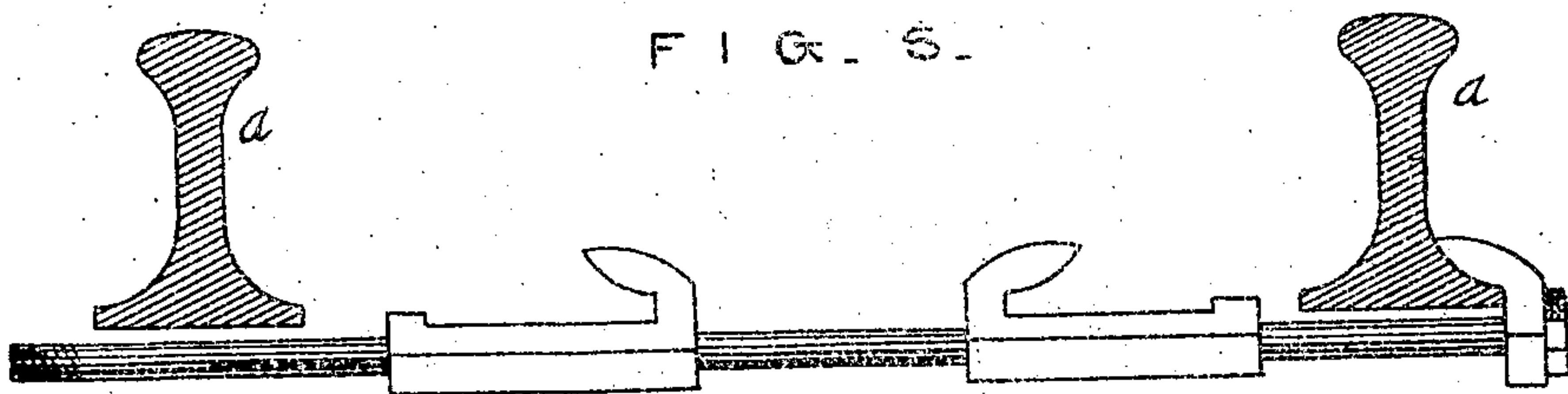
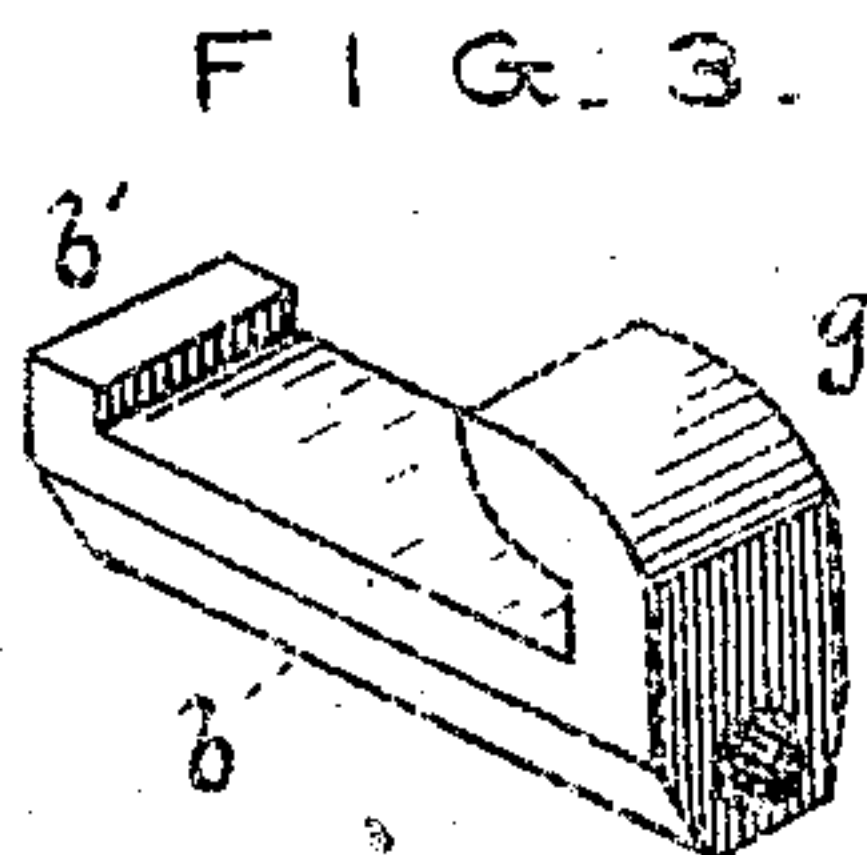
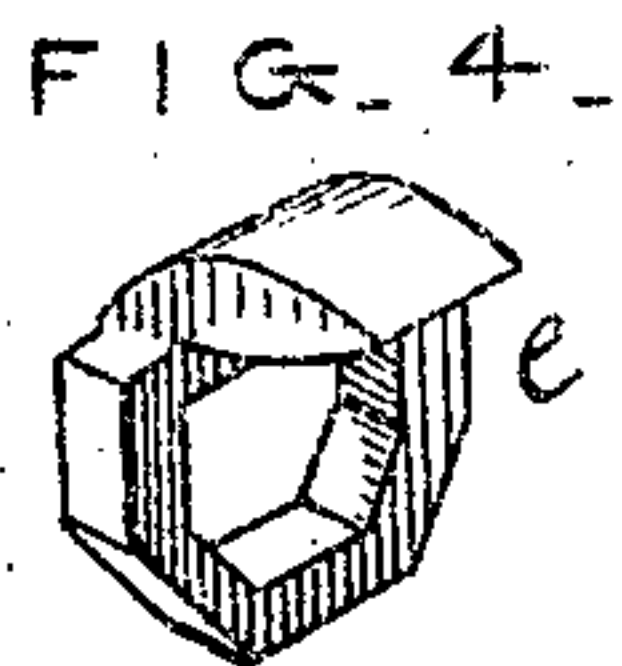
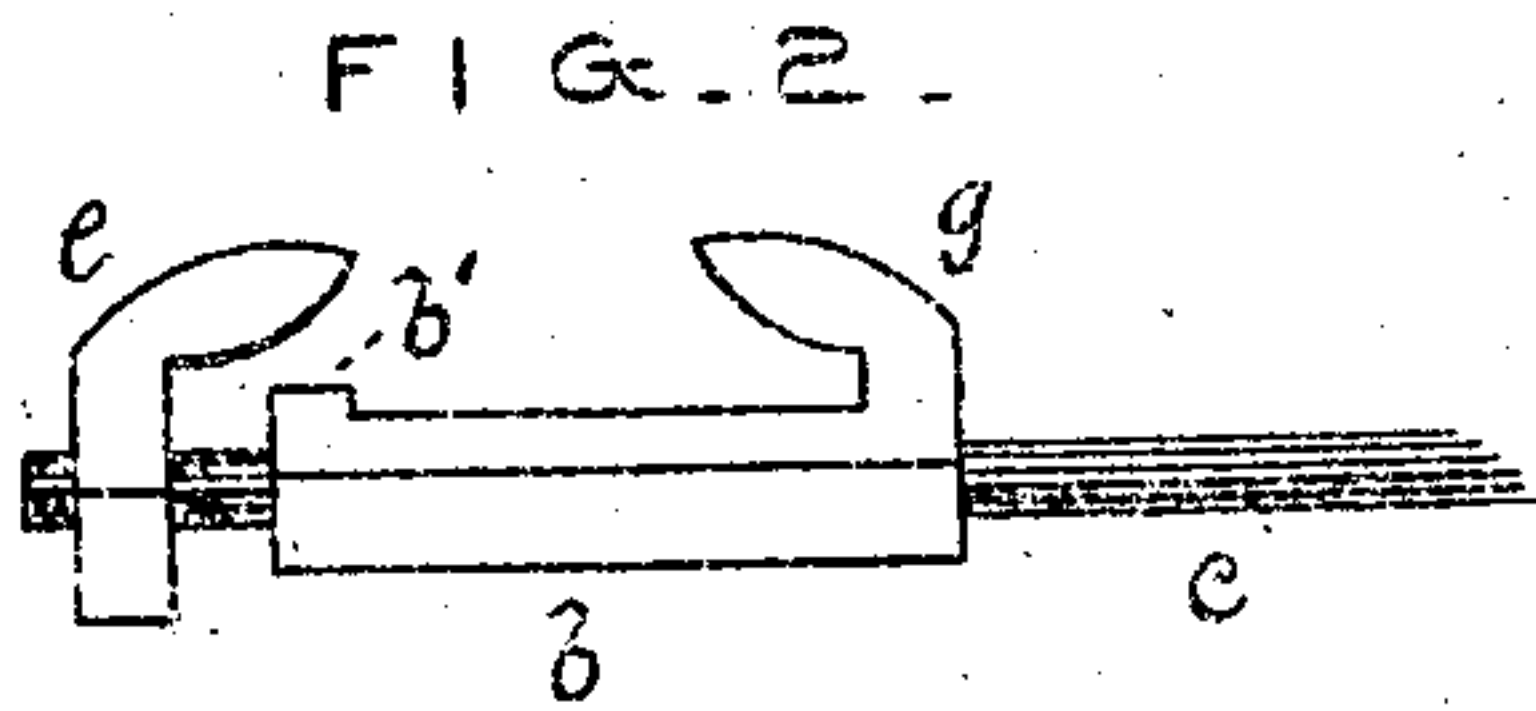
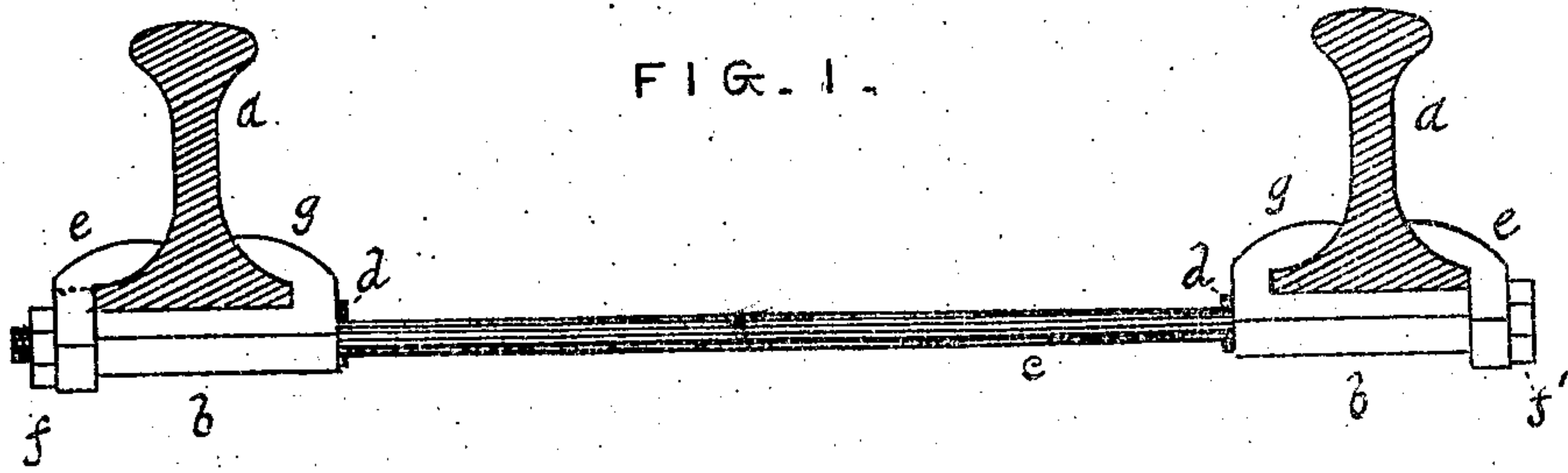


(No Model.)

J. LOCKHART.
CLAMP FOR RAILWAY RAILS.

No. 327,285.

Patented Sept. 29, 1885.



WITNESSES:

W. H. Warren.

John N. Pillsbury.

INVENTOR

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UNITED STATES PATENT OFFICE.

JESSE LOCKHART, OF NIANTIC, ILLINOIS.

CLAMP FOR RAILWAY-RAILS.

SPECIFICATION forming part of Letters Patent No. 327,285, dated September 29, 1885.

Application filed May 18, 1885. (No model.)

To all whom it may concern:

Be it known that I, JESSE LOCKHART, a resident of the town of Niantic, county of Macon, and State of Illinois, have invented certain new and useful Improvements in Clamps for Railway-Rails, of which the following is a specification.

The object of my invention is to improve the device set forth in the patent granted to me June 3, 1884, No: 299,557, by simplifying the construction and increasing the effectiveness of the same.

The result attained by the use of this invention is the same as that set forth in the above-mentioned patent, the rails being secured from lateral displacement by the clamps, and said clamps are capable of being attached to the track at any point without removing the rails from the ties.

In the drawings accompanying and forming a part of this specification, Figure 1 shows my device on a transverse section of the railway-rails. Fig. 2 is a side view of one of the clamps with the various parts disconnected. Fig. 3 is a perspective view of one portion of the clamp, and Fig. 4 is a perspective view of another coacting portion; and Fig. 5 shows the parts before securing them in place.

a represents the railway-rails.

b is a clamp-bar that extends under a rail, and is provided with rigid jaw *g*, of suitable size and conformation to fit over the flange of the rail.

c is a rod of suitable length to extend from side to side of the railway-track, provided with a rigid head on one end and a threaded nut on the other.

d are pins that pass through the rod *c*, and prevent any tendency the rails may have to approach each other.

e are sliding clamp-jaws that fit over the plain ends of bars *b* and embrace the outer flanges of the rails.

f is a nut on rod *c*, and *f'* is a solid head on the opposite end of the same.

b' is a shoulder on the plain end of a clamp-bar, and its function is to hold the rail laterally, thereby leaving the sliding jaws *e* free to provide against vertical displacement. The shoulder *b'*, is embraced by the perforation in *e*, which completely incloses the same, but all lateral strain in the rail bears directly

against the shoulder, thereby avoiding displacement of the clamp-jaw *e*.

The clamp-bars *b* are each provided with a longitudinal aperture sufficiently large to freely admit the rod *c*, and the clamp is applied to the track substantially in the following manner: The nut *f* is removed from the rod, and its adjacent clamp-jaw *e* is removed from bar *b*. The pins *d* are drawn out of the rod, and the clamp-bars *b* are slid toward the center of the rod, after which the device is placed under the rails as indicated in Fig. 5. To complete the attachment, the clamp-bars are reslid into position against the rails, the sliding jaw *e* and the nut *f* are readjusted, and the pins are placed in position against the clamp-bars.

By introducing my device in a new road ties of soft timber can be used with good results, as wood may be firm enough to sustain the rails and their load and still not be able to hold the spikes sufficiently firm to prevent lateral displacement in the rails; also, old ties that will not hold spikes can still be made serviceable if secured as set forth.

Another advantage resulting from the use of my invention is the saving in material and labor, as but a small number of spikes need be used, and the track can be kept in condition with a far less amount of labor.

What is generally termed "spreading" of the track, by means of which railway accidents are of common occurrence, is in reality a tipping of the top of the rail by pressure from the train, and this motion, whenever it occurs, acts as a lever to draw the inside spikes, and thereby permit the rail to become detached.

By the use of my device the rails are secured against any oscillating motion, and the pressure that would easily draw the spikes, with the enormous leverage that a tipping rail affords, would be completely restrained by my clamps fitted firmly around an iron rod.

I claim as new and desire to secure by Letters Patent—

1. The combination, in a clamp for railway-rails, of rod *c*, provided with rigid head *f'* and nut *f*, clamp-bars *b*, provided with rigid jaws *g*, and sliding clamps *e* on clamp-bars *b*, as and for the purpose set forth.

2. The combination, in a clamp for railway-

rails, of rod *c*, provided with rigid head *f'* and nut *f*, clamp-bars *b*, provided with shoulder *b'* and rigid jaws *g*, and sliding clamps *e* on clamp-bars *b*, as and for the purpose set forth.

3. The combination, in a clamp for railway-rails, of rod *c*, provided with rigid head *f'* and nut *f*, clamp-bars *b*, provided with rigid jaws *g*, sliding clamps *e* on clamp-bars *b*, and

a suitable device for preventing the clamp-bars from approaching each other on the rod, as and for the purpose set forth.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

JESSE LOCKHART.

Attest:

C. C. CLARK,
S. S. JACK.