(No Model.)

H. HENDERSON.

NUT LOCK.

No. 522,562. Patented July 3, 1894.

Fig.1

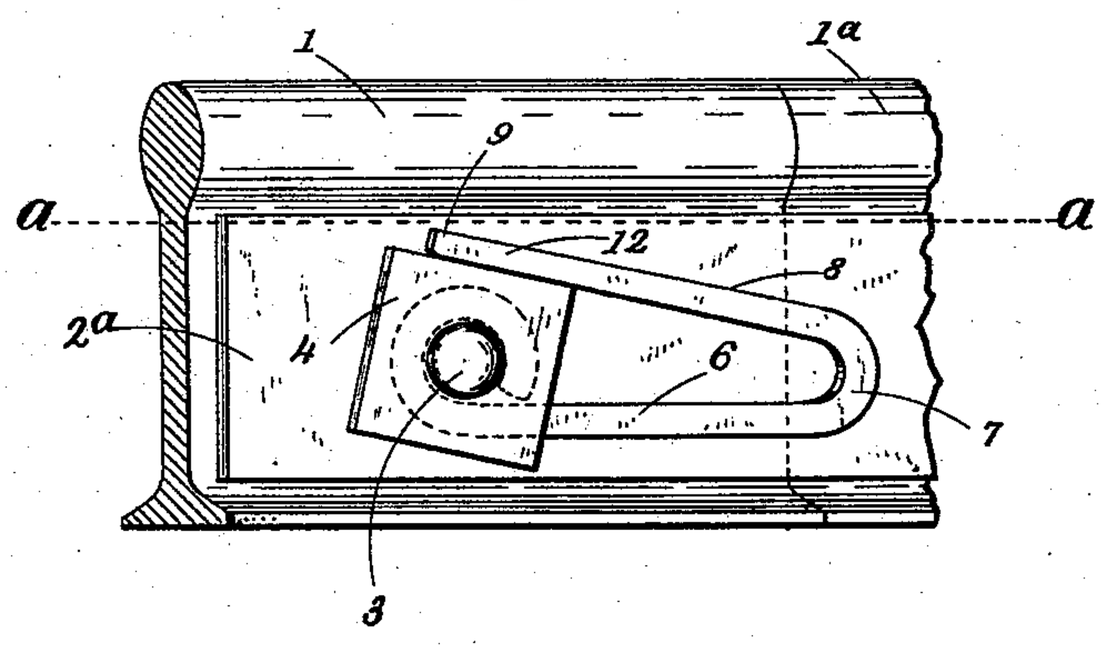


Fig.2

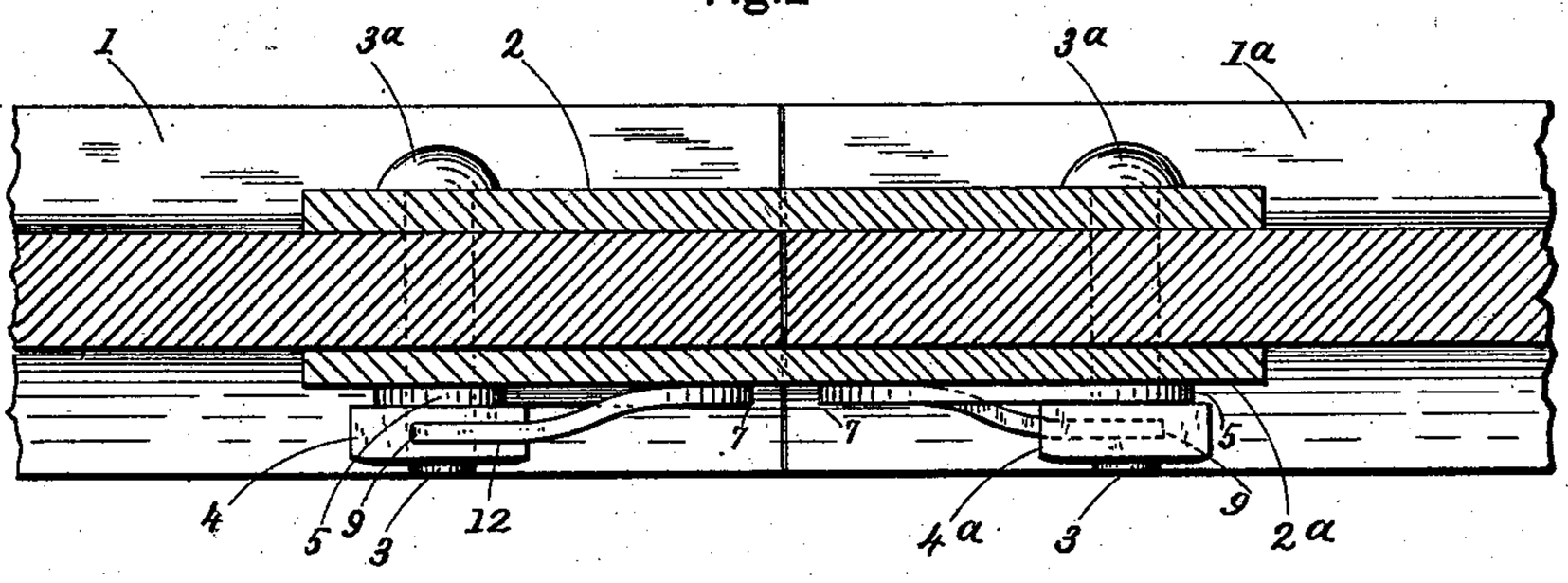


Fig.3

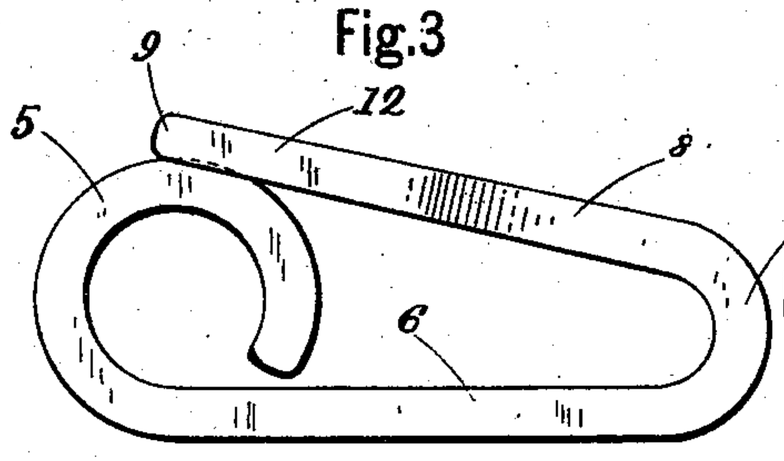
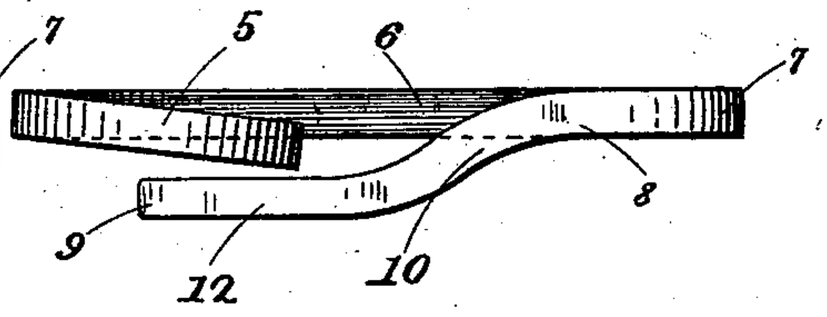


Fig.4.



Witnesses.

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UNITED STATES PATENT OFFICE.

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 522,562, dated July 3, 1894.

Application filed March 5, 1894. Serial No. 502,309. (No model.)

To all whom it may concern:

Be it known that I, HENRY HENDERSON, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

My invention relates to an improved spring nut lock for holding the bolt-nuts that secure the fish-plates to the rails of railway tracks, or for other purposes where a nut-lock is required, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1, is a sectional side elevation slightly in perspective, showing a portion of two rails and fish-plate, and my device connected thereto for holding the nut in place. Fig. 2, represents a horizontal section in or about line *a a*, Fig. 1, showing the two portions of a rail, the two fish-plates and bolts and a top view of two nut locks for holding the nuts in place on the bolts. Fig. 3, is a detached side elevation of the nut lock. Fig. 4, represents a detached top view of the same.

Referring to the drawings in detail, 1 and 1^a, represent portions of an ordinary T rail, 2 and 2^a, the fish plates, the numerals 3, represent the bolts and 3^a the bolt heads for holding the fish-plates and rails in position, and 4 and 4^a, are the bolt-nuts, all being well known, and shown for the purpose of illustrating my invention.

The nut locking device consists of a single piece of steel having a circular spiral bend 5, of the required size to allow the bolt 3, to pass through easily. From this circular spiral bend the portion 6 extends tangentially outward in a substantially straight line and is bent at or about the point 7, so that the portion 8, extends forward toward or over the center of the circular spiral portion 5, terminating at or about the point 9.

It will be noticed, by referring to Fig. 4, that the portion 8, is also provided with a lateral bend or off set bend 10, which extends outward and then forward so that the portion 12, is substantially parallel with the opposite portion 6. The object of this construction is to bring the portion 12, into the proper position to lie flat on one of the sides of a nut and thereby prevent it from turning or getting loose.

The construction of the device is very simple and easily understood. In operating with it, the nut is put on so that the portion 12, will rest on top of it, or on the under side of the nut, substantially as shown in Figs. 1 and 2. In this position the nut may be turned with a wrench, the elastic nature of the material (spring steel preferably) of which the device is made, allowing the portion 12, to be moved upward, as the corners of the nut pass, and then spring down and lie upon one of the flat sides of the nut as it comes into position during the operation of turning it. This construction effectually prevents the nut from turning back or getting loose, but to give an additional security, the circular spiral portion, 5, acts as a spring against which the nut is forced as it is being screwed up against it.

The device can be made and used without the offset 10, if desired and still be made to operate, and the spiral feature of bend 5, may be dispensed with.

I claim as my invention—

A nut lock consisting of a single bar of steel having a circular bend 5, through which the bolt passes, a tangentially extending straight portion provided with a return bend 7, terminating in a straight portion 8, having an offset 10, the straight portion 12, extending laterally in front of the bend 5, far enough to rest with a spring force on the flat side of a nut substantially as described.

HENRY HENDERSON.

Witnesses:
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J. M. CALDWELL.