

C. H. TAYLOR.
Nut-Locks.

No. 142,877.

Patented September 16, 1873.

Fig. 1.

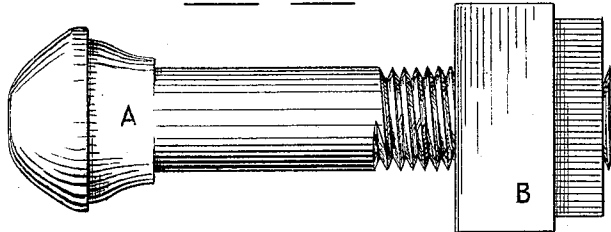


Fig. 2.

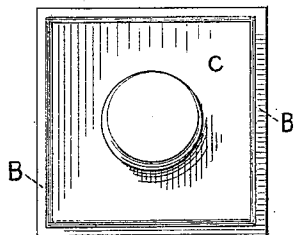


Fig. 3.

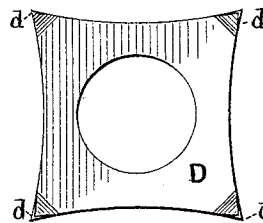
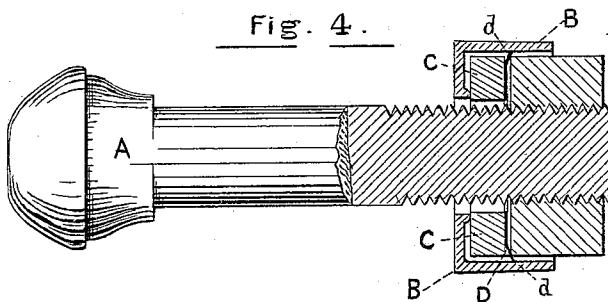


Fig. 4.



WITNESSES.
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IMPROVEMENT IN NUT-LOCKS.

Specification forming part of Letters Patent No. **142,877**, dated September 16, 1873; application filed June 11, 1873.

To all whom it may concern:

Be it known that I, CHARLES H. TAYLOR, of the city and State of New York, have invented certain Improvements in Lock-Nuts for Railways, of which the following is a specification:

This invention relates to improvements in nut-locks, which are fully hereinafter described and claimed.

Figure 1 represents a screw-bolt and the improved nut complete. Fig. 2 is a plan of the box that holds the springs. Fig. 3 is a plan of my improved metal spring that performs the two functions of spring and binder. Fig. 4 represents a portion of the bolt finished and a section through the center of the nut-springs and spring-box, and shows the position of all the parts without any pressure upon the nut or the springs.

At A is represented the screw-bolt, and at B is shown the spring-box, or receiver for the springs, which are shown at C and D. The spring C may consist of any elastic substance, as rubber, which is cut to conform to the shape of the box, as C, Fig. 2, where the shaded lines indicate the space between the rubber and the interior of the box B, said space being left for the expansion of the rubber or similar substance therein when compressed by the nut. But between the nut and the spring C, I introduce as my improvement a second spring, D, formed of sheet metal, preferably of sheet-steel, and made substantially in the form shown at Fig. 3, or with projecting points, as at *d*, and of such a distance apart that, when forced into the box B, said points will be curved outward slightly, as shown by the shading at Fig. 3, and at *d*, Fig. 4, so that said points will impinge upon the sides or corners of the box, and hold both the springs C and D in the box B.

The advantages of using such a spring as at D are: First, the box B may be made of ordinary cast-iron, as there are no lips or lugs on it which require to be bent over to hold the spring and washer, or the spring and nut, in place. Second, the box B need only be made of sufficient depth to hold the springs, and to allow the inner face of the nut to catch within it slightly before compressing the springs in it; consequently a great saving in metal is thereby effected. Third, the springs are held together in the box sufficiently firm to admit of transportation without the combined action of the nut; consequently they are constantly ready for use. Fourth, in the case of being stripped from the bolts, as is often the case when the cars run off the track, the nuts and springs can be separated from the box, and the bolts and all the parts not broken may be readily used again, thereby effecting a saving in repairs. Fifth, the spring or elastic piece of metal D, when compressed in the box B, becomes somewhat buckled or curved to react as a spring, so that a less quantity of rubber may be used, while it serves also as a washer under the nut and a binder to hold both springs in position in the box.

I therefore claim—

In a nut-lock, the flat sheet-metal spring D, having the outwardly-projecting corners *d* located between the elastic substance C and the nut, in combination with each other and with the metal box B, all constructed and arranged substantially as described, for the purpose specified.

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Witnesses:

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