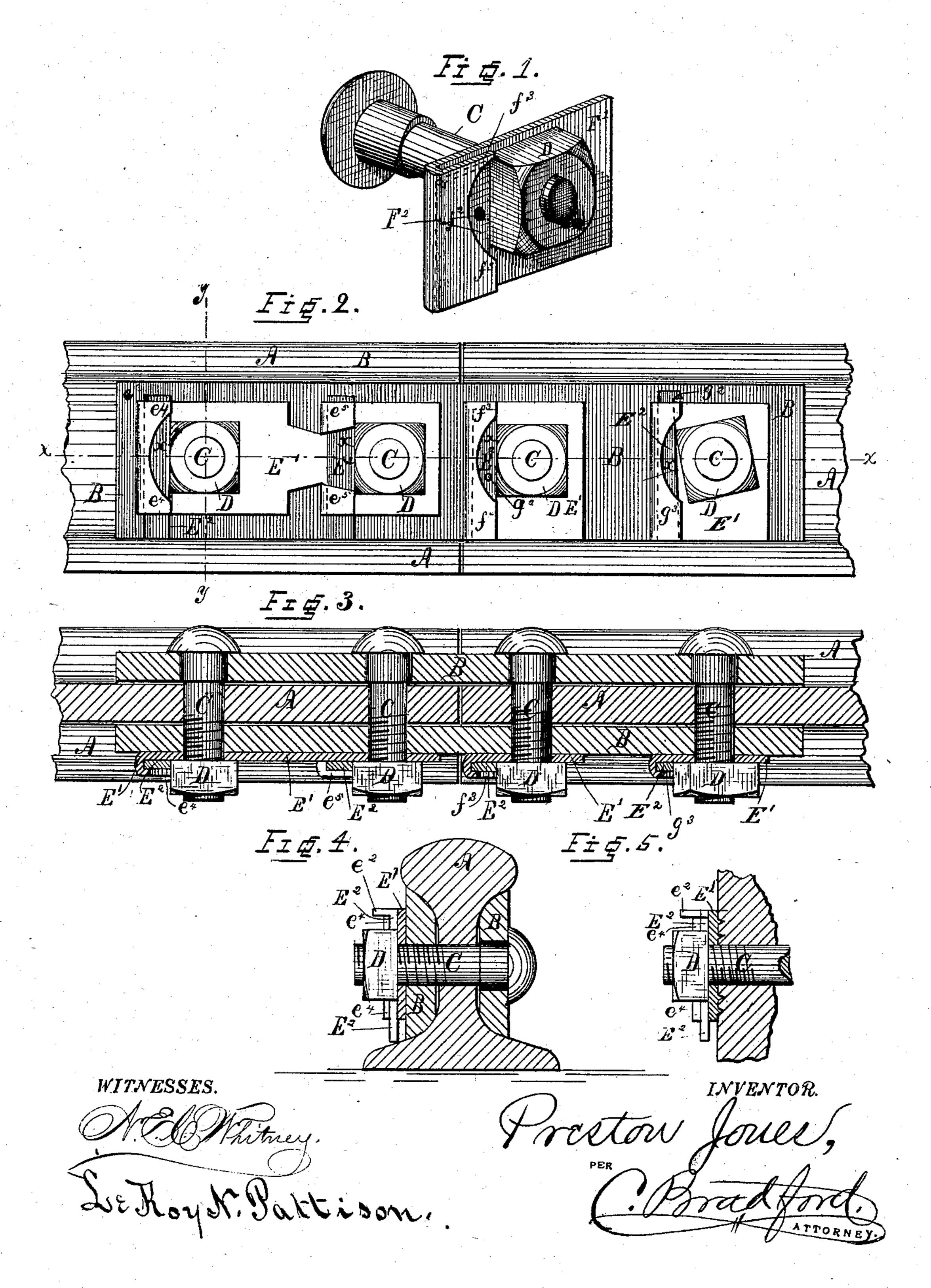
## P. JONES. NUT LOCK.

No. 254,773.

Patented Mar. 7, 1882.



## United States Patent Office.

PRESTON JONES, OF SHELBYVILLE, INDIANA, ASSIGNOR TO HUGH McKENZIE, OF CINCINNATI, OHIO.

## NUT-LOCK.

SPECIFICATION forming part of Letters Patent No. 254,773, dated March 7, 1882. Application filed June 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, Preston Jones, of the city of Shelbyville, county of Shelby, and State of Indiana, have invented certain new and 5 useful Improvements in Nut-Locks, of which

the following is a specification.

The object of my said invention is to produce a device for locking nuts on railroad-rail joints and other places; and it consists of a 10 sheet-metal washer for the nut, having a housing to contain a key, and a suitable key therefor, the same being constructed and combined with the bolt and nut in the manner herein-

after more particularly specified.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate corresponding parts, Figure 1 is a perspective view of a bolt, its nut, and one form of my improved 20 lock; Fig. 2, a side elevation of a railroadrail joint having my improved nut-locks thereon; Fig. 3, a horizontal section of Fig. 2, looking downwardly from the dotted line xx therein; Fig. 4, a transverse vertical section, 25 looking to the left from the dotted line y y in the same figure; and Fig. 5, a view in some respects similar to Fig. 4, but showing the nutlock as constructed when the washer bears

against a wooden surface.

In said drawings, the portions marked A represent a railroad-rail; B, the fish-plates thereon; C, the bolts; D, the nuts thereto; E', the washer, which, with the housings thereon, forms the main portion of my nut-lock. The portion 35 E' has one end,  $e^4$ , turned over to form a housing for the key E2, as shown. This housing should pass nearly or quite across the face of the key, in order to securely retain the same. In order to permit this and at the same time al. 40 low the nut to turn freely, I cut out the edge of said housing opposite said nut, leaving a recess, x, and preferably semicircularly, or separate i the lips as shown. This permits the nut to be screwed down tightly upon the fish-plate 45 without practically shortening the width of the key-housing, as the latter can by this arrangement extend entirely across the key at both the top and bottom and close to the nut. The second key E<sup>2</sup> is held in place by a hous-50 ing formed of two portions,  $e^5$   $e^5$ , struck up out of the body of the portion E', and turned over, as shown, leaving a recess, x, which I

serves the same purpose as the recess in the housing  $e^4$ .

In the above-described double form of this 55 lock the horizontal position of the portion E' is maintained by reason of the two bolts passing through it, and therefore does not need to be so wide as the single form, which has to rest upon the flange of the rail for support.

The nut-locks shown at the right are essentially the same as that described, except that the washers are single instead of double, and are prevented from turning by the flange

of the rail instead of the bolts.

The keys may be lifted from place, when necessary, by a head,  $e^2$ , or a recess or hole,  $g^2$ , according to their construction. The key having been inserted, the nut is turned back slightly, and the size of the opening being 70 thereby slightly decreased, the key cannot be thrown out by any jarring of the passing train. When a short key is employed, the top being below the top of the housing, it may be held securely in place by bending the 75 upper part of the housing slightly inward.

When it is desired to use this lock with bolts which pass through wood the back of the washer may be serrated or provided with points, as shown in Fig. 5, which will enter 80 the wood when the bolt is screwed down, and

thus prevent it from turning.

The material of which I prefer to construct my improved nut-lock washer is sheet metal of about one-eighth of an inch in thickness. 85

I do not claim broadly a washer provided with a flange to hold a key at the side of the nut, as this is old; but

I claim—

1. The plate E', having the housings  $e^4$  and 9c  $e^5$ , jointly with the keys  $E^2$  and  $E^2$ , substantially as and for the purpose set forth.

2. The combination, in fastenings for nuts, of washer-plates having housings folded over and provided with recesses x and keys  $E^2$ , as 95set forth.

In witness whereof I have hereunto set my hand and seal, at Shelbyville, Indiana, this 8th day of June, A. D. 1881.

PRESTON JONES. [L. s.]

In presence of— W. R. SNYDER, JAMES T. CAUGHEY.