

A. C. SMITH.

Improvement in Nut and Bolt-Fastenings.

No. 132,867.

Patented Nov. 5, 1872.

Fig. 1.

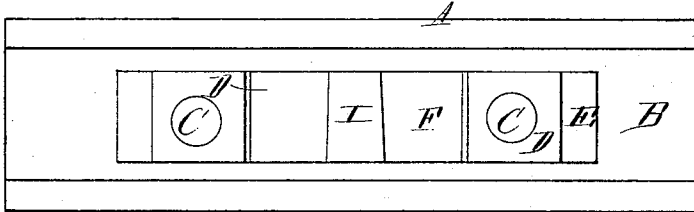
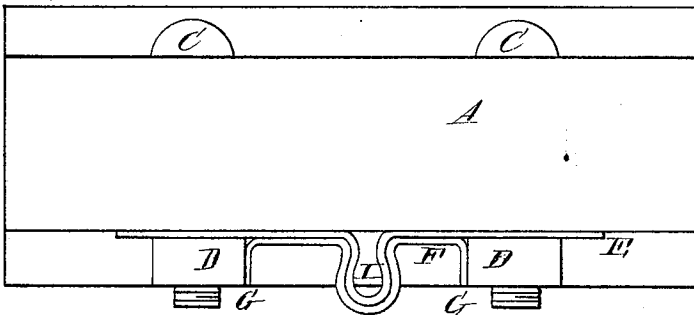


Fig. 2.



WITNESSES.

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IMPROVEMENT IN NUT AND BOLT FASTENINGS.

Specification forming part of Letters Patent No. 132,867, dated Novem. 5, 1872.

To all whom it may concern:

Be it known that I, ALBERT C. SMITH, of Fort Madison, in the county of Lee and State of Iowa, have invented a new and valuable Improvement in Nut-Locks; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a side view of my invention. Fig. 2 is a top view of the same.

This invention has relation to nut-locks for railroad rails; and it consists in the construction and novel arrangement of a pair of correspondingly-corrugated lock-plates, one of which lies behind the nuts, with holes pierced to let the bolts pass through, while the other has flanges bent on its ends to fit close against the inner sides of two adjacent nuts. In the middle part of each plate a tube-like vertical corrugation is formed. The corrugation of the outer plate is the larger, but slides down over and incloses the other corrugation, both corrugations fitting together in such a manner as to prevent the outer plate from turning or falling off.

Referring to the drawing, A represents the railroad rail, B the fish-plates, C the bolts, and D the nuts. E represents the inner lock-plate, having holes bored near the ends for the bolts to pass through. This plate is put in place

before the nuts are placed on the bolts. F designates the outer plate, having its ends bent outward to produce flanges G. The distance apart of these flanges is equal to the distance apart of the two nuts when the same are squarely on the bolts. At their middle parts these plates are correspondingly fluted or corrugated, as shown at I. These corrugations are tube-like, being kinked or contracted at their inner parts, so that when the outer corrugation, which is the larger, is put over the other both may be held together and the nuts locked. These corrugations are of conical form so that the outer plate cannot fall below its proper position.

The two plates are connected by sliding the outer one down over the inner, letting one corrugation pass inside the other, as shown. To disconnect the plates the outer one is to be simply raised until its lower edge clears the inner plate.

What I claim as my invention, and desire to secure by Letters Patent, is—

The nut-lock herein described, consisting of the sliding flanged plate F and plate E, having corresponding conical tube-like corrugations I, as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses: ALBERT C. SMITH.
E. A. WRIGHT,
G. W. REDMAN.