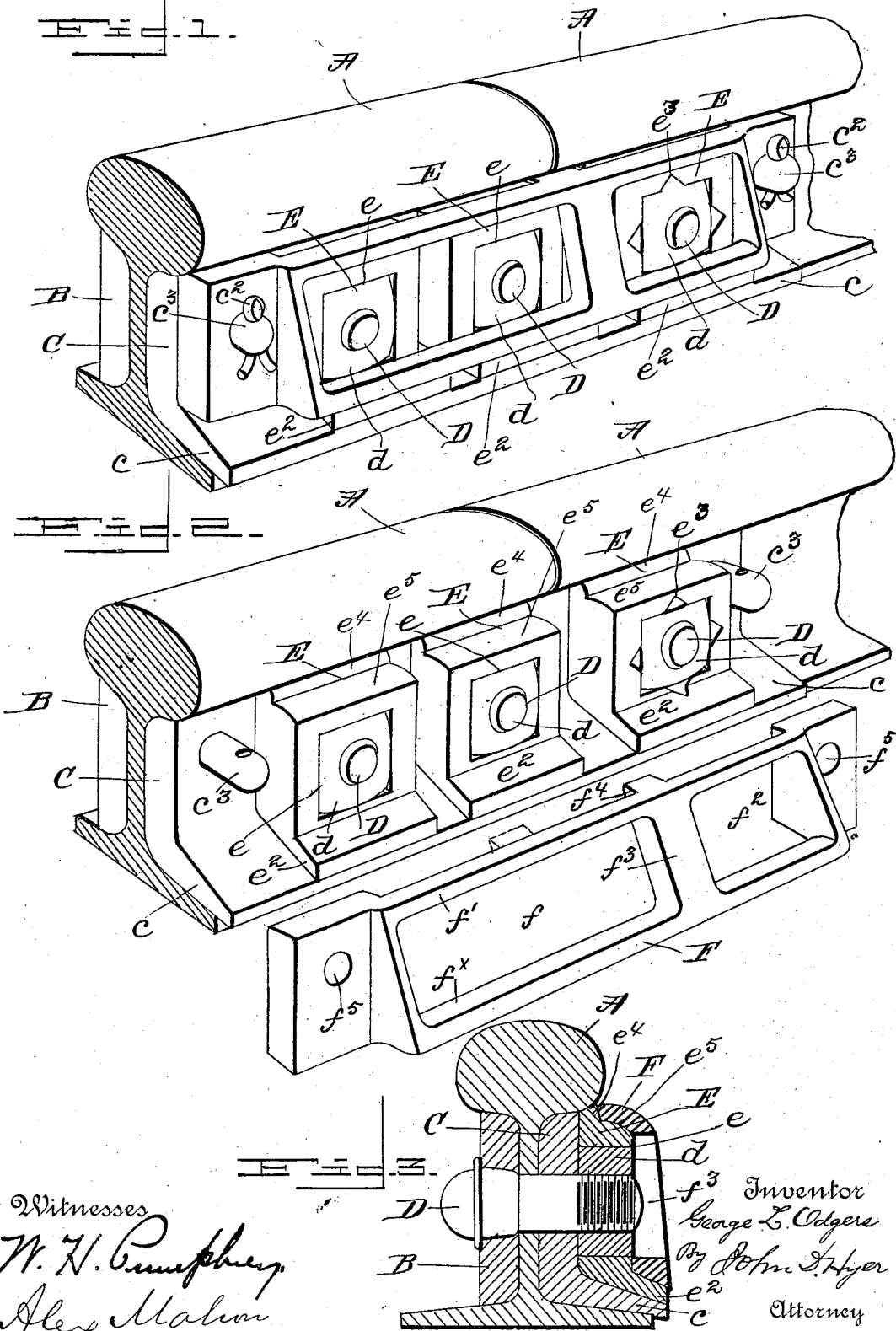


(No Model.)

G. L. ODGERS.
NUT LOCK.

No. 510,285.

Patented Dec. 5, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE L. ODGERS, OF BONNE TERRE, MISSOURI, ASSIGNOR OF ONE-HALF
TO P. A. BENHAM, OF SAME PLACE.

NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 510,285, dated December 5, 1893.

Application filed October 9, 1893. Serial No. 487,559. (No model.)

To all whom it may concern:

Be it known that I, GEORGE L. ODGERS, a citizen of the United States, residing at Bonne Terre, in the county of St. François and State of Missouri, have invented certain new and useful Improvements in Nut-Locks; and I do hereby 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.

This invention relates to nut-locks, and it consists in certain improvements therein which will be presently described.

Referring to the drawings: Figure 1 is a perspective view of abutting rail sections showing the improved construction applied thereto. Fig. 2 is a like view with the outer frame or plate removed and shown in advance of the main figure. Fig. 3 is a transverse vertical section of the device as shown in Fig. 1, taken through one of the locking bolts.

Similar letters of reference are employed to indicate corresponding parts in the several views.

Referring to the drawings, the letter A designates two abutting rail sections which are of any ordinary form of construction, having bolt openings extending transversely through the web thereof at proper intervals. On both sides of the rail sections, over the joint formed by the abutting ends, are placed fish plates, one plate, B, being without base flange, and the other plate, C, having a base flange, *c*, adapted to rest on the flanges of rail sections, and indicating that either form may be employed. In each instance, however, the plates have bolt openings which align with the bolt openings in the webs of the rail sections and receive locking bolts, D, on which are mounted nuts, *d*. The opposite ends of the fish plates, as well as the adjacent portions of the rail sections, are also provided with bolt openings through which are passed securing bolts, *c*³, for a purpose which will be presently described.

Over the nuts, *d*, blocks, E, are fitted, said blocks each having an opening, *e*, therein simulating the shape of said nuts, or said openings may be formed in the contour of

two squares intersecting each other diametrically so as to accommodate an irregular position of the nuts, *d*. Each of the blocks has a lower angular flange, *e*², which bears against the flange, *c*, of the fish plate, C, or directly against the rail flange, according as either of the forms of fish plates is employed. The upper part of each block is constructed with a vertical flange, *e*⁴, which rests against the under side of the rail head, and forms a top shoulder or rest, *e*⁵.

Over the blocks, E, and resting against the flanges, *e*², thereof at its lower edge, is a locking frame or plate, F, which is recessed longitudinally at the back portion thereof by being projected in front and inclined divergently from the top downwardly, the lower edge being beveled to partake of the same plane of inclination as the flanges, *e*², of the said blocks to institute a close fitting adjustment. The central projected portion of the frame or plate, F, is formed with one or more openings, as at *f* and *f*², to fit over the nuts, *d*, and provide upper and lower longitudinal bars, *f*¹ and *f*^x, which are adapted to be connected by a cross-bar, *f*³, or a plurality of the same. The upper bar, *f*¹, is formed with one or more locking lugs, *f*⁴, which fit in the spaces between the blocks, E, and serve as guides in properly applying the said frame or plate and also to hold the latter in position. The opposite ends of said frame or plate recede backwardly and are formed with bolt openings, *f*⁵, through which the projecting ends of the bolts, *c*³, are passed, the latter then having split keys or linchpins, *c*², or other suitable locking devices inserted through openings there into hold the said frame plate in locked position.

The several parts of the device are constructed of suitable metal and by any preferred manner. They can be readily applied in locking position or detached, and, when properly applied, a secure locking means is provided.

It is obviously apparent that many minor changes in the proportion and construction of the several parts might be made and substituted for those shown and described so long

as they are within the scope of the invention without departing from the nature or spirit of the latter.

5 Having thus described the invention, what is claimed as new is—

10 1. In a nut lock, the combination with the rail sections, fish plates, and locking bolts and nuts, of a series of individual blocks fitted over said nuts, and a rigid locking plate or frame applied over said blocks, substantially as described.

15 2. In a nut lock, the combination with the rail sections, fish plates, and locking bolts and nuts, of a series of blocks fitted over said nuts, a locking plate or frame applied over said blocks, and securing bolts for said frame or plate, substantially as described.

20 3. In a nut lock, the combination with the nuts, of a series of blocks fitted thereover having lower flanges, and a locking frame or plate applied over said blocks, substantially as described.

4. In a nut lock, the combination with the

nuts, of a series of blocks fitted thereover, and a locking plate applied over the blocks 25 and having one or more lugs which are adapted to fit in the spaces between said blocks, substantially as described.

5. In a nut lock, the combination of the nuts, of a series of blocks fitted thereover 30 and provided with lower flanges, a locking plate or frame mounted over said blocks and provided with a central outward projection with one or more openings therein and forming upper and lower bars, said upper bar hav- 35 ing one or more lugs fitting between said blocks, and end securing bolts for removably holding said plate or frame in position, substantially as described.

In testimony whereof I affix my signature in 40 presence of two witnesses.

GEORGE L. ODGERS.

Witnesses:

B. A. BELKNAP,
WM. ODGERS.