(No Model.)

J. W. DEERING & R. D. FOSTER.

NUT LOCK.

No. 417,772. Patented Dec. 24, 1889.

Fig. 1.

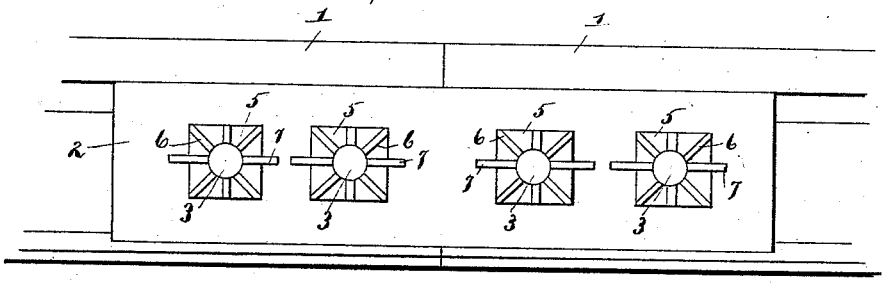


Fig. 2.

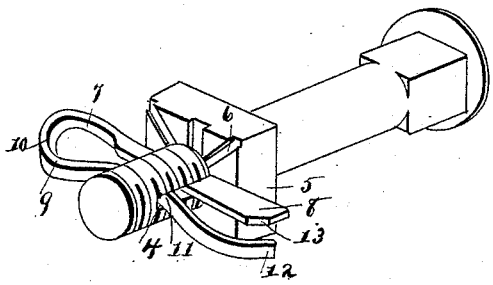


Fig. 3.

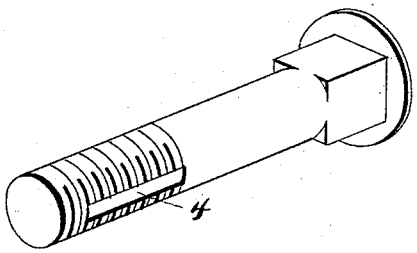


Fig. 4.

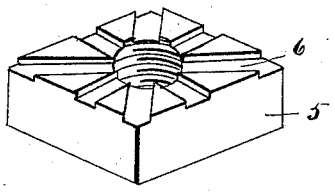
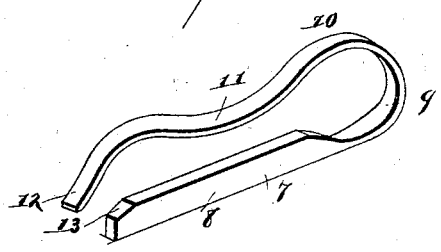


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES W. DEERING AND ROBERT D. FOSTER, OF HARWOOD, MISSOURI.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 417,772, dated December 24, 1889.

Application filed August 23, 1889. Serial No. 321,763. (No model.)

To all whom it may concern:

Be it known that we, JAMES W. DEERING and ROBERT D. FOSTER, citizens of the United States, residing at Harwood, in the county of Vernon and State of Missouri, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention has relation to nut-locks of that class known as "top-key" and "ratchet;" and the object and advantages thereof, together with the novel features, will hereinafter appear, and be particularly pointed out in the claim.

Referring to the drawings, Figure 1 is a side elevation of a railway-joint provided with nut-locks constructed in accordance with our invention. Fig. 2 is a detail in perspective of the bolt-nut and lock detached from the rails. Fig. 3 is a detail of the bolt; Fig. 4, of the nut; Fig. 5, of the locking-pin.

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

1 represents two adjacent rail-sections having the usual fish-plates 2, and 3 represents the bolt for binding the same together. The bolt 3 is provided with a longitudinal slot 4, extending from near its inner end to about midway its length, and over the bolt is threaded the nut 5, the outer face of which is provided with right-angularly disposed transverse grooves and diagonally-disposed similar grooves 6, either of which is adapted to register with the longitudinal slot 4 of the bolt.

7 represents the locking-key, and the same consists of a heavy rigid base portion 8 and a reduced remaining spring portion 9, bent over upon the base portion, as at 10, having a central depression 11 and terminating in a depending tongue or end 12, adapted to come into contact with a cut-away shoulder 13, formed on the end of the rigid portion of the key or pin. The nut being mounted in position upon the bolt, it will be apparent that one or the other of the recesses will be in line with the longitudinal opening thereof, and the terminal 12 of the pin is depressed until in contact with the cut-away portion of the base of the pin, and thus form a tapered entering end, and is inserted into one of the grooves and through the elongated opening in the bolt and beyond the outer edge of the opening and until the central depressed portion 11 is in the end of the longitudinal slot, when it will be apparent that the pin is prevented from any accidental displacement by reason of the spring portion thereof and the location of the opposite bend at each side of the depression 11.

Having described our invention, what we claim is—

The combination, with the bolt 3, having the slot 4, of the nut 5, threaded thereon and having the transverse pair and diagonal pair of recesses 6 in its outer face, one of which registers with the slot 4, and the pin or locking-key 7, having the thickened rigid base portion 8, terminating at one end in the reduced portion, bent, as at 10, to form the spring-tongue 9 and having a central depression 11 lower than and between the ends of the spring and taking against the end of the slot, and the depending tongue 12, adapted to be depressed upon the end of the base 8, which is cut away, as at 13, to form a reduced entering end, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JAMES W. DEERING.
ROBERT D. FOSTER.

Witnesses:
PHINEAS BALDWIN,
M. N. WATTS.