

No. 819,225.

PATENTED MAY 1, 1906.

G. HARWELL.
NUT LOCK.

APPLICATION FILED FEB. 15, 1905.

Fig. 1.

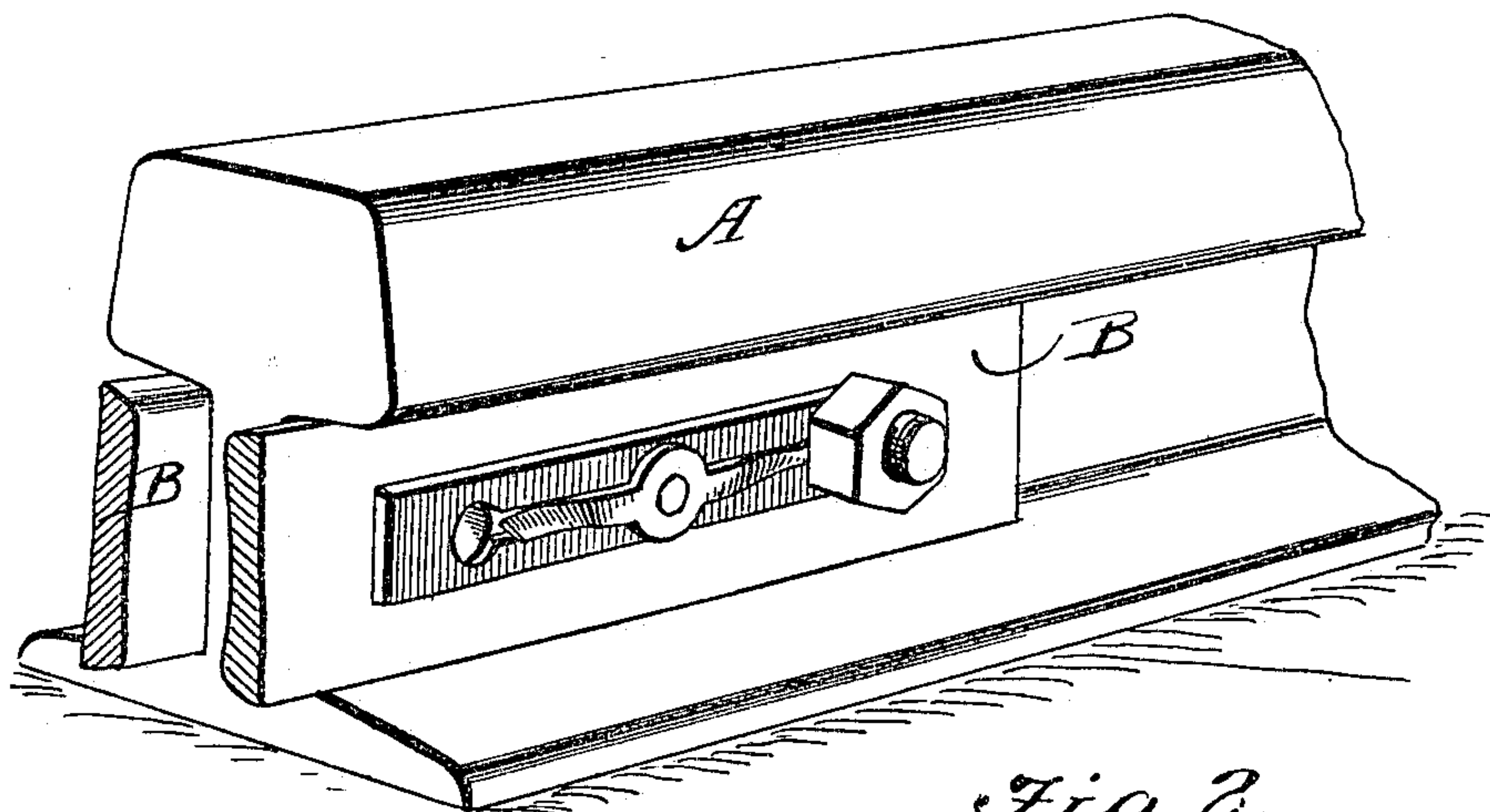


Fig. 2.

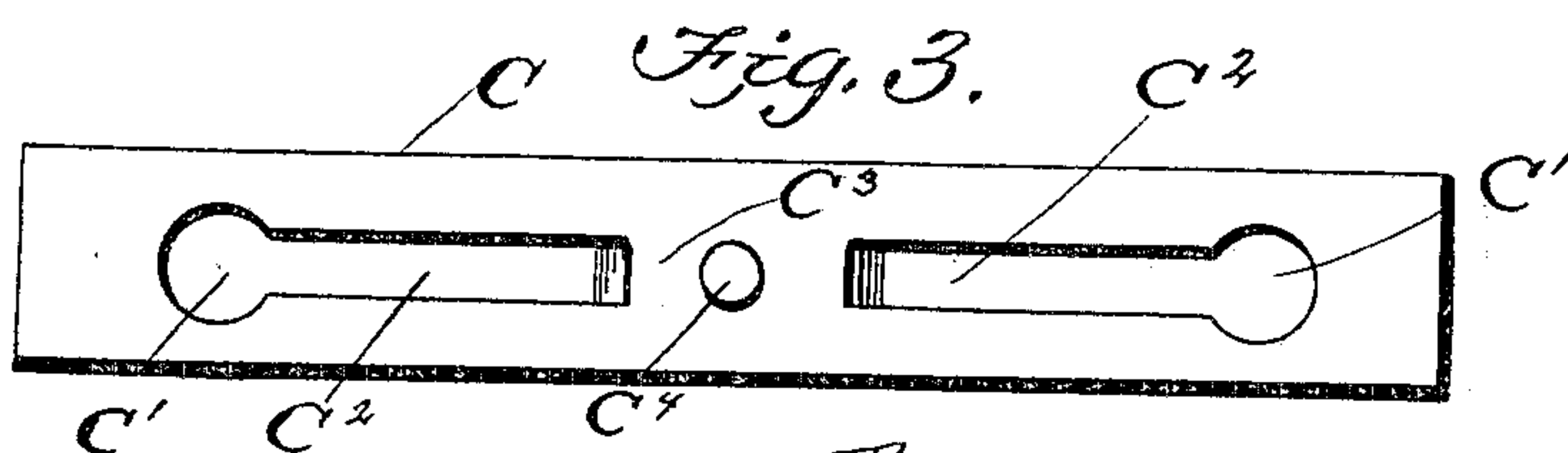
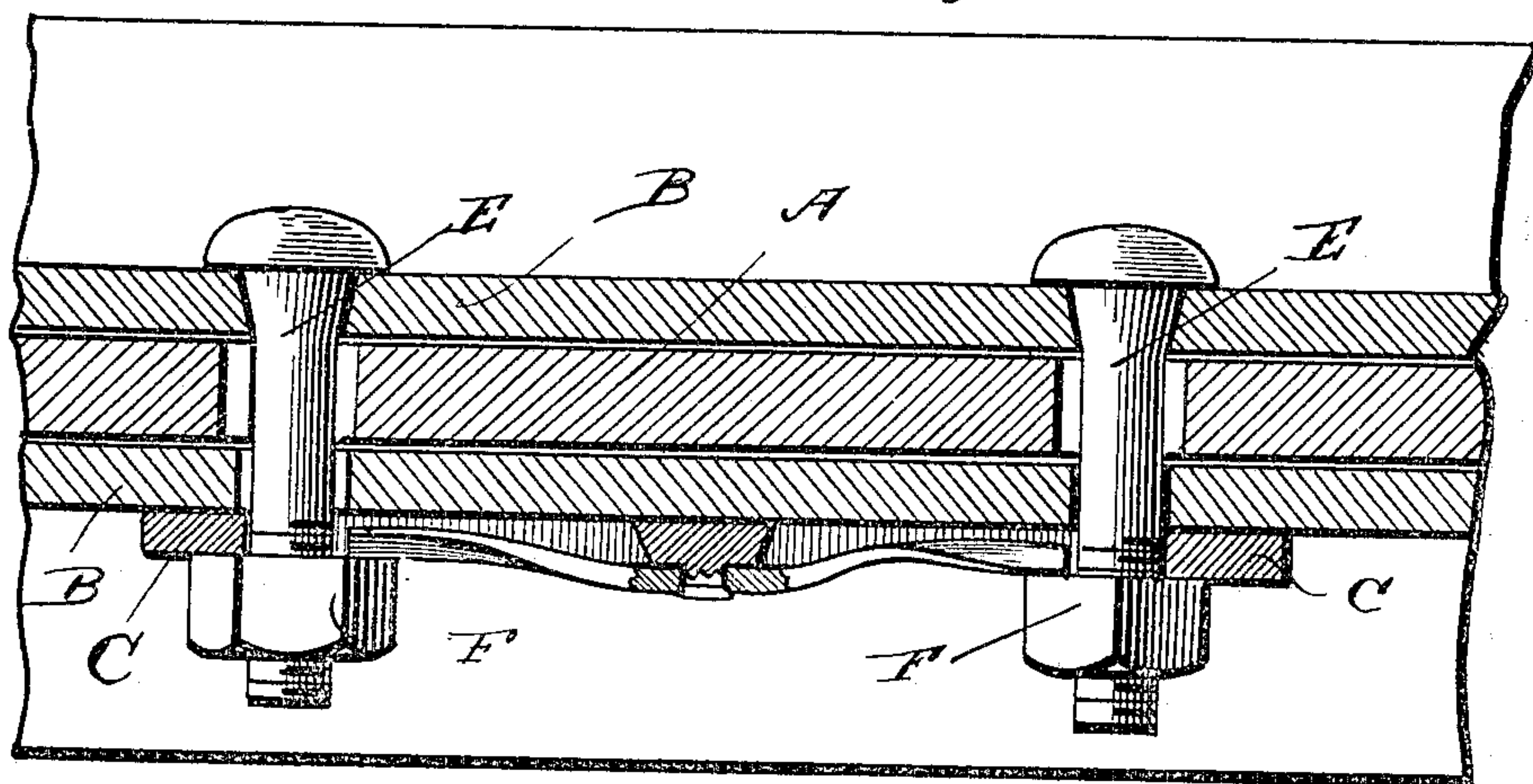
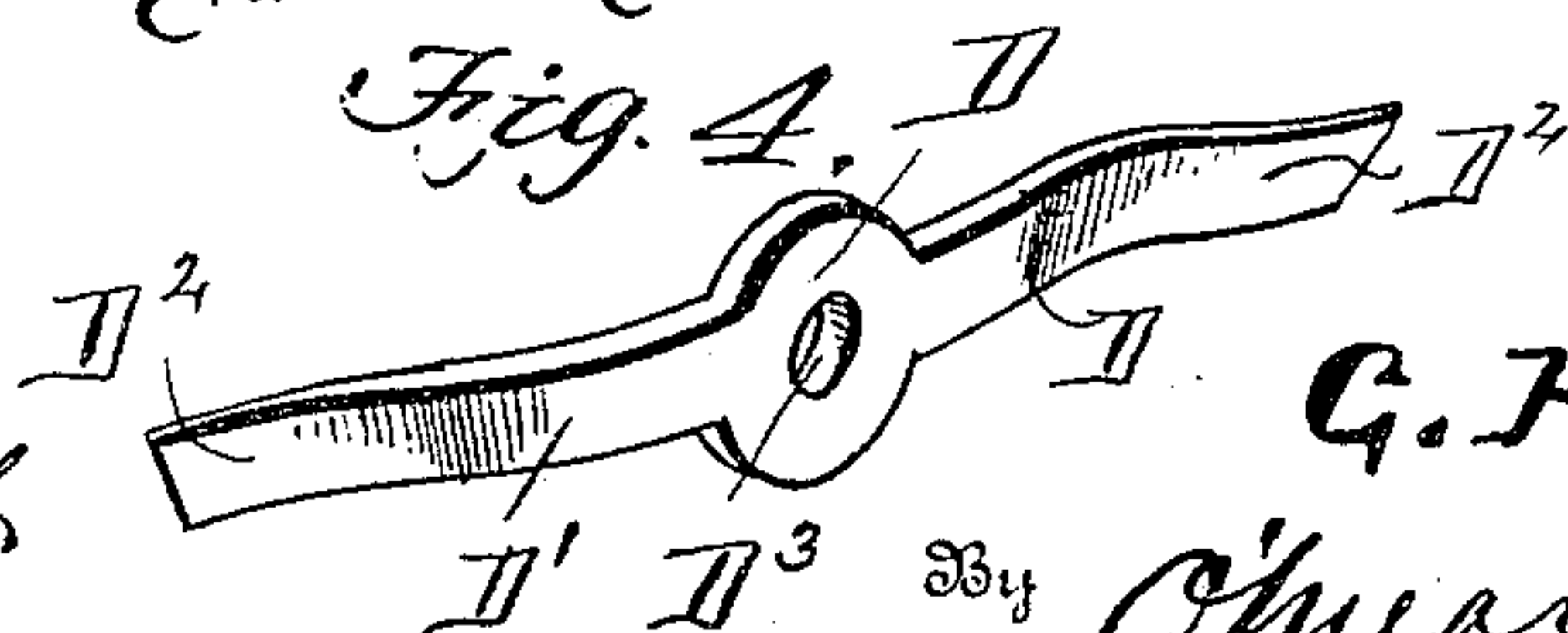


Fig. 4.



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NUT-LOCK.

No. 819,225.

Specification of Letters Patent.

Patented May 1, 1906.

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To all whom it may concern:

Be it known that I, GALVESTON HARWELL, a citizen of the United States, residing at Cartersville, in the county of Bartow and State of Georgia, have invented a new and useful Nut-Lock, of which the following is a specification.

This invention relates generally to nut-locks, and particularly to an improved construction of locking device specially adapted for holding tight the nuts arranged upon the bolts employed for uniting the ends of railroad-rails. It is obvious, however, that my construction of nut-lock is also suitable for use in bridging, building, and structures of similar character.

The object of my invention is to provide a simple and efficient form of nut-lock which will hold the nut from reverse rotation, and a still further object is to provide a device which can be easily unlocked whenever it is desired to remove the nut.

With these objects in view my invention consists, essentially, in the employment of a slotted washer-plate having a central portion to which a spring locking-plate is attached, said locking-plate having two arms twisted at their outer ends and adapted to engage the under side of the nut for the purpose of holding said nut against reverse rotation.

The invention consists also in certain details of construction and novelties of combination, all of which will be hereinafter fully described, and pointed out in the claim.

In the drawings forming a part of this specification, Figure 1 is a view showing the practical application of my invention. Fig. 2 is a sectional view, partly in top plan. Fig. 3 is a detail elevation of the washer. Fig. 4 is a detail perspective view of the spring locking-plate.

Referring to the drawings, A indicates a section of railroad-rail, and B the fish-plates of ordinary construction.

C is a washer-plate having bolt-openings C', and communicating with said openings are the longitudinal slots C², thus leaving a central portion C³, which is provided with a central stud C⁴, the purpose of which will appear hereinafter.

D indicates a spring locking-plate comprising the central circular portion and the oppositely-extending arms D', said arms being made somewhat thinner at their outer ends and twisted in reverse directions, as most clearly shown at D², said twisted ends being adapted to serve as pawls and engage the inner face of the nut F, screwed upon the threaded end of the bolt E. The central circular portion of the spring-plate has an aperture D³, through which the stud C⁴ passes, said stud being headed or hammered down, as most clearly shown in Fig. 2, for the purpose of securely connecting the spring-plate to the washer. Thus it will be seen that after the fish-plates and bolts have been arranged the washer-plate carrying the spring locking-plate is arranged upon the bolts, and the nuts are then screwed down until they bind against the free ends of the locking-plate or against the twisted ends of the arms which form a part of said plate. Owing to the position of these ends and the engagement of the nuts therewith, said nuts will be held securely against reverse rotation; but when it is desired to disengage the nut the arm D' is pressed inwardly, forcing the end D² away from the nut, which can then be easily unscrewed.

It will thus be seen that I provide an exceedingly cheap, simple, and efficient construction of nut-lock which will effectively hold the nuts in a locked position after they have once been properly screwed down.

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

A nut-lock comprising a washer-plate having bolt-openings, and longitudinal slots communicating with said openings, the central portion of said washer-plate having a stud projecting therefrom, a locking-plate having a central opening through which the stud of the washer-plate is adapted to pass and oppositely-extending spring-arms twisted in reverse directions adjacent their outer ends, said twisted ends being adapted to engage the inner face of the nuts to be locked as set forth.

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Witnesses:

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