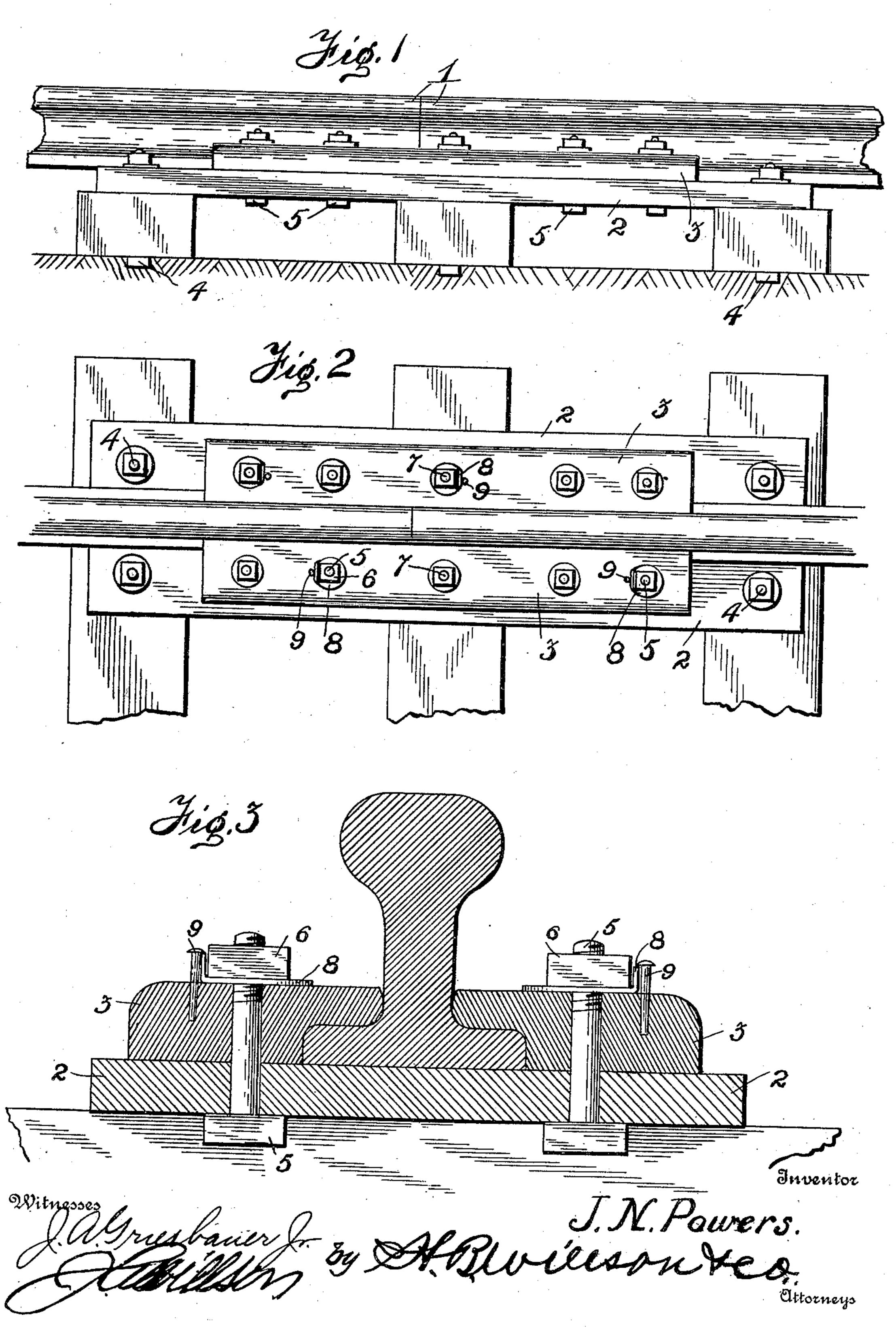
J. N. POWERS.

RAIL JOINT.

(Application filed Feb. 21, 1900.)

(No Model.)



United States Patent Office.

JOHN N. POWERS, OF SHREVEPORT, LOUISIANA.

SPECIFICATION forming part of Letters Patent No. 652,487, dated June 26, 1900.

Application filed February 21, 1900. Serial No. 6,072. (No model.)

To all whom it may concern:

Be it known that I, JOHN N. POWERS, a citizen of the United States, residing at Shreveport, in the parish of Caddo and State of Lou-5 isiana, have invented certain new and useful Improvements in Rail-Joints; and I do 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 to make and use the same.

This invention relates to rail-joints.

The object of the invention is to provide a rail-joint which shall be simple and strong of construction, durable in use, and compara-*5 tively inexpensive of production, and which is designed for the purpose of preventing the spreading of the rails and to permit of their endwise movement to compensate for expansion and contraction.

With these objects in view the invention consists in certain features of construction and combination of parts, which will be here-

inafter fully set forth.

In the accompanying drawings, Figure 1 is 25 a side elevation of the abutting ends of two railroad-rails, illustrating the application of my invention. Fig. 2 is a top plan view, and

Fig. 3 is a cross-sectional view.

In the drawings, 1 denotes the abutting ends 30 of two railroad-rails, 2 the supporting-plate, and 3 the clamping-plates. The ends of the rails are seated upon the supporting-plate, which is secured at its ends to the usual tie by the bolts 4. After the rails have been 35 placed upon the plate they are secured thereto by the clamping-plates 3, which are provided with bolts 5, which extend through the baseplate and clamping-plates and have nuts 6. These bolts are so arranged and spaced apart 40 that their heads at the under side of the supporting-plate are between the ties, so as to permit easy access to them.

7 denotes the central set of bolts, which pass through the clamping-plates, the base-plate, 45 and the centrally-located tie, which is arranged directly beneath the joint of the rails. Any well known or approved form of nut-lock may be used for locking the nuts to the bolts;

but that shown in the present instance is preferred, and consists of a washer 8, a portion 50 of the periphery of which is bent up against the side of the nut after it has been screwed home. This washer is prevented from rotating by the pin 9, which is driven into a hole formed in one of the clamping-plates at the 55 side of the turned-up portion of the washer.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my improved rail-joint will be readily ap- 60 parent without requiring an extended explanation. The device is extremely simple, may be made at small cost, and is exceedingly useful for the purpose for which it is desired.

Having thus fully described my invention, 65 what is claimed as new, and desired to be secured by Letters Patent of the United States,

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The combination with a supporting-plate provided with bolt-holes, three sets of which 70 are designed to be placed over the ties and two sets of which are designed to be placed over the space between the ties, of rails seated upon said plate, clamping-plates seated upon said plate and engaging the base of the rails, 75 said clamping-plates being provided with bolt-holes which register with all of the boltholes aforesaid with the exception of those at the ends of the plate, bolts inserted through said bolt-holes and provided with nuts, the 80 bolts of the nuts which are located over the ties extending entirely through the ties, washers placed upon the upper ends of said bolts and having a portion bent upward against the side of said nuts and fixed pins arranged 85 adjacent to said nuts to prevent the rotation of said washers, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- 90

nesses.

JOHN N. POWERS.

Witnesses:

D. E. NICHOLSON,

J. W. WHITE.