
A. NEEDS. Nut-Lock.

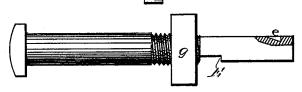
No. 202,859.

Patented April 23, 1878.

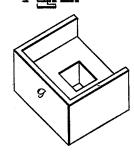
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UNITED STATES PATENT OFFICE.

ALFRED NEEDS, OF LATROBE, PENNSYLVANIA.

IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. 202,859, dated April 23, 1878; application filed April 11, 1878.

To all whom it may concern:

Be it known that I, Alfred Needs, of Latrobe, in the county of Westmoreland and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in nut-locks; and it consists in the combination of a bolt which has a screw-thread formed upon the central portion of its body, and the end opposite to the head made square and having a notch cut in it just at the end of the thread, so that after a square cap has been passed down over the square portion of the bolt, and made to catch over the top of the nut, the said cap can be given a sidewise movement, so as to lock it in position, and thus prevent it from coming off, as will be more fully described hereinafter.

The accompanying drawings represent my invention.

a represents a screw-bolt of any desired size or length, and which has the head b formed upon one end, the screw-thread C at or near its center, and the end d opposite to the head, made square, as shown. In this square portion d of the bolt, just at the end of the screw-thread, is cut a notch, E. After the nut g has been screwed into position, the cap i, having a recess in its under side that will just fit over the top of the nut, and which is open on one side, is passed down over the square portion d of the bolt and made to catch over

the top of the nut. After the cap has caught down over the top of the nut, the cap is given a slight edgewise motion so as to make its edge move forward under the shoulder formed by the notch E, as shown. As the hole through the cap through which the bolt passes is made square, so as just to fit the square end of the bolt, it is impossible for the cap to turn around, and as long as the cap is caught over the top of the nut, even in the slightest degree, it will be impossible for the nut to turn in either direction. As long as one edge of the cap remains in the notch E the cap cannot be moved outward, and hence it will be impossible to displace the nut until the cap has been moved out of the way.

In order to prevent the cap from becoming displaced, a key, O, is used, which consists of a flat plate thicker at its lower than its upper edge, so as to be elastic, and which has the projection r on its side to catch in a corresponding recess in the bolt. The thick end of the key is passed down between the side of the bolt and the cap, and prevents the cap from moving out of the notch. The projection r holds the key in place.

Having thus described my invention, I claim—

The combination of the cap, nut, bolt having a recess in its side, and a locking device to keep the cap in place, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of March, 1878.

ALFRED NEEDS.

Witnesses:

JNO. A. FLOHN, JNO. F. KNOX.