

G. F. KILMER.

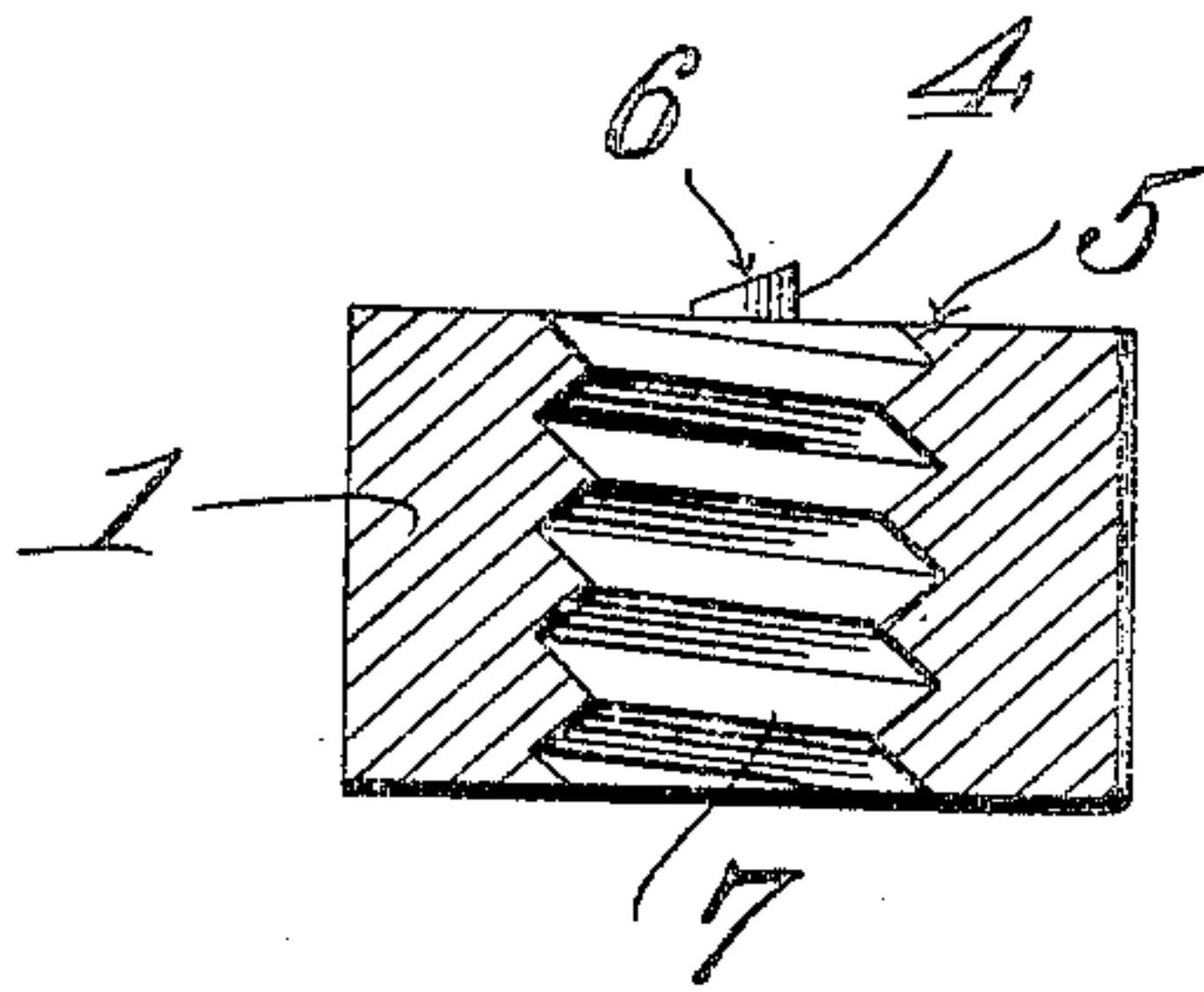
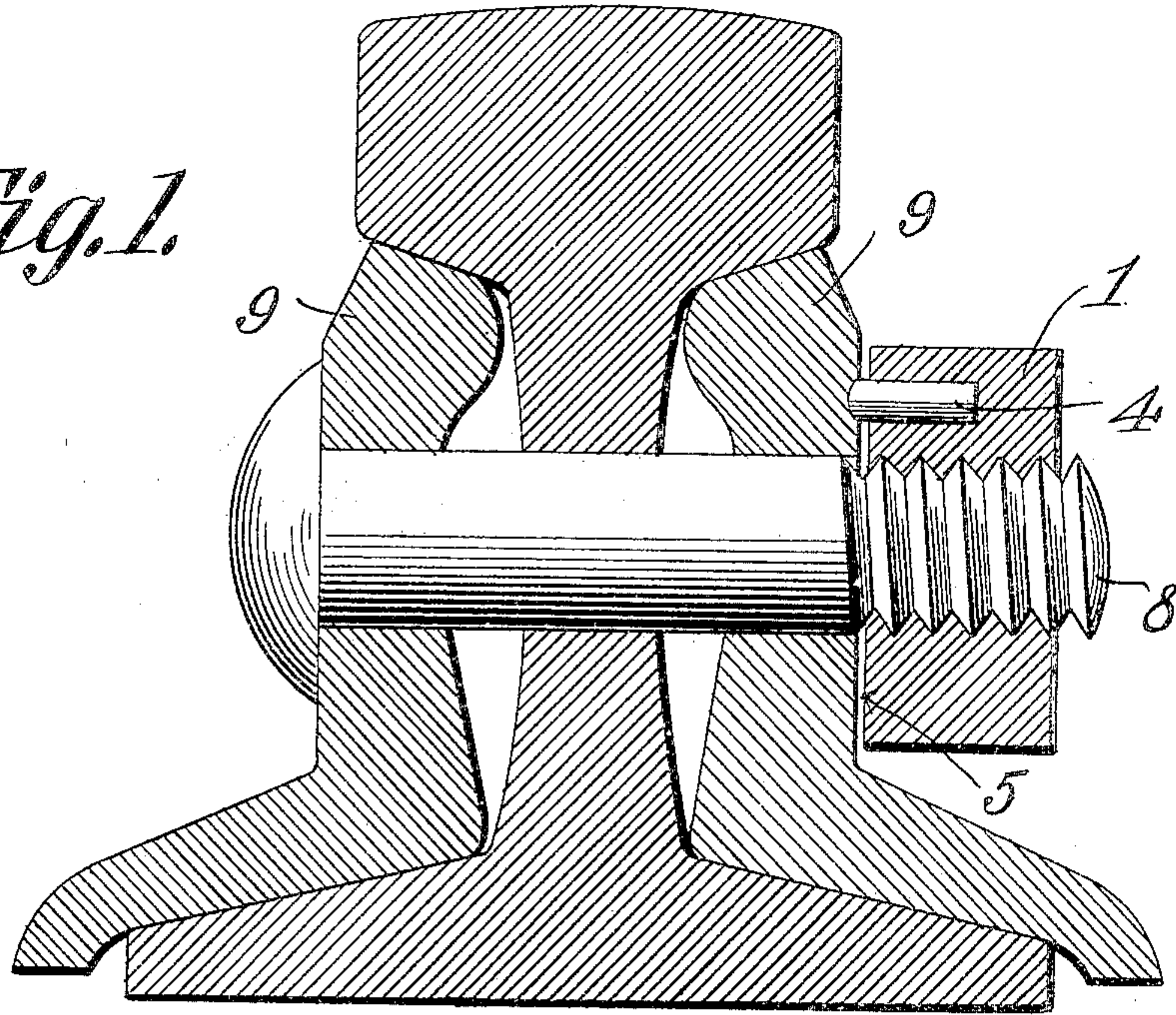
LOCK NUT.

APPLICATION FILED AUG. 20, 1906. RENEWED MAY 8, 1909.

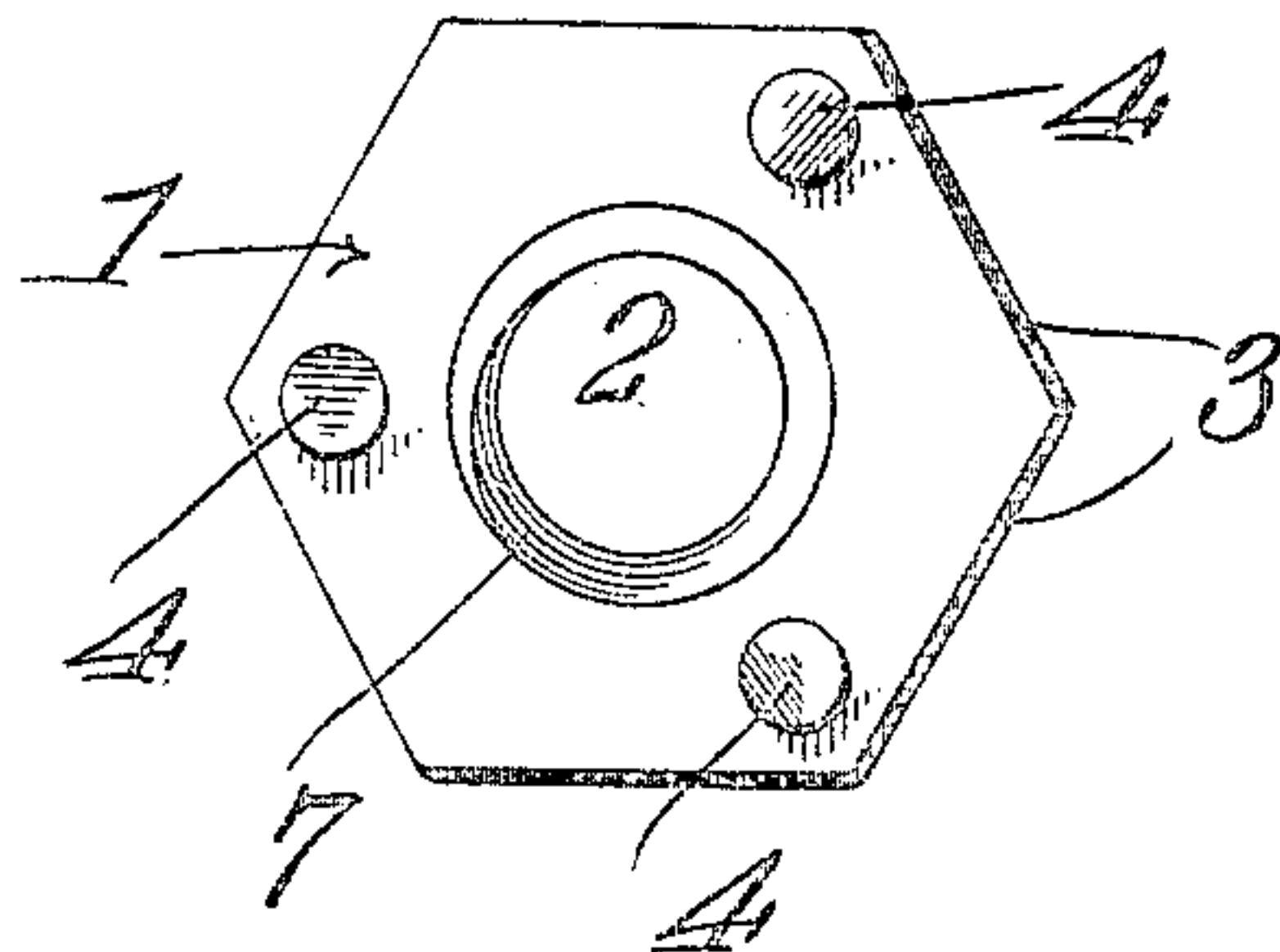
929,955.

Patented Aug. 3, 1909

*Fig. 1.*



*Fig. 3.*



*Fig. 2.*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE F. KILMER, OF BISBEE, ARIZONA TERRITORY.

## LOCK-NUT.

No. 929,955.

Specification of Letters Patent.

Patented Aug. 3, 1909.

Application filed August 20, 1906, Serial No. 331,405. Renewed May 8, 1909. Serial No. 494,922.

*To all whom it may concern:*

Be it known that I, GEORGE F. KILMER, a citizen of the United States, residing at Bisbee, in the county of Cochise and Territory of Arizona, have invented a new and useful Lock-Nut, of which the following is a specification.

This invention relates to lock nuts.

The object of the invention is to provide an extremely strong, simple, durable, inexpensive and thoroughly efficient device of the character specified which can easily and quickly be screwed into place in such manner as to cause it to bite into the adjacent fish-plate or other surface and thus become securely locked against accidental loosening or removal.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of the following claim without departing from the spirit of the invention or sacrificing any of its advantages.

In the accompanying drawings forming part of this specification: Figure 1 is a transverse section through a rail joint equipped with a lock nut constructed in accordance with the present invention; Fig. 2 is a view looking at the inner face of the improved lock nut; and Fig. 3 is a longitudinal section through the nut.

Like reference numerals indicate corresponding parts in the different figures of the drawings.

The improved lock nut of this invention comprises a body portion 1 which is formed with a central threaded bore 2 in the usual manner. The body portion 1 is formed with a plurality of flattened faces 3 which cause it to be polygonal in shape.

The particular improvement of the present invention consists in combining with a nut of the character set forth a triad of hardened steel pins 4 which are embedded in a triad of suitable equi-distant sockets in the body portion 1 in such manner as to project a slight distance outward from the end face 5

thereof the pins projecting equally from said sockets so that when the nut is screwed on a bolt passed through a plate the pins constitute a three-point bearing on the plate and prevent lateral stress being brought to bear on the bolt. In order to prevent the sockets which are formed in the body portion 1 to receive the hardened steel pins 4 from unduly weakening the said body portion 1, it is preferred to locate said sockets at the thickened portions of the nut adjacent the points of intersection of the flattened faces 3, as shown. Each of the hardened steel pins 4 has its outer end cut on an incline, as indicated at 6. The inclined end 6 of each of the hardened steel pins 4 extends at an angle opposite to the incline of the thread 7 at the side of the bore 2 nearest said end, as indicated clearly in the sectional view. For this reason, as the improved lock nut is screwed inward upon the bolt 8 so as to abut against the fish-plate 9, the inclined ends 6 which are disposed in advance of the acute angled edges of the respective pins will easily ride over the outer surfaces of the fish-plate and will bite thereinto when the nut is screwed entirely home, so that any accidental loosening or rearward rotation of the nut will be prevented by the grip which the sharp points of the hardened steel pins 4 will have taken in the fish-plate.

The improved lock nut of this invention is extremely strong, simple, durable and inexpensive in construction as well as thoroughly efficient in operation.

What is claimed is:

As an article of manufacture a nut provided with a triad of equi-distant sockets in the under side thereof and a triad of pins having beveled ends projecting equally from said sockets to constitute a three point bearing when said nut is in use, the inclined end faces of the pins being disposed in advance of the acute angled edges of said ends, as the nut is screwed on a bolt.

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

GEORGE F. KILMER.

Witnesses:

CHARLES ALVORD,  
GERALD PEEL.