

No. 611,930.

Patented Oct. 4, 1898.

M. B. PARKER.
NUT LOCK.

(Application filed May 22, 1897.)

(No Model.)

Fig. 1.

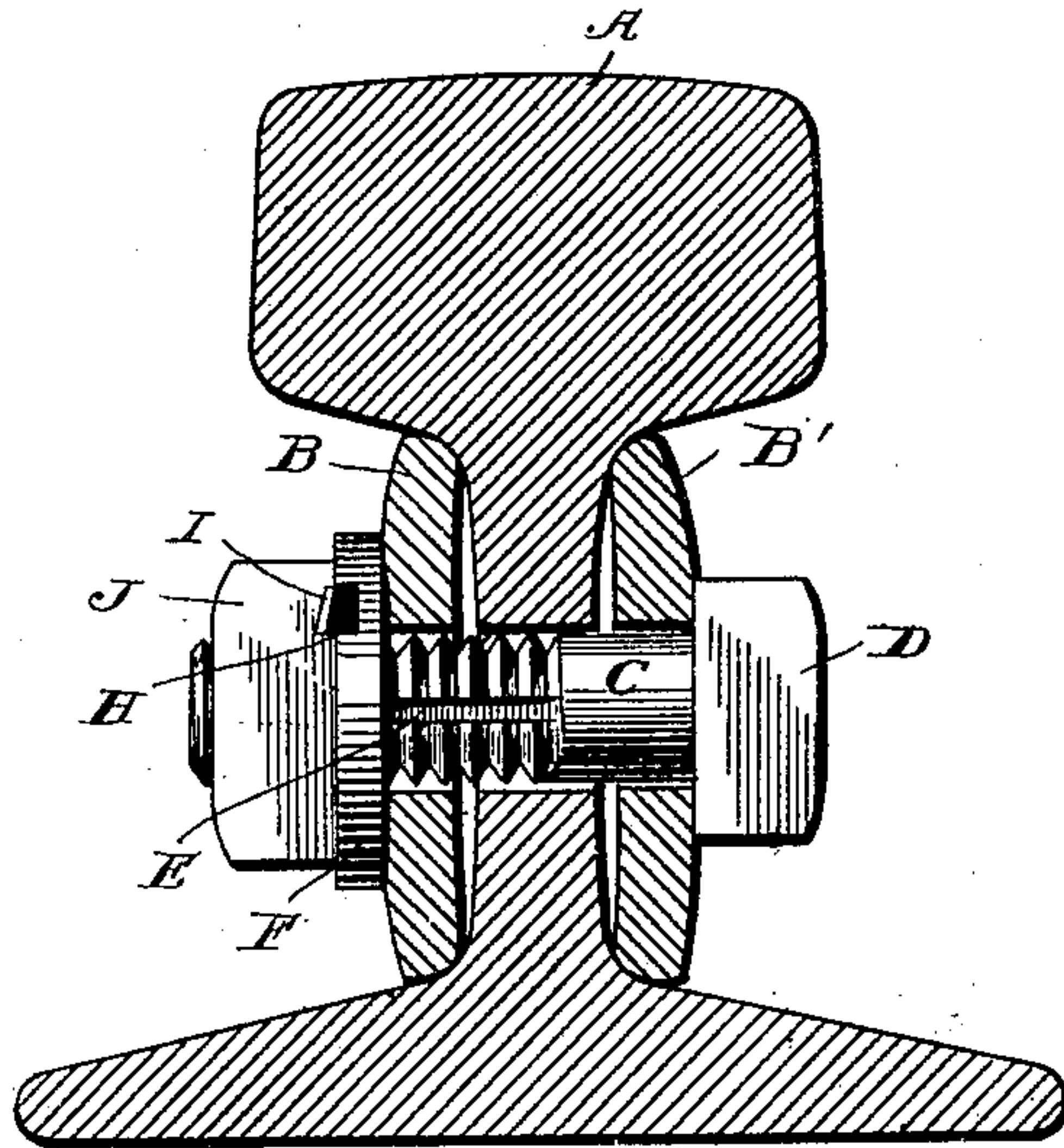


Fig. 2.

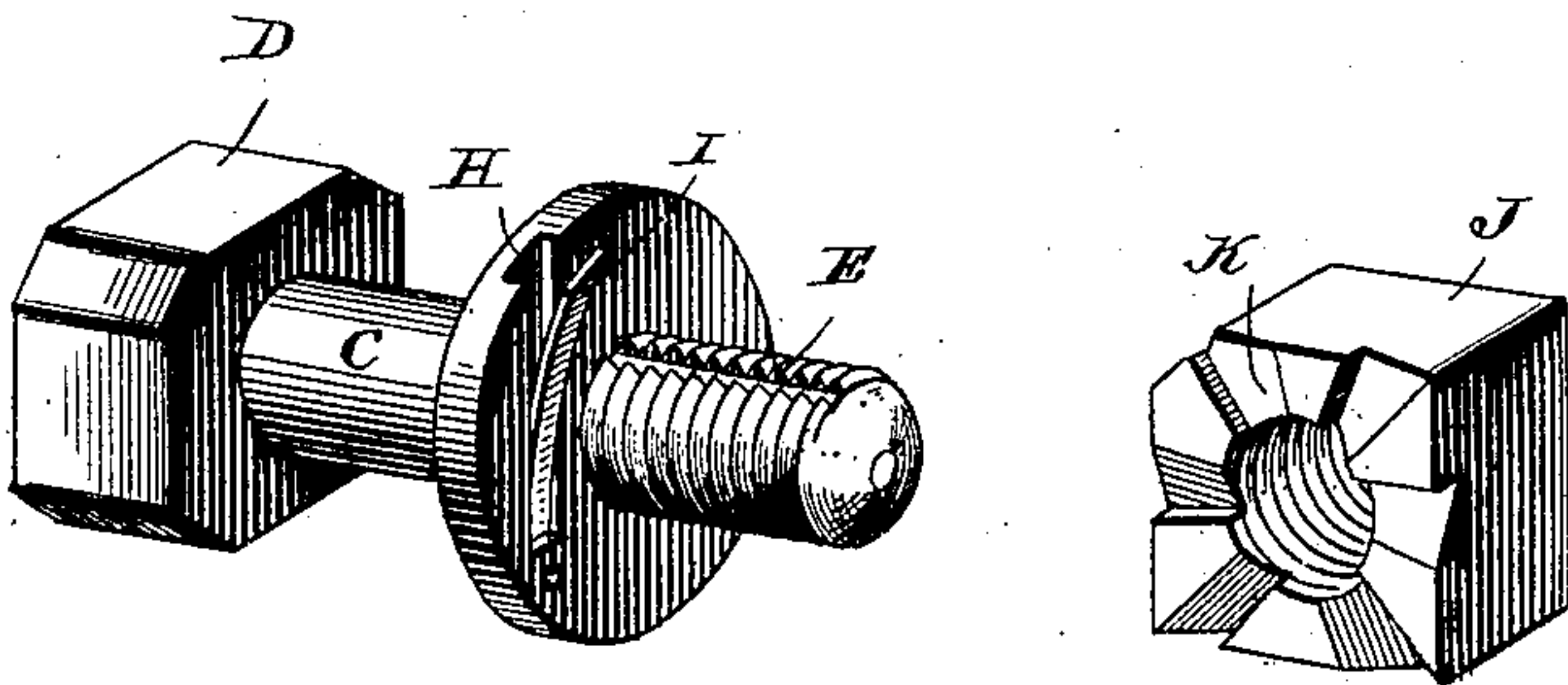


Fig. 4.

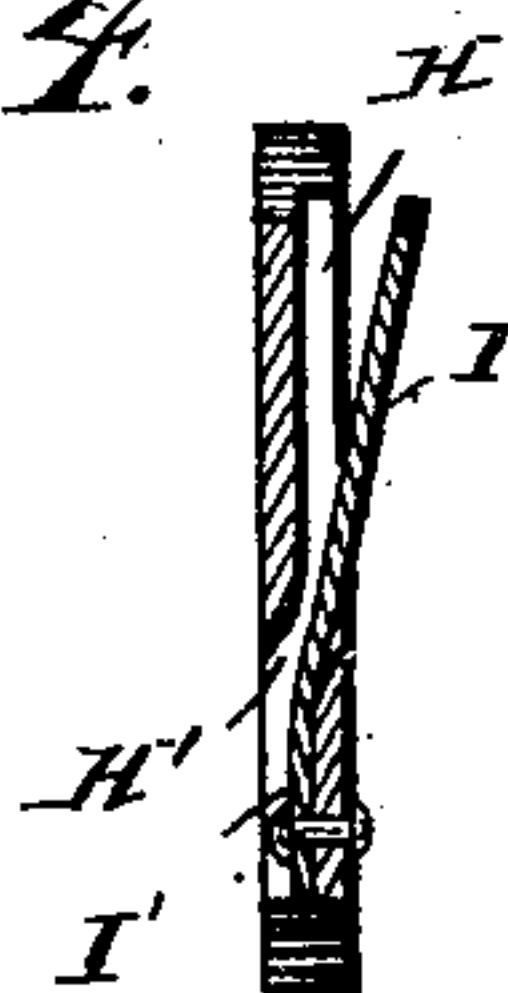
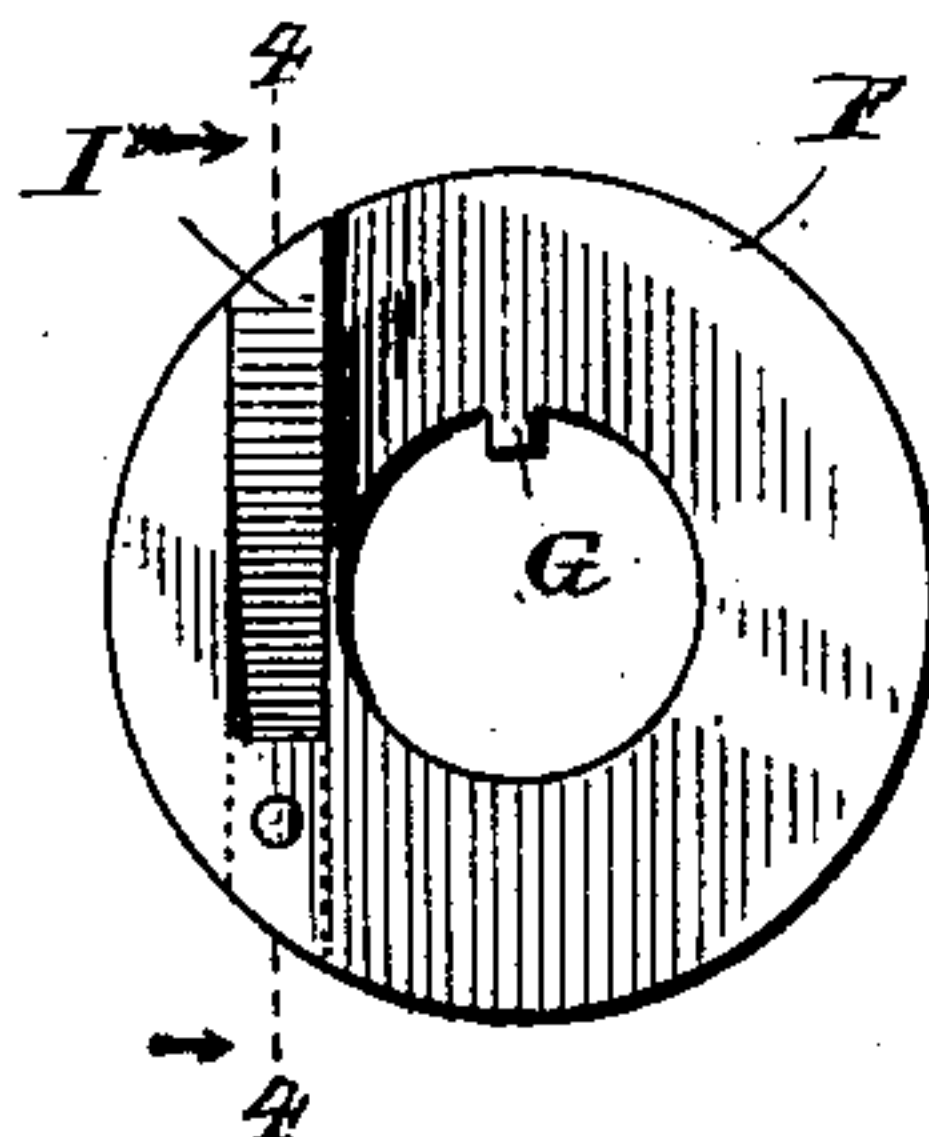


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

MANNIE B. PARKER, OF NORMAN, OKLAHOMA TERRITORY, ASSIGNOR OF
ONE-HALF TO ROSCOE J. MORGAN, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 611,930, dated October 4, 1898.

Application filed May 22, 1897. Serial No. 637,691. (No model.)

To all whom it may concern:

Be it known that I, MANNIE B. PARKER, residing at Norman, in the county of Cleveland and Territory of Oklahoma, have invented a new and useful Nut-Lock, of which the following is a specification.

My invention relates to nut-locks, and has for its object to furnish a nut-lock for use with bolts and nuts wherever they may be used, particularly to secure fish-plates to railroad-rails, which shall be simple to construct, readily placed in position, reliable in securing the nut against accidental displacement, and easily removed when necessary.

With this object in view my invention consists in the improved construction, arrangement, and combination of parts hereinafter fully described and afterward specifically pointed out in the claim.

In order that persons skilled in the art to which my invention most nearly appertains may construct and use the same, I will now proceed to describe its construction and operation, having reference to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical transverse section through a railroad-rail and fish-plate having my improved nut-lock applied thereto in practical operation, the nut, bolt, and washer being shown in side elevation. Fig. 2 is a detail perspective view showing the several parts of my nut-lock, the nut being detached from the bolt. Fig. 3 is a detail view in elevation showing the washer detached from the other parts. Fig. 4 is a detail sectional view on the line 4 4 of Fig. 3, looking in the direction of the arrow.

Like letters of reference mark the same parts wherever they occur in the different figures of the drawings.

Referring to the drawings by letters, A is a railroad-rail, and B B' are the fish-plates for joining the ends of the same. These parts are of the usual or any ordinary or preferred construction.

C is a bolt to be passed through the usual opening in the railroad-rail web and fish-plates, having a head D of ordinary construction and provided with a longitudinal groove or spline

E, cutting transversely through one side of its threads.

F is a washer provided with an inwardly-projecting feather to engage in the spline-way E of the bolt C when placed thereon. A groove H is formed in one of the faces of said washer which extends inwardly from its edge, and said washer is slotted at the inner end of the groove, as illustrated at H'. A spring I is secured adjacent its lower end in the groove I' of the opposite face of the washer and in line with the groove H, the opposite end of the spring being bent upwardly to engage the ratchet of the nut.

By my improved construction it will be seen that the spring is attached to the washer in a very neat manner and so as to be extremely effective in operation. By securing the spring at a point adjacent the end the spring is rendered much more resilient than those constructions in which but a small portion of the spring constitutes the spring tongue or pawl for engaging the ratchet of the nut.

J is a nut provided with any desired number of turning-faces and with the usual opening threaded to engage the thread of the bolt and having its inner face provided with a series of teeth K, forming a circular ratchet around the central opening, such series being adapted to slide over spring I in turning the nut onto the bolt and to engage against the end of said spring when any attempt is made to turn the nut off the bolt, the spring acting as a spring-pawl during such operations.

The rails being in position and the fish-plates B B' being placed on the sides of the web thereof with the openings in the fish-plates registering with the openings in the web of the rail, the bolt is passed through the fish-plates and the web of the rail, the threaded end projecting beyond the face of the plate. The washer is now slid upon the bolt with the tooth G resting in spline E, the side of the washer containing the groove and spring being outside. The nut is now screwed up on the bolt with its toothed face inward. As soon as the teeth of the nut come in contact with the spring I it will engage the faces of said teeth and act as a pawl and prevent the nut from being unscrewed or turned back-

ward. If, however, it is desired to remove the nut, the spring may be pressed into the groove H by means of any suitable tool, which will free it from contact with the teeth of the
5 nut and permit the nut to be unscrewed in the same manner as would a plain nut.

From the foregoing description it will be obvious that my improved nut-lock is simple, cheap, efficient, and durable. It can be easily
10 manipulated by any unskilled person and contains no expensive parts liable to loss or breakage.

While I have illustrated and described the best means now known to me for carrying
15 out my invention, I do not wish to be understood as restricting myself to the exact details of construction shown and described, but hold that any slight changes or variations, as might suggest themselves to the ordinary
20 mechanic, would properly fall within the limit and scope of my invention.

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

The combination in a nut-lock, of a bolt 25 having a splineway, a washer having a feather to engage said splineway and provided on one of its faces with an inwardly-extending groove which communicates with a slot
30 formed in the washer at the inner end of said groove, a spring-tongue secured upon one of the faces of the washer and passed through a slot therein to the opposite face of said
washer and in line with the groove, and a nut 35 having a ratchet formed on its opposite face to be engaged by the tongue, substantially as set forth.

MANNIE B. PARKER.

Witnesses:

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