

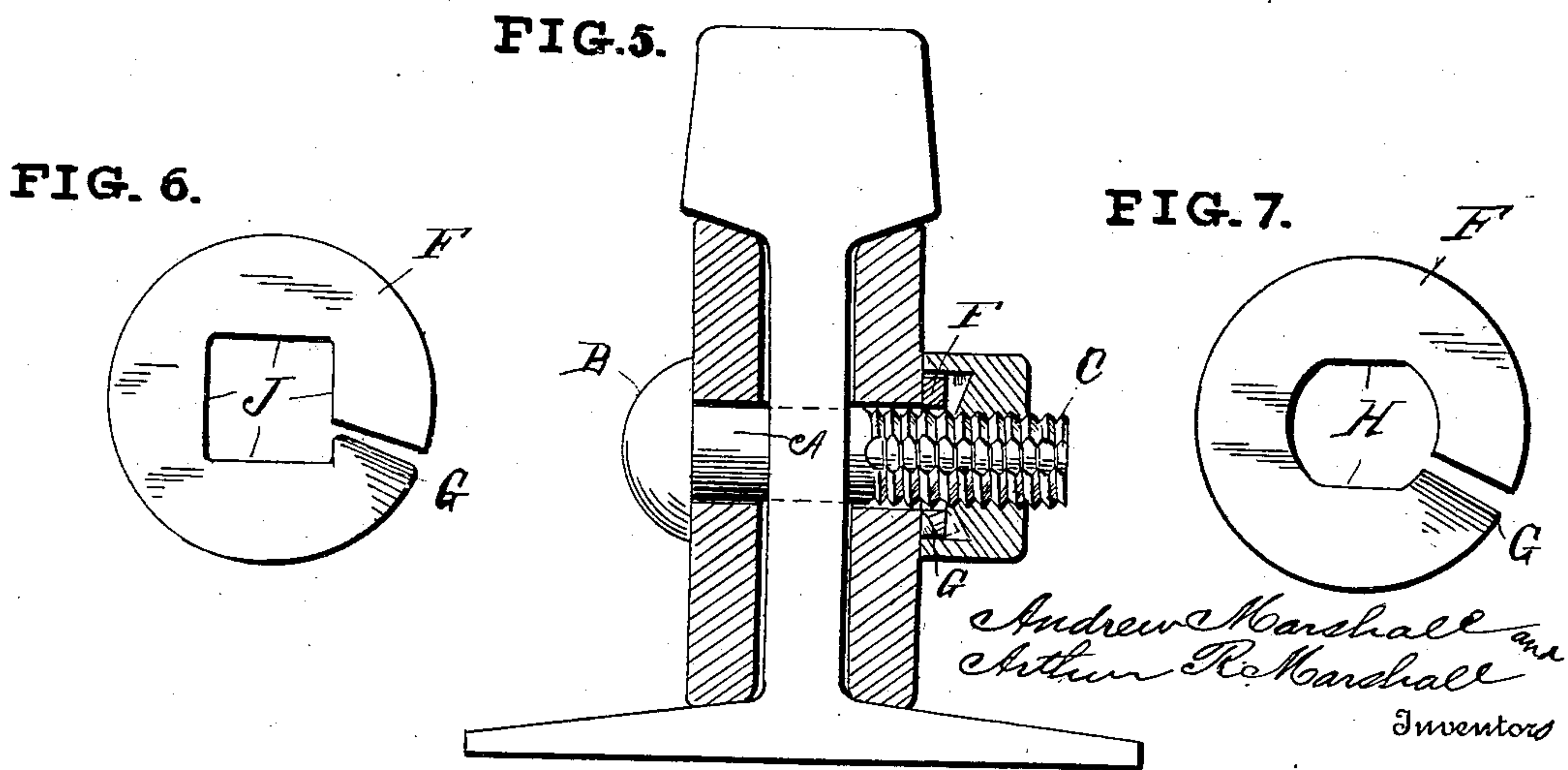
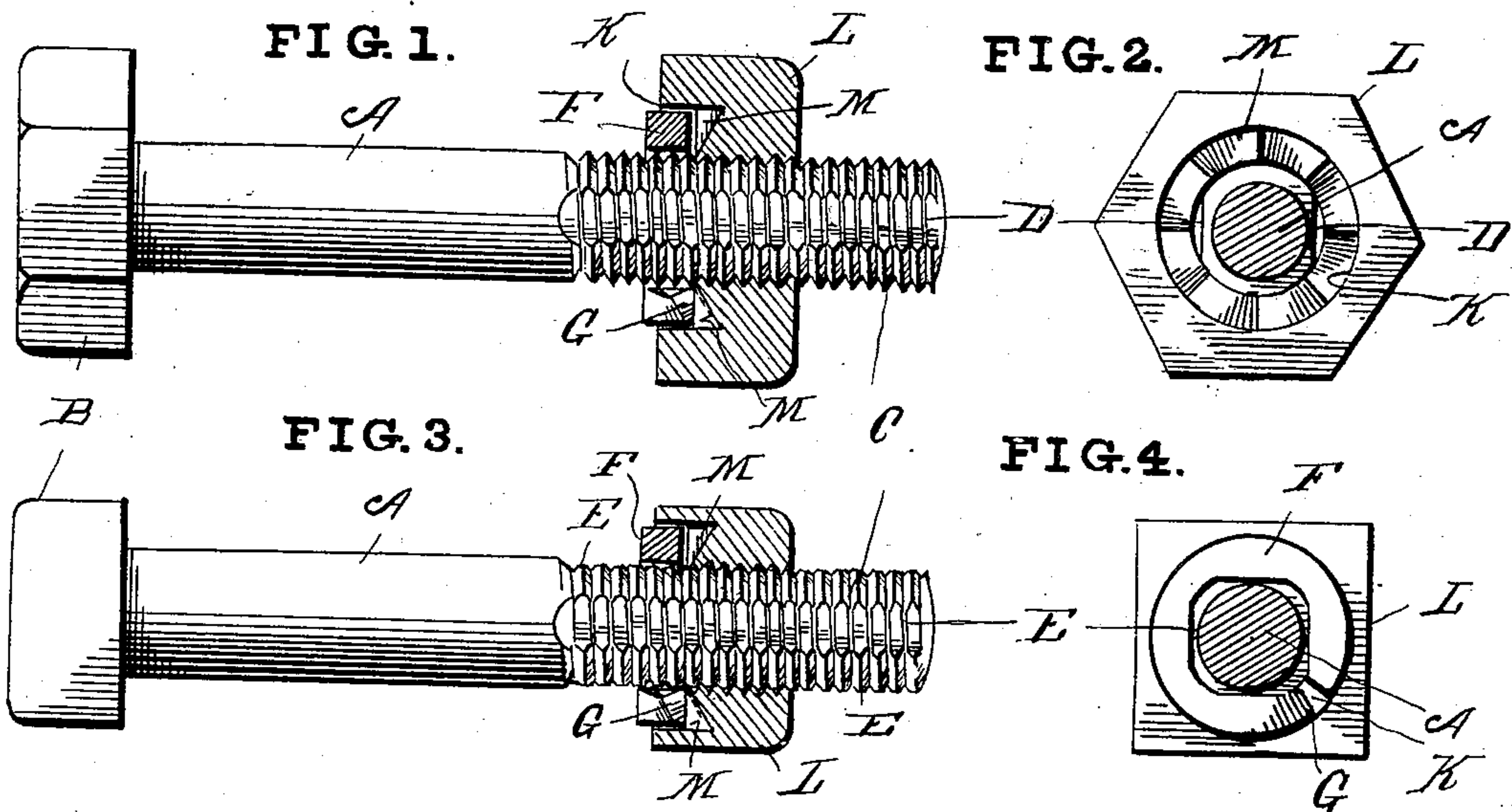
No. 742,466.

PATENTED OCT. 27, 1903.

A. & A. R. MARSHALL.
NUT LOCK.

APPLICATION FILED MAR. 23, 1903.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

ANDREW MARSHALL AND ARTHUR R. MARSHALL, OF PITTSBURG,
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NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 742,466, dated October 27, 1903.

Application filed March 23, 1903. Serial No. 149,025. (No model.)

To all whom it may concern:

Be it known that we, ANDREW MARSHALL and ARTHUR R. MARSHALL, citizens of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Locks, of which the following is a specification.

Our invention relates to improvements in nut-locks which while specially adapted for use upon railroad-tracks may be employed in any situation where it would perform the function of a nut-lock.

One object of our invention is the provision of a nut-lock which will permit of the nut, bolt, and locking means being made at a very small cost in order that the nut-lock will commend itself as desirable and practical from the point of economy.

Another object of our invention is the provision of a nut-lock which when in use will protect the locking parts from the damaging influence of the weather, and thus make the lock long-lived and prevent damage from the elements.

Another object of our invention is the provision of a nut-lock which will prevent the bolt from turning, also which will secure the locking mechanism from slipping, and which will form a perfect lock for the nut, thus possessing all the features to insure a practical nut-lock.

With these objects in view our invention consists of a nut-lock embodying novel features of construction and combination of parts, substantially as disclosed herein.

Figure 1 represents a side view with the locking parts of our nut-lock shown in section and in locked position. Fig. 2 represents a transverse sectional view with the locking-washer removed. Fig. 3 represents a side view, partly in section, of a modified form of our lock. Fig. 4 represents a transverse sectional view thereof with the locking-washer in place. Fig. 5 represents a sectional view of a rail and fish-plates with our nut-lock applied to illustrate the application of our invention. Figs. 6 and 7 represent views of the two forms of spring locking-washers which we employ.

In the drawings the letter A designates the bolt, having the head B and the threaded end

C, and we form the threaded end with two flat sides D or with four flat sides or faces E, and upon the threaded end of the bolt fits the spring-washer F, which has the spring locking finger or ratchet G and which may have the opening formed with two squared sides H or may have the four squared sides J, forming the rectangular opening.

The washer is made of a thick plate of steel and split at an angle to form the spring-finger, and the washer is preferably made circular or round in form to enable it to fit within the cavity or chamber K, formed in the inner face of the nut L, said nut being also formed with the series of vertical and inclined teeth M, any of which are adapted to be engaged by spring locking finger or ratchet G. We prefer to make the nut with the cavity or chamber and of circular form to allow the washer to fit snugly therein. We may also use the bolt with two square faces or with four, as required, and we claim particular advantage in having the nut formed with the cavity or chamber, the locking-washer fitted therein, and said washer formed with two or four square sides to fit the bolt and hold said washer from turning, and thus enabling the lock to operate perfectly without danger of slipping or working loose or spreading. Also our nut-lock can be made at a very small additional cost from the ordinary nut and bolt in common use, as the flat faces on the bolt and the chamber and teeth of the nut can be made without extra cost.

We claim—

The nut-lock herein described consisting of the bolt having the smooth faces, the flat washer having the straight edges to fit the smooth faces of said bolt and having the split ends, one formed with a spring locking-tongue, the nut fitting on the bolt and formed with a chamber or recess to receive the flat washer and having teeth to be engaged by the spring locking-tongue of the said washer.

In testimony whereof we affix our signatures in presence of two witnesses.

ANDREW MARSHALL.

ARTHUR R. MARSHALL.

Witnesses:

ALFRED B. DENT,

WM. N. MOORE.