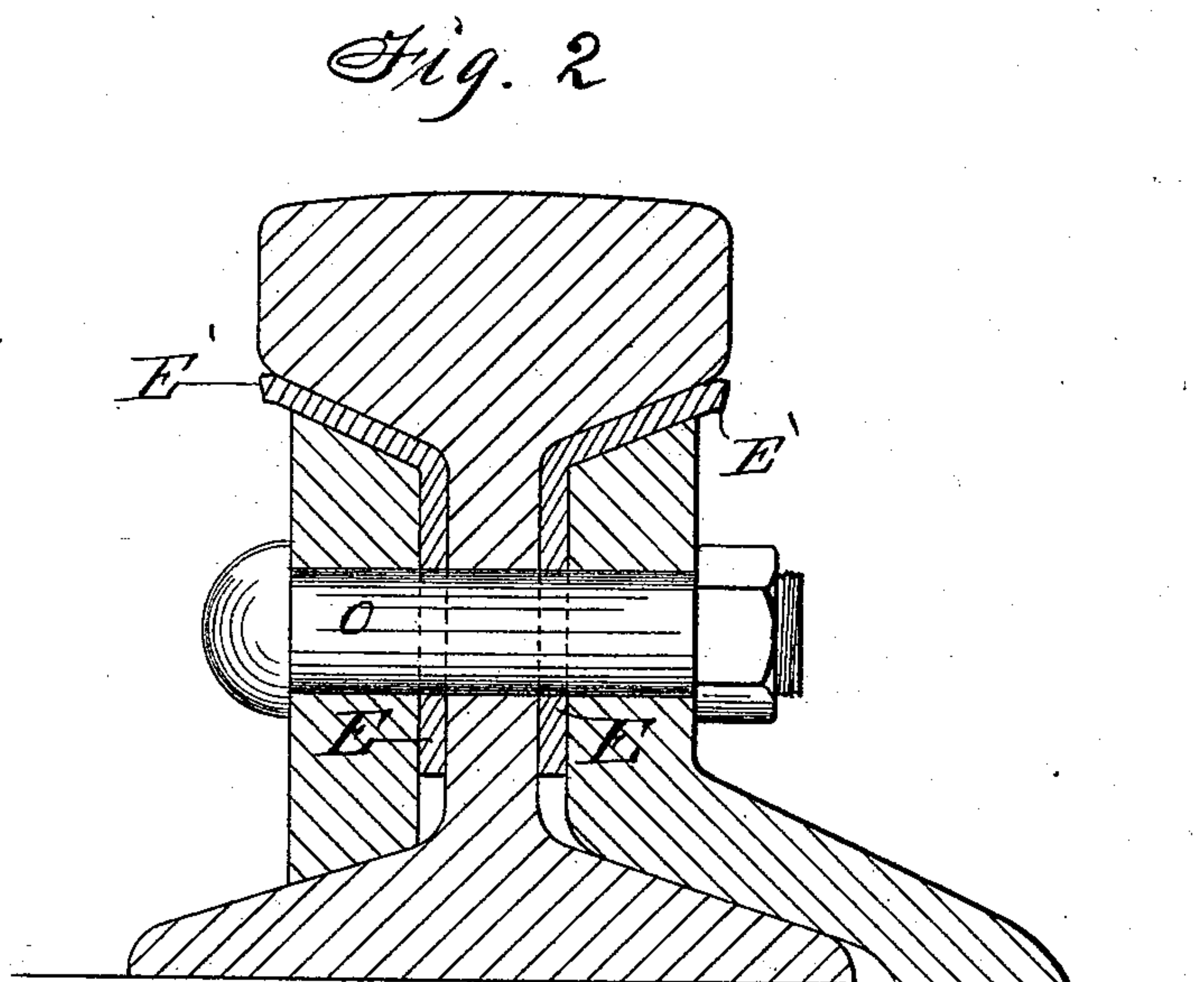
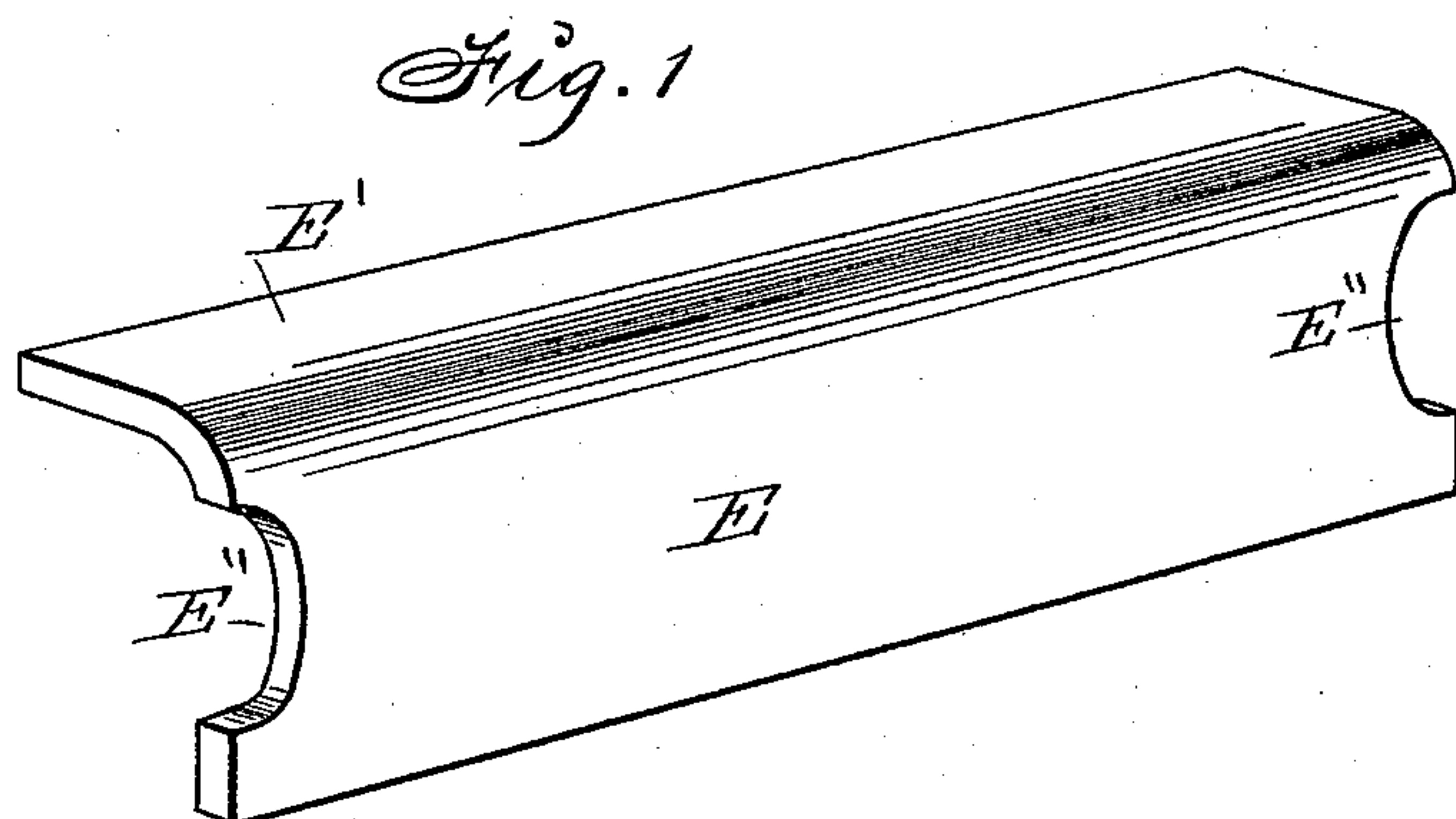


(No Model.)

W. F. GOULD.  
METAL SHIM AND RAILWAY RAIL JOINT.

No. 487,832.

Patented Dec. 13, 1892.



Witnesses:

R. H. Orwig,  
W. B. Smith.

Inventor:

William F. Gould,  
By Thomas G. Orwig,  
attorney.

# UNITED STATES PATENT OFFICE.

WILLIAM F. GOULD, OF DES MOINES, IOWA.

## METAL SHIM AND RAILWAY-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 487,832, dated December 13, 1892.

Application filed March 26, 1890. Serial No. 345,348. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM F. GOULD, a citizen of the United States of America, and a resident of Des Moines, in the county of Polk and State of Iowa, have invented a new and useful Shim for Railway-Rail Joints, of which the following is a specification.

My object is to provide a simple practical means to compensate for the wear of the abutting ends of rails and their connecting-irons and to reinforce a railway-rail joint when worn and weak from the tread of the wheels of trains passing over the track and joint.

My invention consists in the construction, application, and use of a shim, as hereinafter set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the shim; and Fig. 2, a transverse sectional view of a rail-joint, showing shims in position as required for practical use.

The shim is preferably made of plate metal and adapted in shape to overlap the side faces of the webs and the under sides of the balls of the rails of the end portions of two abutting ends of rails in a track, and also the inside and top faces of fish-plates, angle-bars, or splice-bars, as clearly shown in Fig. 2.

The thickness and weight and length of the shim may vary; but the shape must conform to the contour of the track-rails to which it is to be applied.

E is the vertical and lower portion of the shim, adapted to overlies the web of a rail, and E' is the top and horizontal part, adapted to engage the under side of the ball of the T-head of a rail at a joint or at any portion of the rail that may need to be reinforced.

Longitudinal movement of the shim E relative to the splice-bars can be prevented by allowing the vertical portion to extend downward, so as to come between the interior bolts at the joint, while the overlapping portion E' comes between the balls of the rails and their supports.

I claim as my invention—

As an article of manufacture, a metal shim for railway-rail joints, adapted to be placed between the balls of rails and a rail-splice, in the manner set forth, for the purposes stated.

WILLIAM F. GOULD.

Witnesses:

S. C. SWEET,

THOMAS G. ORWIG.