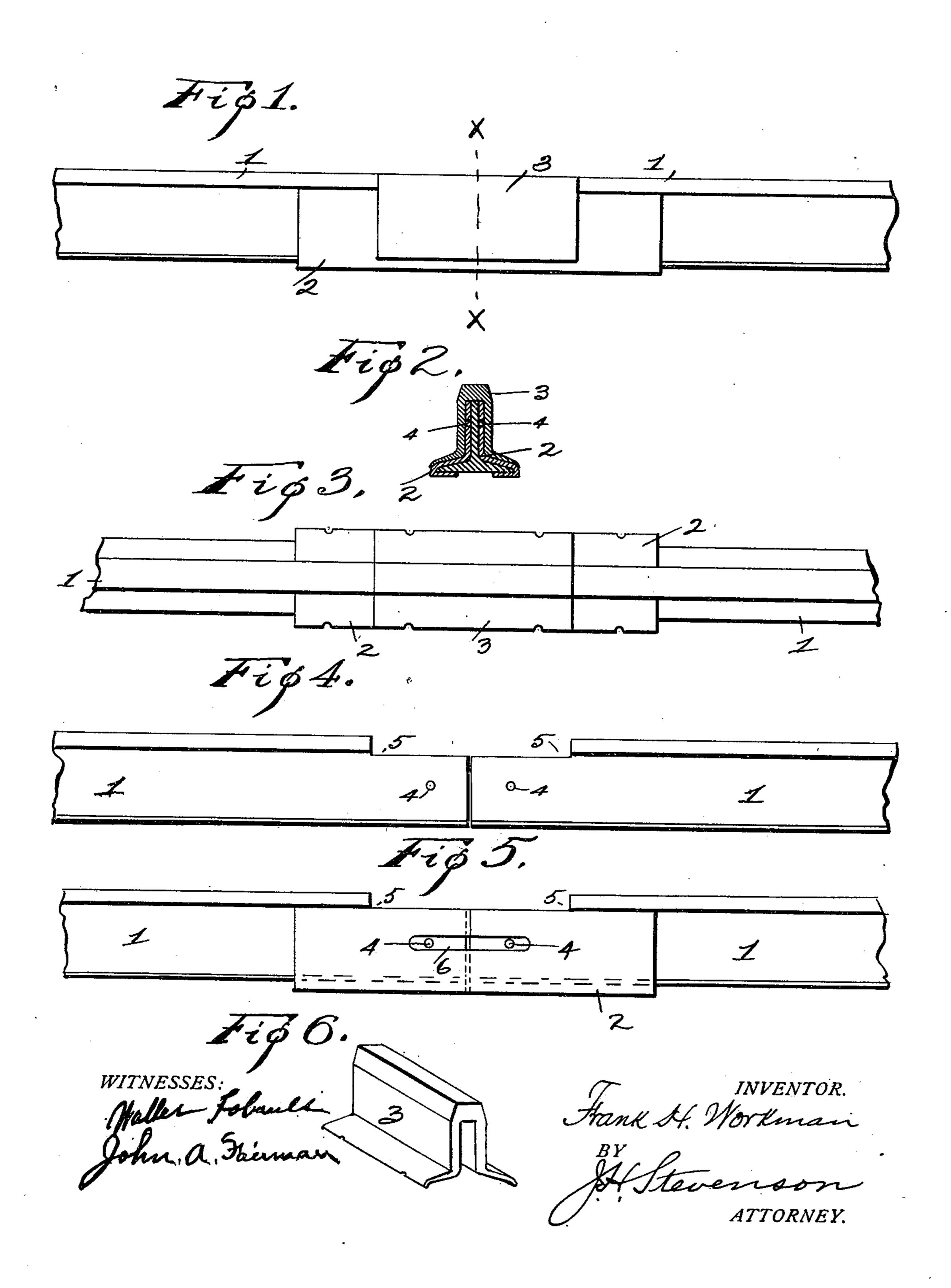
## F. H. WORKMAN. RAILROAD JOINT.

(No Model.)

(Application filed Feb. 14, 1901.)



## United States Patent Office.

## FRANK H. WORKMAN, OF BADEN, PENNSYLVANIA.

## RAILROAD-JOINT.

SPECIFICATION forming part of Letters Patent No. 675,259, dated May 28, 1901.

Application filed February 14, 1901. Serial No. 47,360. (No model.)

To all whom it may concern:

Be it known that I, Frank H. Workman, a citizen of the United States of America, residing at Baden, in the county of Beaver and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Joints; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in rail-joints.

The object of my invention is to provide a joint for railroad-rails that will dispense with the use of both bolts and nut-locking devices.

I accomplish my object in the manner illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of two rail-sections having my improved joint thereon. Fig. 2 is an end sectional view through the joint on the line xx of Fig. 1. Fig. 3 is a plan view of the same. Fig. 4 is a side view of the two rail-sections having the connecting parts removed. Fig. 5 is a similar view having the fish-plates in position thereon. Fig. 6 is a perspective view of the connecting-shoe to engage over the rail ends and fish-plates.

In the drawings the numerals 1 designate the rail-sections, each of said sections having a portion of the ball or tread removed, as indicated at 5, and having pins 4 projecting at each side from the web. A pair of fish-plates 2 are fitted upon each side of the rail-sections at their juncture. These plates are each provided with an elongated slot 6 to engage over

the web-pins 4, said slots being of sufficient length to permit expansion of the rails. A 40 shoe 3 is fitted down over the fish-plates, filling up the gap in the rail ends at 5, thereby forming a continuous rail-joint. After the shoe is fitted in position it is spiked down to the ties, likewise the fish-plates, firmly secur- 45 ing the rail-sections.

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

1. The combination with a pair of rails ar- 50 ranged end to end and having portions of their treads removed at adjacent ends to form opposing shoulders above the webs of said rails, of fish-plates fitting against the webs and extending beyond said shoulders, and a 55 cap fitting over the fish-plates and forming between the shoulders a continuation of the treads of the rails, substantially as set forth.

2. The combination with a pair of rails arranged end to end and having portions of 60 their treads removed at adjacent ends to form opposing shoulders above the webs of said rails, of pins projecting from said webs, fishplates fitting against the webs and extending beyond said shoulders and having slots into 65 which said pins project, and a cap fitting over the fish-plates and forming between the said shoulders a continuation of the treads of the rails, substantially as set forth.

In testimony whereof I have hereunto af- 70 fixed my signature in the presence of two subscribing witnesses.

FRANK H. WORKMAN.

Witnesses:

G. H. MILLER, CHARLIE JONES.