(No Model.)

S. A. LAKE. NUT LOCK.

No. 488,337.

Patented Dec. 20, 1892.



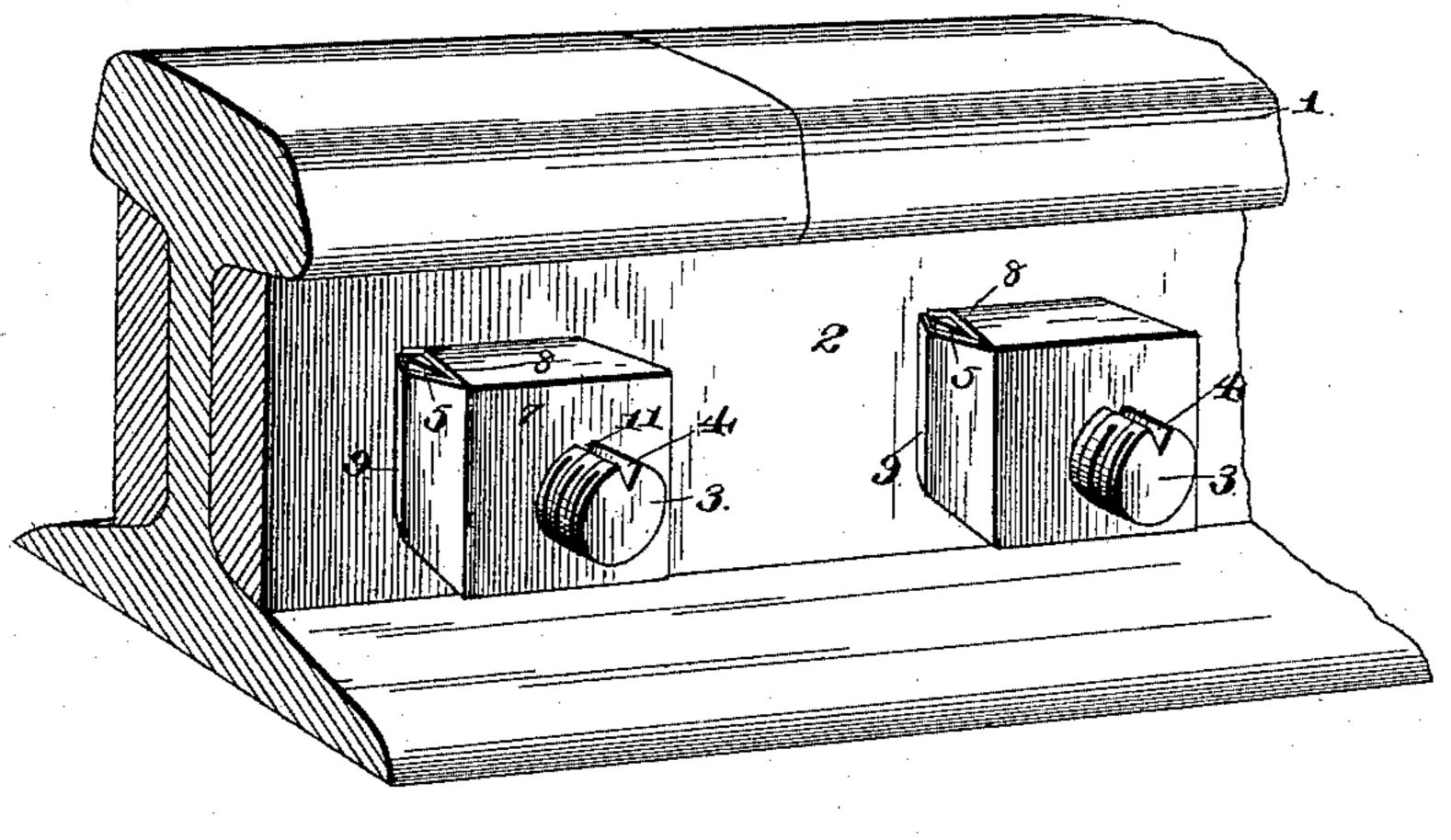
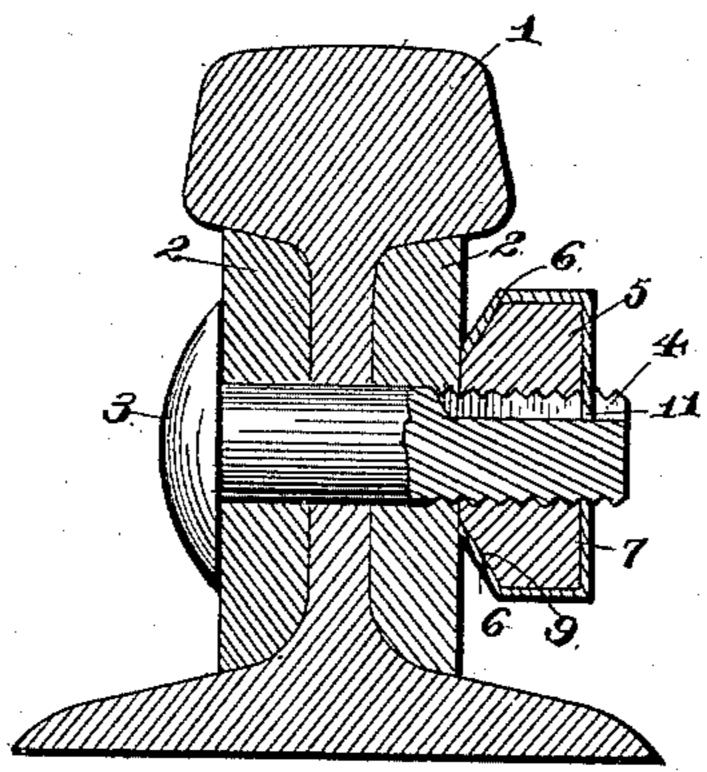
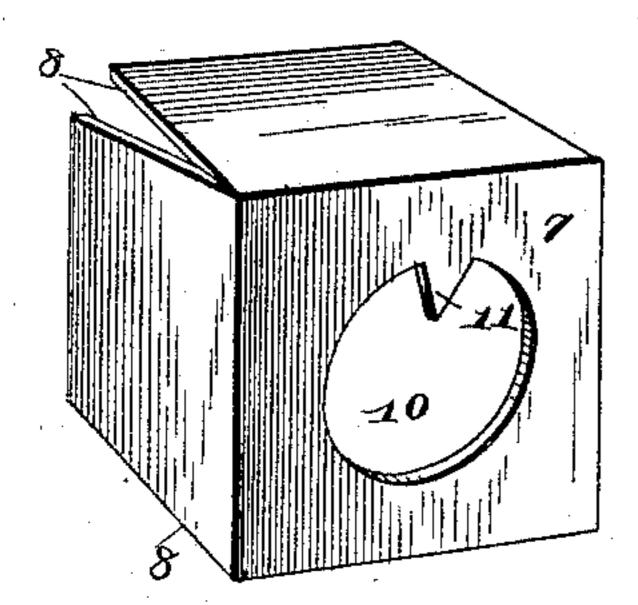


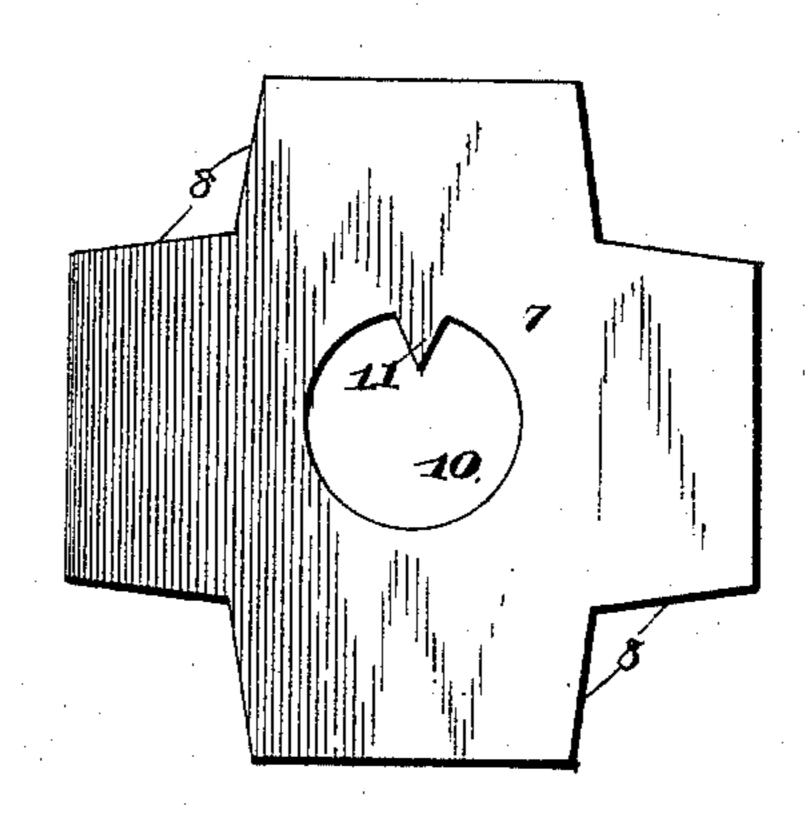
Fig. 2.



Hig. 3.







Witnesses
Char A Tar

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UNITED STATES PATENT OFFICE.

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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 488,337, dated December 20, 1892.

Application filed April 16, 1892. Serial No. 429,405. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY A. LAKE, a citizen of the United States, residing at Lake View, in the county of Pierce and State of Washington, have invented a new and useful Nut-Lock, of which the following is a specification.

My invention relates to nutlocks; and particularly to that class termed in the art as

ro "top."

The objects of my invention are to provide a lock of the above class, that may be applied or removed with facility, and when in position will constitute a lock of great effi-15 ciency and durability.

With these objects in view, the invention consists in certain features of construction hereinafter specified and particularly pointed

out in the claim.

Referring to the drawings:—Figure 1 is a perspective of a portion of a rail-joint the nuts of the bolts of which are locked in accordance with my invention. Fig. 2 is a transverse section of the joint. Fig. 3 is a detail 25 of the lock. Fig. 4 is a plan of the blank, of which the lock is formed, before bending.

Like numerals of reference indicate like parts in all the figures of the drawings.

In the drawings, 1 designates the rail-sec-30 tion, 2 the fish-bars, which together with the section are perforated for the transverse passage of the bolt 3. This bolt is of the ordinary construction, with the exception that its threaded end is provided with a longitudi-35 nally-disposed groove 4. The nut 5 is provided with the usual central opening, and has its four inner edges beveled, as at 6.

The lock is formed of sheet metal, and from a square blank, larger than the nut, the blank 40 being indicated as 7 in Fig. 4 of the drawings. This blank has its four corners notched, at 8, and the intermediate portions of the edges are bent at a right angle, to form a series of nut-embracing flanges 9. The blank is fur-45 ther provided with a central bolt-receiving opening 10, the edge of which has an inward-

ly-disposed spur or lug 11, conforming to the shape in cross section, of the groove of the bolt in which it is designed to fit, and is in 50 this instance V-shaped.

In applying the lock, after the nut has been run down upon the bolt and tightened, the said lock is introduced over the end of the bolt, the latter passing through the opening !

10 of the lock, and the spur of said lock tak- 55 ing into the groove of the bolt, whereby the lock is prevented from turning. By a further movement down upon the bolt, the flanges of the lock are made to embrace the bolt, which they somewhat snugly fit, and through 60 the instrumentality of a pair of pinchers of ordinary construction, the inner ends or edges of the flanges 9 are inwardly bent to engage with the beveled inner corners of the nut, so that as will be obvious the lock and nut be- 65 come rigidly connected, and the lock being immovable upon the bolt, a secure fastening is effected.

The nut is completely protected and housed on all sides by the locking cap and its flanges, 70 and the V-shaped groove in the bolt together with the similarly shaped tongue of the locking cap constitutes a simple, cheap, and readily formed lock, which can be easily opened or closed with suitable tools.

From the foregoing description, in connection with the accompanying drawings, it will be seen that I have provided a simple and efficient lock, that is strong and durable as well as safe, may be applied with ordinary 80 tools, when applied is removable, and whose efficiency is not destroyed for re-application or re-use by such removal.

Having described my invention, what I claim is:—

In combination, a bolt having a single longitudinal groove, and a nut engaging said bolt and having its rear or inner angles severally under-cut or chamfered, the lockingcap corresponding in shape to the outer face 90 of the nut and having a series of rearwardly or inwardly disposed flanges, 8, corresponding in number to the sides of the nut and lying, respectively, in contact therewith, said flanges being inwardly bent at their extremi- 95 ties 6, to engage and lie in contact with the chamfered edges of the nut, the cap being further provided with a bolt-hole 10, and a tongue 11, to engage the groove in the bolt, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SIDNEY A. LAKE.

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Witnesses:

J. A. WINTERMUTE, GEO. K. BRETHERTON.