

No. 610,878.

Patented Sept. 13, 1898.

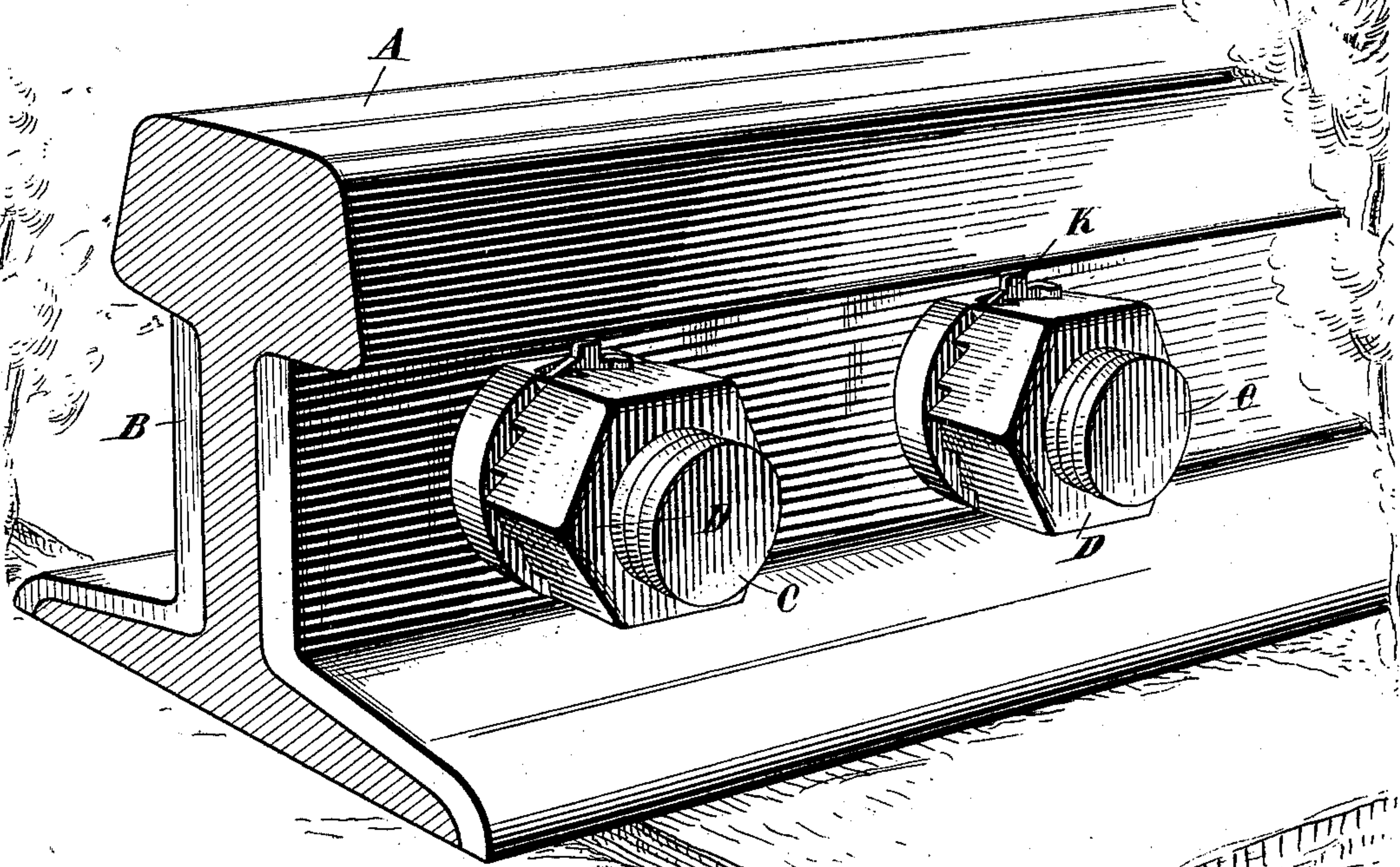
W. T. PENDLEY & C. C. FINCHER.

NUT LOCK.

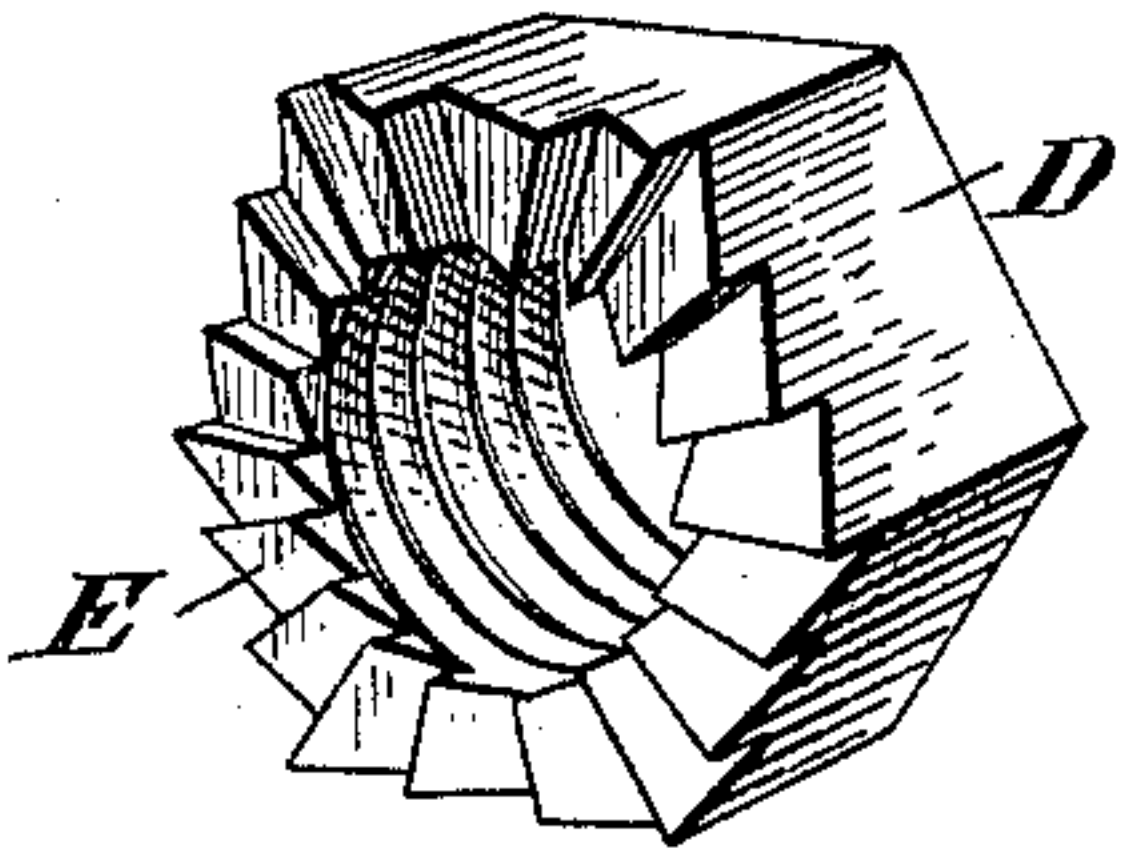
(Application filed Sept. 17, 1897.)

(No Model.)

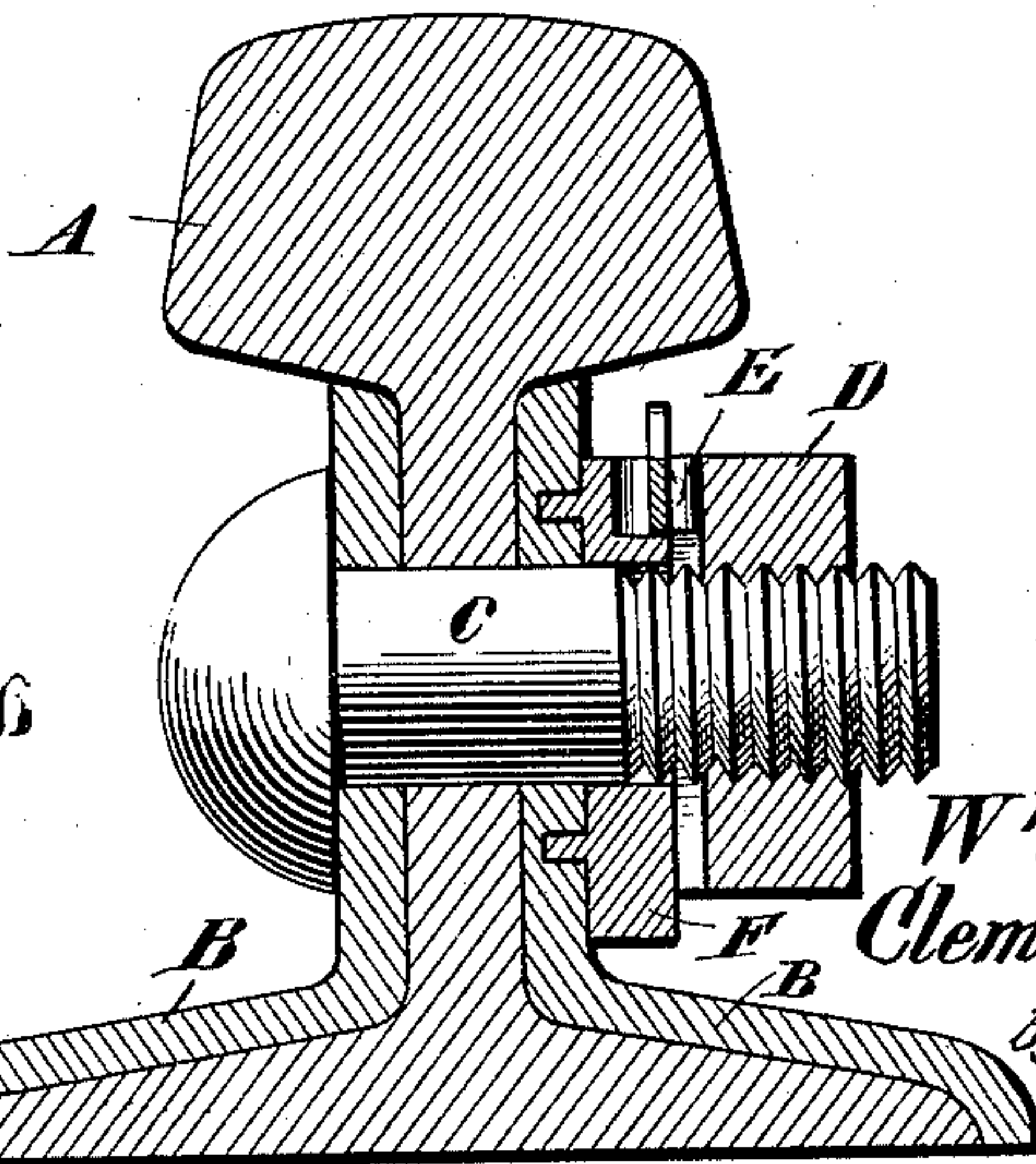
*Fig. 1.*



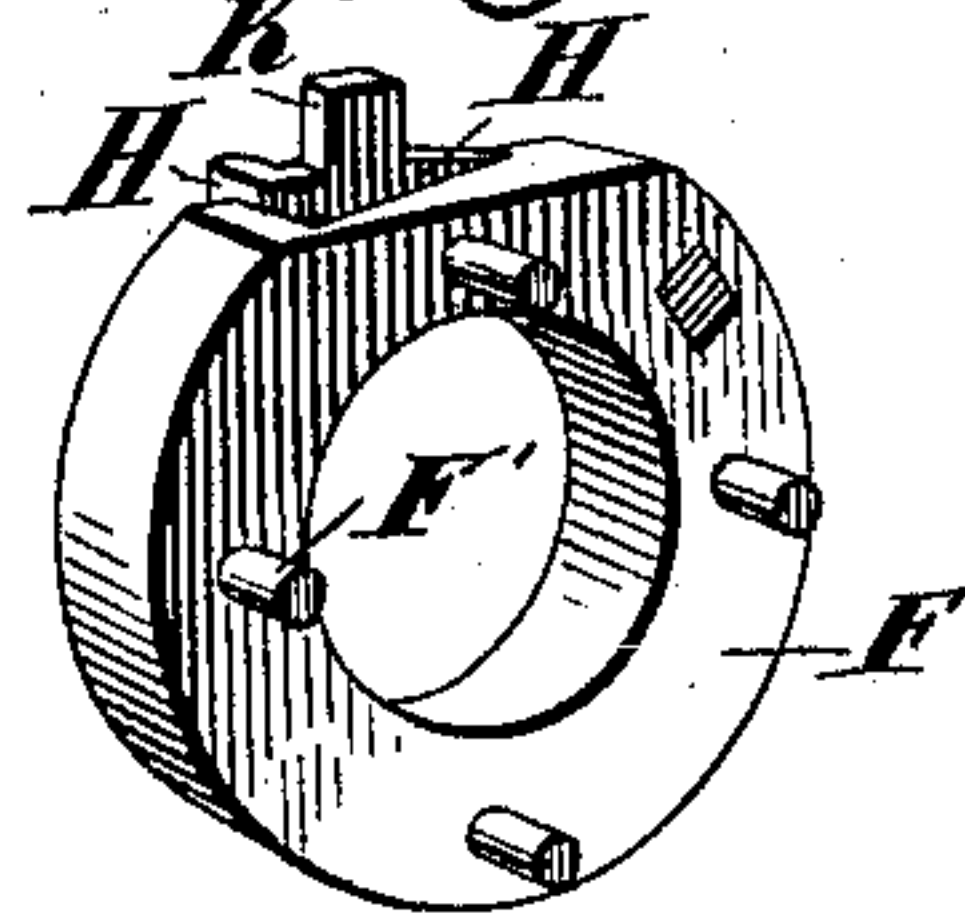
*Fig. 3.*



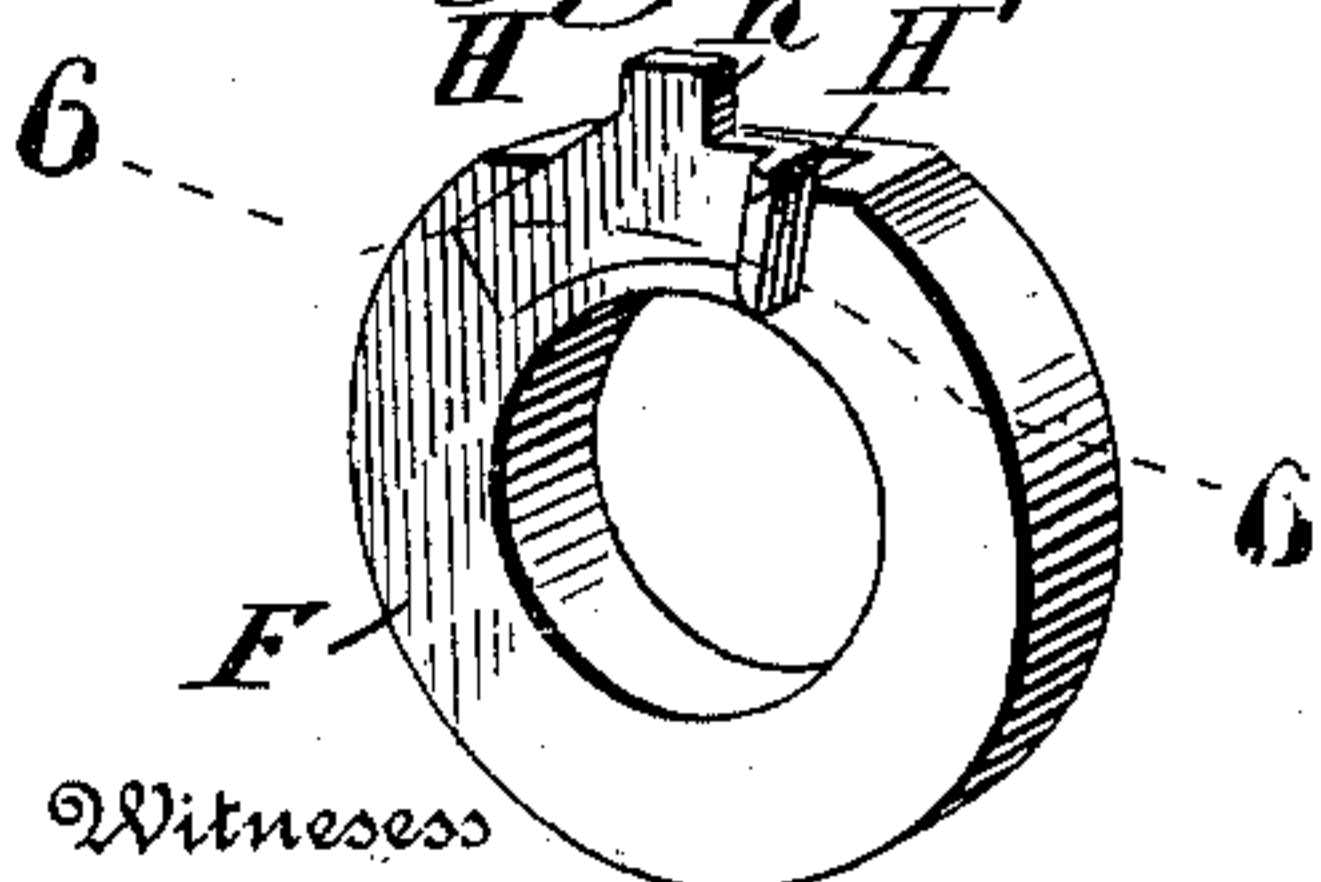
*Fig. 2.*



*Fig. 5.*



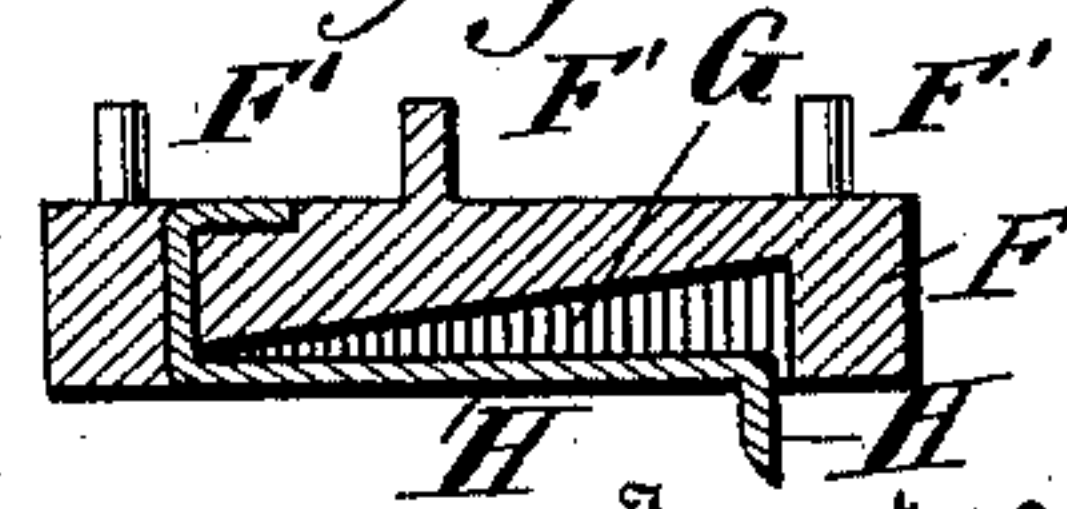
*Fig. 4.*



Witnesses

*T. W. Riley,*  
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*Fig. 6.*



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# UNITED STATES PATENT OFFICE.

WILLIAM T. PENDLEY AND CLEMON C. FINCHER, OF MILAN, GEORGIA.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 610,878, dated September 13, 1898.

Application filed September 17, 1897. Serial No. 652,082. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM T. PENDLEY and CLEMON C. FINCHER, residents of Milan, in the county of Telfair and State of Georgia, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention relates to improvements in nut-locks, and has for its object to provide a device of this character which will firmly secure the nuts against rotation upon the bolts, at the same time being provided with means whereby the unlocking of the nut may be effected.

Our improved nut-lock is exceedingly simple in construction as well as efficient in action, and the parts being interchangeable as between one bolt and another they may be manufactured and marketed as a separate article aside from the bolt, or bolts may be provided with the entire mechanism therewith.

As illustrated in the drawings herewith, our improved nut-lock is shown in connection with railway construction; but it is apparent that it may be applied in any place where bolts are projected.

In the drawings herewith, forming a part of this specification, in which like parts are indicated by similar letters of reference, Figure 1 is a perspective view of a portion of a rail and fish-plate secured by a bolt provided with our improved nut-lock. Fig. 2 is a vertical section of a rail and fish-plates through the bolt-apertures. Fig. 3 is a perspective view showing the inner face of the nut. Fig. 4 is a perspective view showing the outer face of the washer. Fig. 5 is a similar view showing the inner face of the washer. Fig. 6 is a section on lines 6 6 of Fig. 4.

Referring to the drawings by letters, A is a rail; B, the fish-plates; C, the bolt, which is of ordinary construction, and D the nut, having its inner face E ratcheted, as shown.

F is a washer, which is provided upon its inner face with a plurality of inwardly-projected pins at right angles therewith, said pins being adapted to enter corresponding apertures provided in the outer fish-plate or in the bearing-surface through which the bolt is projected. The outer face of said washer F is provided with a recess G, having an inclined

bottom, in which recess is confined a plate-spring H, having one end projected through the washers and clenched upon its inner face and its free end H' bent outwardly at right angles with itself and beveled. The normal position of said spring is that shown in Fig. 6. Said spring is also provided with a laterally-extended portion K, by which it may be depressed into the bottom of said recess G whenever desired.

The parts having been constructed as above set forth, the operation of our device is as follows: The bolt C is first passed through and the washer F is passed over its screw-threaded end, the pins F projecting into the apertures provided in the bearing-surface. The nut is then applied and rotated upon the screw-threaded end of the bolt until said bolt is sufficiently tightened. As soon as the ratchet-teeth E of the nut engage with the end H' of the spring H the latter will be depressed into the recess G until the inner surface of the nut rests upon the outer surface of the washer. In this position the spring H will not reach entirely to the bottom of the recess G, but have sufficient additional play therein so as to be pushed out of its engagement with said ratcheted surface E by means of its projected portion K, upon which the nut can be backwardly rotated.

We thus provide a simple device by which not only a nut can be expeditiously locked upon a bolt, but which with equal expedition may be unlocked and rotated off the bolt.

We are aware of numerous inventions in which the inner surface of the nut is ratcheted and made to engage with the edge of a spring adapted to prevent backward rotation, but we are not aware of any construction in which a washer provided with a spring is held rigidly upon a bearing-surface and adapted to lock a nut by contact therewith.

Having thus described our invention, what we claim as new, and desire to secure by means of Letters Patent, is—

In a nut-lock, the combination with the fish-plate, of a washer provided with a series of inwardly-projecting pins adapted to enter apertures formed in the bearing-surface of said fish-plate, said washer being provided on its outer surface with a recess having an inclined

bottom, a plate-spring secured in said recess at its shallow end and having its free end bent at right angles and projected outwardly and beveled, a nut having an inner ratcheted face  
5 adapted to be engaged by the outwardly-projecting end of said spring, and an outwardly-projecting lug formed on said spring, whereby it may be pushed out of engagement with the nut, substantially as shown and described.

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Witnesses:

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W. H. STUDSTILL.