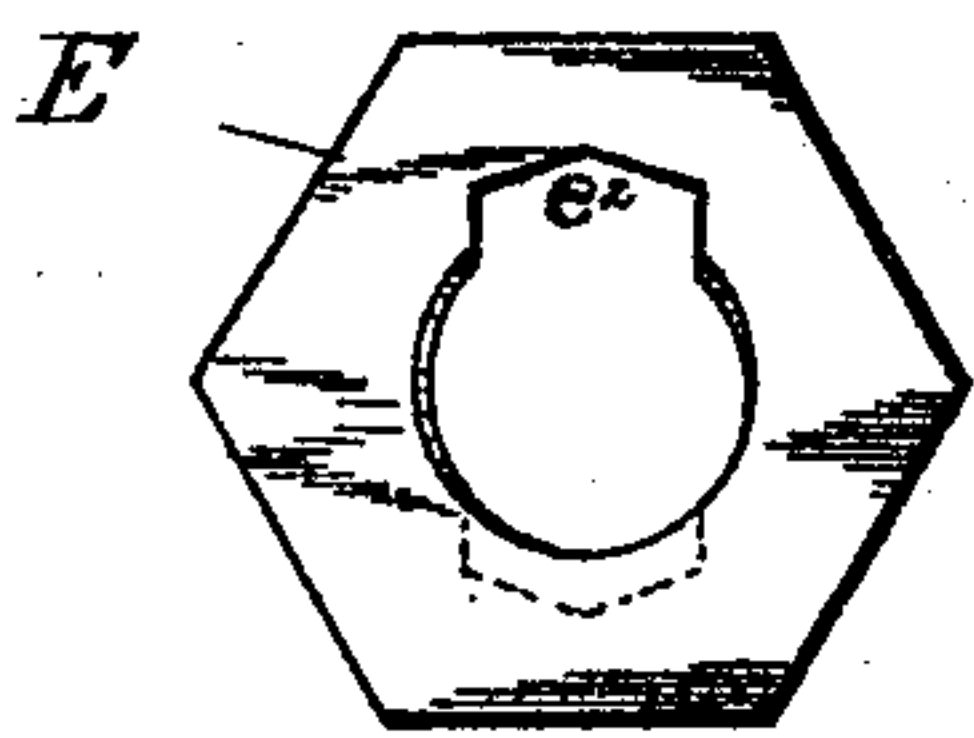
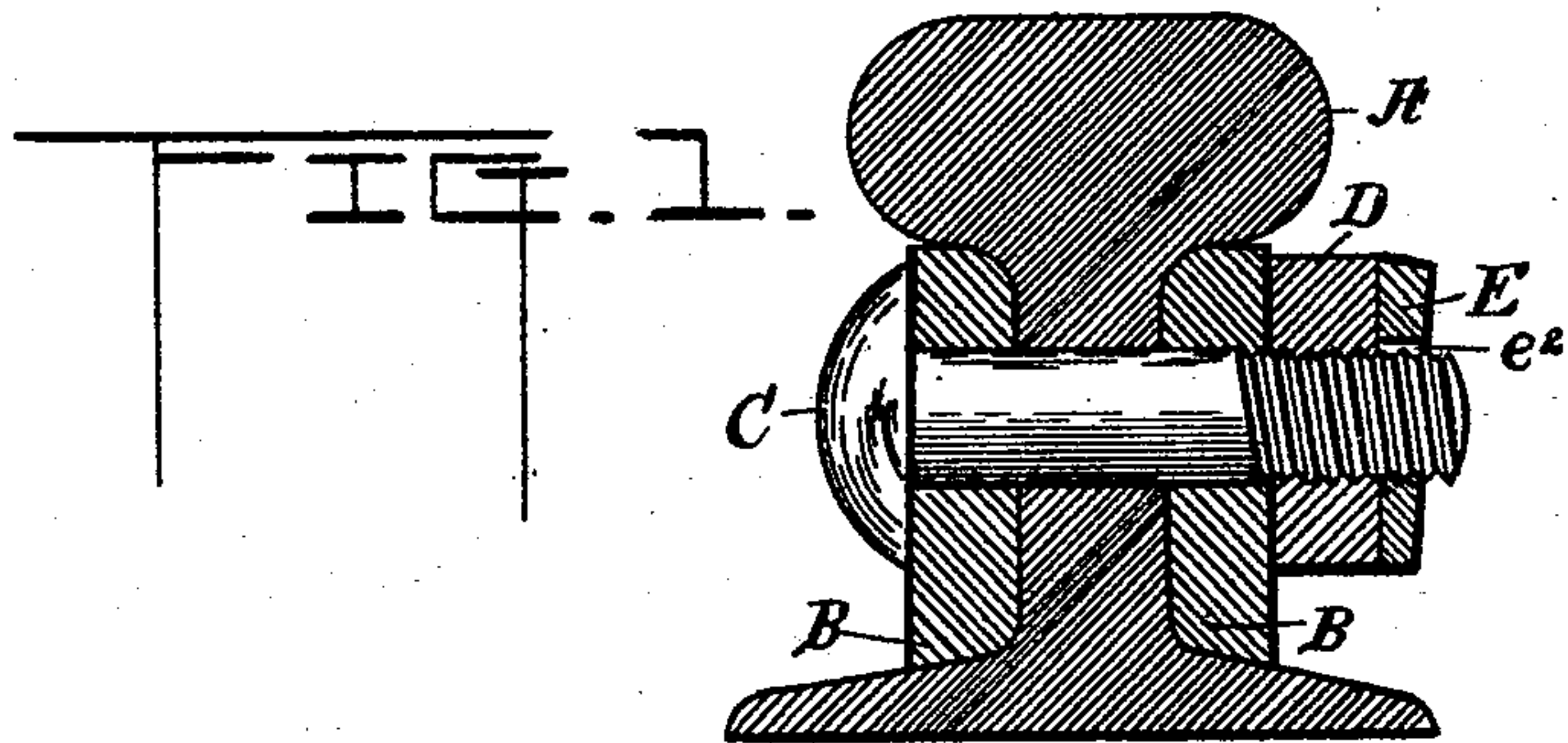


(No Model.)

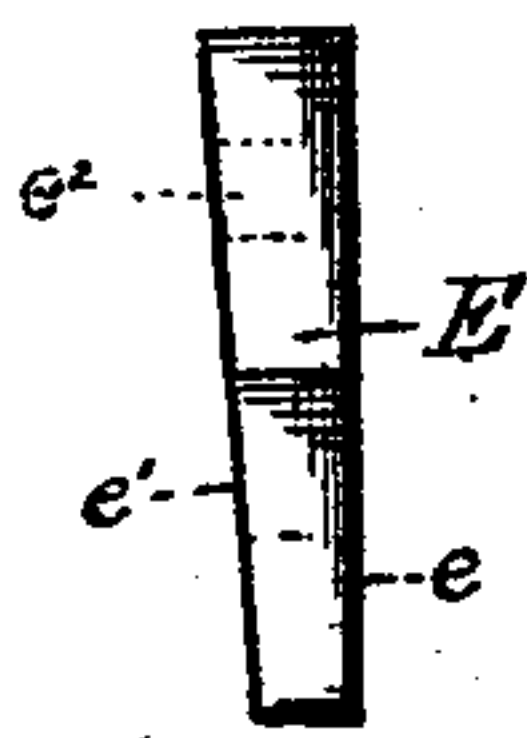
J. L. HUDSON.
NUT LOCK.

No. 497,666.

Patented May 16, 1893.



IG. 2.



IG-3.

Witnesses
Chas. E. Riordon.
Ralph Chiplon.

Inventor
John L. Hudson
By Will W. Douglas
his Attorney

UNITED STATES PATENT OFFICE.

JOHN LEWIS HUDSON, OF ATLANTA, GEORGIA, ASSIGNOR OF ONE-HALF TO
HAMILTON DOUGLAS, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 497,666, dated May 16, 1893.

Application filed December 9, 1892. Serial No. 454,600. (No model.)

To all whom it may concern:

Be it known that I, JOHN LEWIS HUDSON, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Nut-Locks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in nut-locks and consists in providing a bolt with an ordinary or primary nut designed to bear against the surface of one of the articles which it is desired to secure together, and a jam-nut adapted to bear against the outer face of said primary nut when the device is securely locked in position.

The object of my invention is to provide a nut-lock which shall be simple and inexpensive in construction, efficient in use and more durable and easy of operation than devices of this character heretofore in common use.

The invention further consists in the construction and arrangement of the various parts as will be more fully hereinafter described and particularly pointed out in the claims at the end of this description.

Referring to the accompanying drawings which form a part of this specification and in which similar letters of reference are used to denote similar parts in each of the several views, Figure 1, is a sectional view of my improvement applied to a railroad rail. Fig. 2, is a plan of the jam-nut; and Fig. 3, is a side elevation of Fig. 2.

A, in the drawings denotes an ordinary railroad rail, and B, B, the fish plates; C, a bolt of ordinary construction passing longitudinally through the same, and screw-threaded at one end to receive the nuts D and E. The primary nut D is of ordinary construction, of any convenient size and is designed to bear against the fish plate B.

E, denotes the jam or check-nut which is placed on said bolt and designed to bear against the outer face of said primary nut.

This nut E, I preferably construct of spring metal and make it substantially wedge-shaped in cross-section; that is, the inner face *e'* or face next to the primary nut D, is oblique to the bore of said nut, while the opposite face *e*, is perpendicular to said bore.

In the bore of the check-nut E, I provide the recess *e²*; said recess being formed by cutting away the threads in that portion of the bore adjacent to the thickest part of the nut.

The operation of my invention is as follows:—To firmly secure the fish plates, the primary nut is screwed upon the bolt so as to contact with the outer fish plate; the check or jam-nut is then screwed upon the bolt with its oblique face *e'* next to the primary nut. The thickest portion of said nut will necessarily be the first to contact with the primary nut. Then by further turning the check-nut this thick portion will, by reason of the resiliency of the metal bend outwardly, and its threads will be thrown across the threads of the bolt, thereby locking the primary nut firmly in position. This outward bending allows the thin portion of the nut to come flush with the primary nut, thereby distributing the strain over the entire surface of the nut, which as a matter of fact will enable said nut to withstand a much greater strain than if only a part of said face contacted therewith. To make the jam-nut even more efficient and if desired, another recess may be cut in the jam-nut as indicated in dotted lines in Fig. 2.

I have shown and described my improvement as used in connection with fish-plates on railroad-rails, but it is equally applicable in all cases where the primary nut is liable to become loosened by strain or otherwise; hence I do not desire to be understood as limiting my invention to the exact application shown and described.

In practice I make this jam-nut of any suitable material, but preferably of spring metal and quite thin; in fact only thick enough to admit of about two threads.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A jam-nut of spring metal having an ob-

lique and a perpendicular face and having its threads cut away to form a recess in that part of its bore adjacent to the thickest portion of the nut, substantially as described.

- 5 2. In a nut-lock the combination with the fish-plates, of a bolt passing through said fish-plates, a primary nut adapted to bear against one of said plates and a jam-nut of spring metal having a perpendicular and an oblique

face and provided with a recess substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN LEWIS HUDSON.

Witnesses:

THOMASINA SHELTON,
THOS. H. NORTHERN.