

(No Model.)

J. W. GRANTLAND.  
NUT FASTENING DEVICE.

No. 472,788.

Patented Apr. 12, 1892.

Fig. 1.

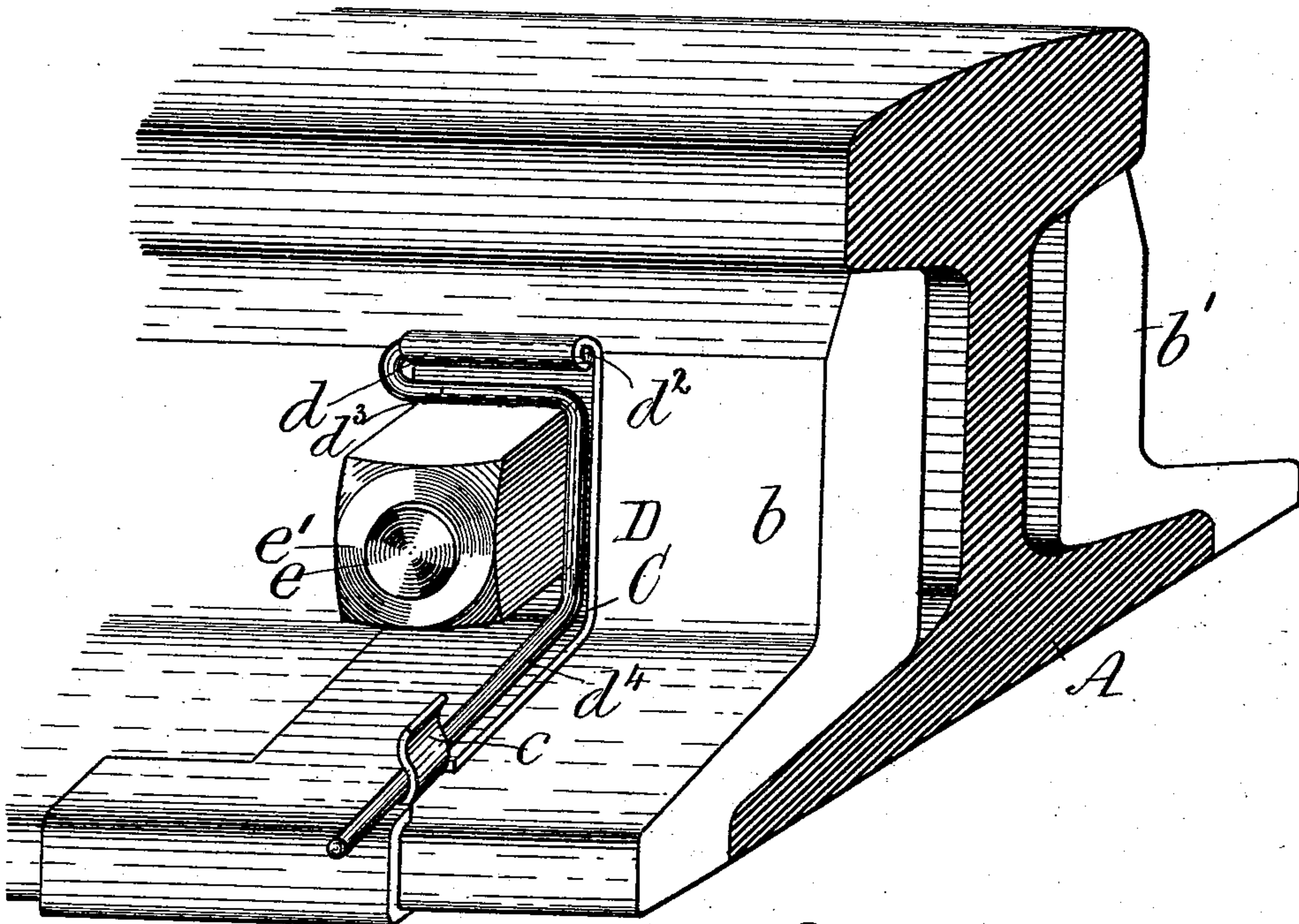
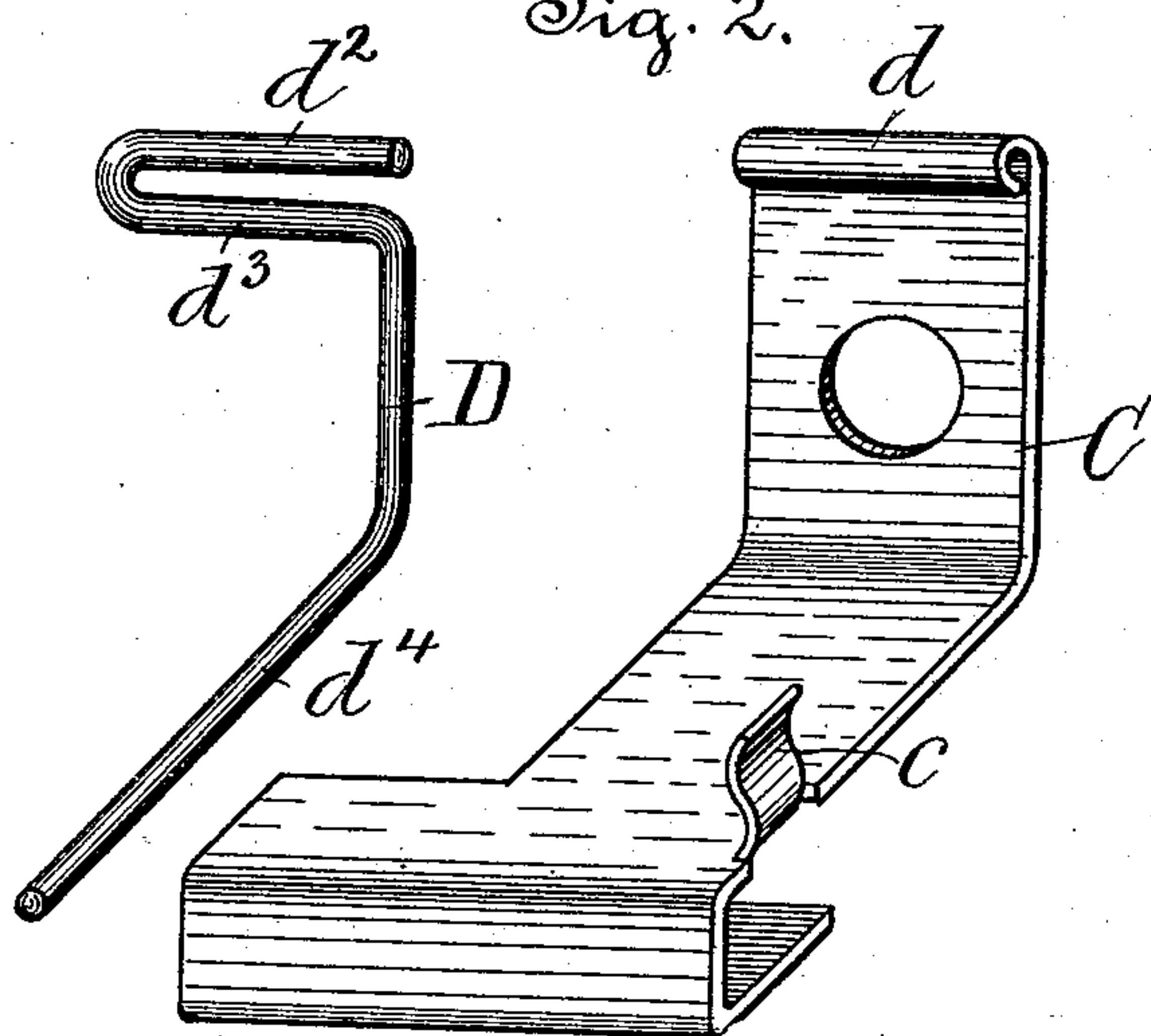


Fig. 2.



Witnesses.

Hermann Bormann  
Thomas M. Smith.

Inventor:

John W. Grantland.

by

Walter Douglass  
Att'y.



# UNITED STATES PATENT OFFICE.

JOHN W. GRANTLAND, OF PHILADELPHIA, PENNSYLVANIA.

## NUT-FASTENING DEVICE.

SPECIFICATION forming part of Letters Patent No. 472,788, dated April 12, 1892.

Application filed February 23, 1892. Serial No. 422,412. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. GRANTLAND, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Nut-Fastening Devices, of which the following is a specification.

My invention has relation, in general, to fastening devices for the nuts applied to bolts of fish-plates or bars employed at the meeting extremities of railroad-rails; and it relates more particularly to the specific construction and arrangement of means for locking such nuts to place on bolts and for preventing their displacement or movement while mounted thereon.

The principal objects of my invention are, first, to provide a simple, durable, and effective fastening device for the nuts applied to bolts employed in connection with railroad-rails; second, to provide a fastening device of such construction and arrangement as that the same may be readily attached to and detached from the nut, as occasion requires, and, third, to provide a detachable nut-fastening device and a metallic plate therefor adapted to engage with a fish-plate or bar applied to the rails and of its being held rigidly in position against the fish-plate or bar, the construction and arrangement of the plate and fastening device being such that turning of the nut while the latter is in engagement therewith is entirely prevented.

My invention consists of a nut-fastening device for railroad-rails such as hereinafter described and claimed.

The nature and objects of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, in which—

Figure 1 is a perspective view of a section of a railroad-rail with a fish-plate applied to the web thereof and having a bolt passing through the same with a nut mounted thereon and showing my invention in application thereto, and Fig. 2 is a detached view of the

metallic washer-plate adapted to be applied to the fish-plate of the rail and with the detachable nut-fastening device connected therewith.

Referring to the drawings, A represents an ordinary railroad-rail provided with the usual fish-plates *b* and *b'*, engaging with the web of the rail A in any preferred manner.

C is a metallic plate conforming to the surface of the fish-plate *b* and extending downward beneath the fish-plate and engaging with the base thereof. This plate C has struck up from one side or part thereof a spring-catch *c*, and at the upper extremity is provided a bearing or socket *d* for the reception of the tongue *d'* of a hook-shaped locking device D, having lateral and vertical projections *d*<sup>2</sup> and *d*<sup>3</sup> and a flaring free extremity *d*<sup>4</sup>, which is adapted to engage with the spring-catch *c* in the manner illustrated in Fig. 1. This hook-shaped locking device D, constructed as above described, in use is brought into engagement with two or more sides or surfaces of the nut *e'* applied to the bolt *e*, extending through the fish-plates *b* and *b'* and web of the rail by its engagement with the spring-catch *c*, holding the nut *e'* on the bolt *e* firmly in position against any tendency to displacement or movement by the passage of a train over the rails or due to any other causes.

One of the main advantages incident to the use of a nut locking or fastening device in application to a metallic washer-plate of the general character hereinbefore explained is that in case of the loss of one of the locking-hooks another may be readily applied to the metallic plate C without having to disturb the nut *e'*.

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

1. A nut-fastening device for railroad-rails, comprising a metallic plate provided with a bearing or socket and a spring-catch and a detachable hook-shaped locking device held in said bearing or socket and adapted to be brought into engagement with said catch for

maintaining a nut firmly to position and against displacement of movement, substantially as set forth.

2. A nut-fastening device for railroad-rails,  
5 comprising an oblong metallic washer-plate conforming to the surface of a fish-plate of a rail and clamped to and held firmly in position by said fish-plate and having formed integral therewith a spring-catch and a bearing  
10 or socket, and a hook-shaped detachable fast-

ening device held in said bearing or socket and adapted to engage said spring-catch, substantially as and for the purposes set forth.

In witness whereof I have hereunto set my signature in the presence of two subscribing  
15 witnesses.

JOHN W. GRANTLAND.

Witnesses:

J. WALTER DOUGLASS,  
THOMAS M. SMITH.