

(No Model.)

J. L. BRADY.  
NUT LOCK FOR RAILWAYS.

No. 563,253.

Patented July 7, 1896.

Fig. 1.

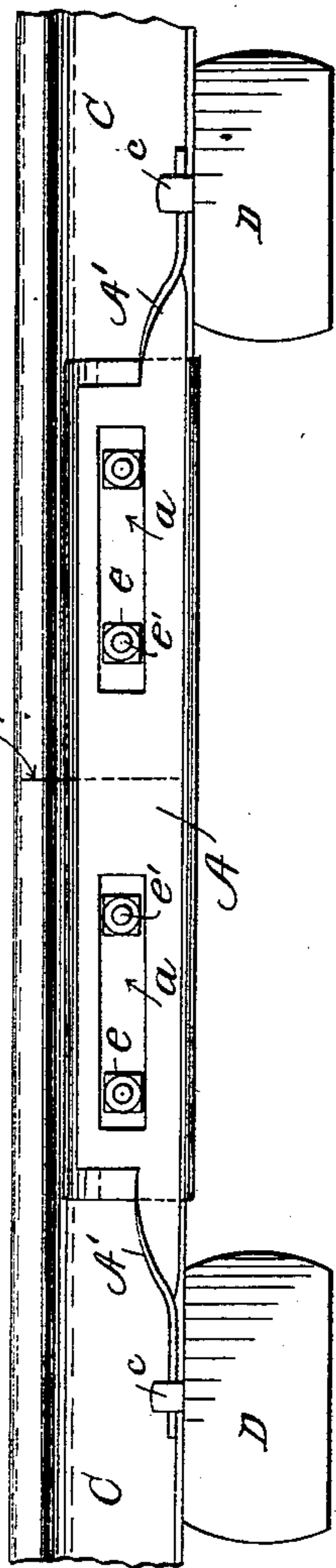
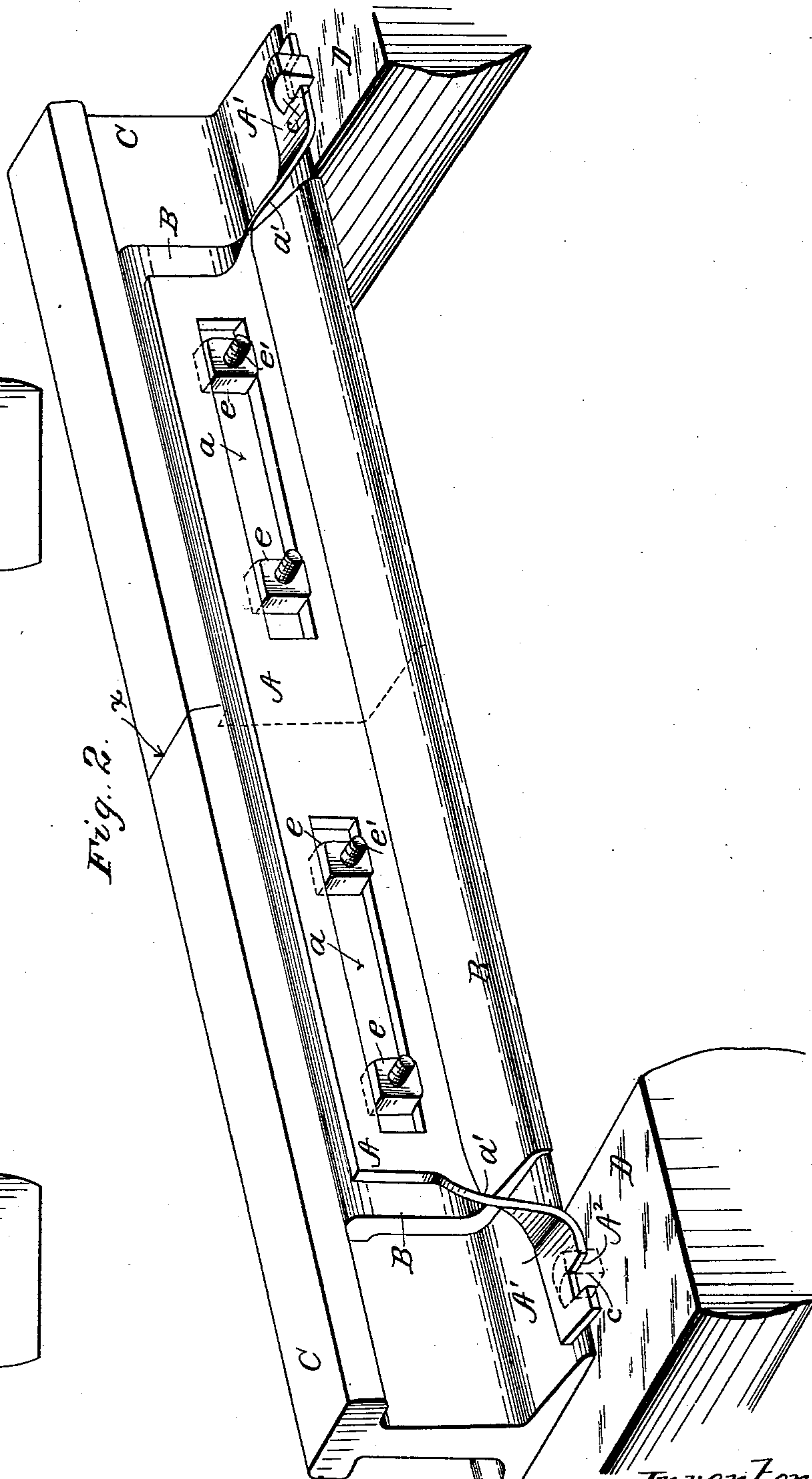


Fig. 2.



Witnesses  
W. Rees Edelen.  
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# UNITED STATES PATENT OFFICE.

JOHN L. BRADY, OF BARDSTOWN JUNCTION, KENTUCKY, ASSIGNOR OF  
ONE-HALF TO HETTIE C. WATHEN, OF SAME PLACE.

## NUT-LOCK FOR RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 563,253, dated July 7, 1896.

Application filed March 21, 1895. Serial No. 542,672. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN L. BRADY, residing at Bardstown Junction, in the county of Bullitt and State of Kentucky, have invented certain new and useful Improvements in Lock-Plates for Railways; 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.

The invention relates to improvements in lock-plates for railways, and has for its object to provide a lock which shall not only hold the nuts from turning, but shall materially aid in connection with the fish-plate to prevent the adjoining rails in a spring rail-joint from sagging down, separating, or spreading from the line.

The invention consists in the combination and arrangements of the parts, as hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a side elevation of two cross-ties with a section of two rails, showing the fish-plate, also the improved lock-plate, and showing the manner of applying the lock-plate, the locking of the nuts, the support and stiffening of the spring rail-joint by connection to and with the adjacent cross-ties. Fig. 2 is a perspective view of the same.

The rails C C, cross-ties D D, and the fish-plate B B may be of any usual or preferred construction, and the fish-plate in combination with the lock-plate connected to the rails by any desired form of bolts or nuts.

The lock-plate A is provided with two elongated slots *a a* of a width to closely fit or embrace the faces of the nuts *e e* of abutting rails, and each end of the lock-plate is provided with an extension A', twisted, as shown at *a'*, and bent downward and outward to form a foot or lug, the bend or twist being formed in such shape as to bring the foot or lug at right angles, and in such manner that while the main portion of the lock-plate lies flat against the fish-plate these feet or lugs rest upon the flange of the rails and are spiked to the center of the adjoining cross-ties.

It will be observed that the lock-plate "straddles" the flange of the fish-plate, or, in

other words, allows said plate to pass under it between the ends fastened to the cross-ties. This construction permits the body of the lock-plate to set closely to the web of the fish-plate, so that it may be securely held.

The foot-pieces or lugs are notched, as shown at A<sup>2</sup>, and said notches are cut of such size and at such places as to receive the spikes *c c* and embrace the same between the edge of flanges of the rails in such manner that when the spikes are driven into the cross-ties to hold the rails down thereon or connected thereto the same spikes shall hold the lock-plate firmly to each adjacent cross-tie, and in connection with the fish-plate lock the abutting ends of the rails together and prevent the sagging down or spreading of the rails.

It will be seen from the foregoing description that the lock-plate passes over and embraces the upper and lower side faces of the nuts of the adjacent rails, effectually preventing them from being loosened or dropping off, thus preventing the fish-plate itself from becoming loose or being jarred off by heavy traffic on the rails, and at the same time, as above stated, the lock-plate itself, by being spiked to the adjacent cross-ties, serves to hold the rails down to the cross-ties, thus materially strengthening the rail-joint, preventing lip-joints sagging or spreading of the rails, and preventing what is known as "flat-wheels" and in a measure dispensing with the services of a track-walker.

Having described the invention, what is claimed as new and useful, and sought to be secured by Letters Patent, is—

1. A lock-plate for the rail-joints of railways provided with elongated slots, to lock the nuts of the confining-bolts and twisted at its ends so as to form legs that permit the plate to straddle the web of the fish-plate, the legs being horizontally bent to form lugs which may be secured to the cross-ties substantially as and for purposes specified.

2. In railway-joints, the combination of the abutting rails, the fish-plate having its flange extending over the flanges of the same, and its web setting against the web of rails, the lock-plate having a longitudinally-slotted web

setting against the web of the fish-plate, and  
legs and lugs at its ends, whereby it is per-  
mitted to straddle the flange of the fish-plate,  
the lock-nuts and bolts for holding the parts  
5 and the spikes whereby the flanges of the rails  
and the lugs of the lock-plates are fastened to  
the cross-ties substantially as specified.

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

JOHN L. BRADY.

Witnesses:

BEN CHAPEZE,  
J. V. THOMPSON.