

No. 675,645.

Patented June 4, 1901.

J. L. WOOD.
RAILROAD RAIL JOINT.

(Application filed Dec. 3, 1900.)

(No Model.)

Fig. 1.

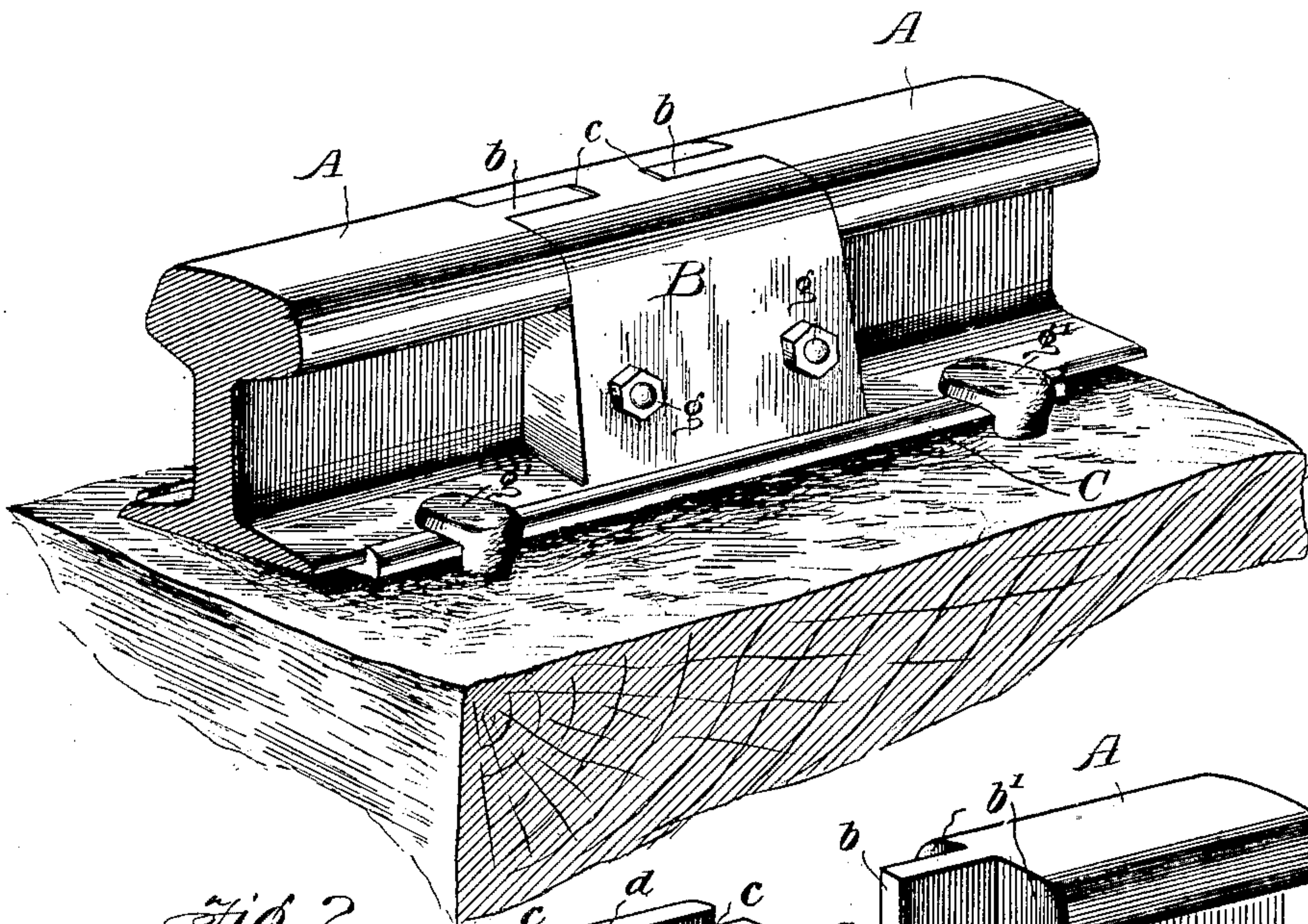


Fig. 2.

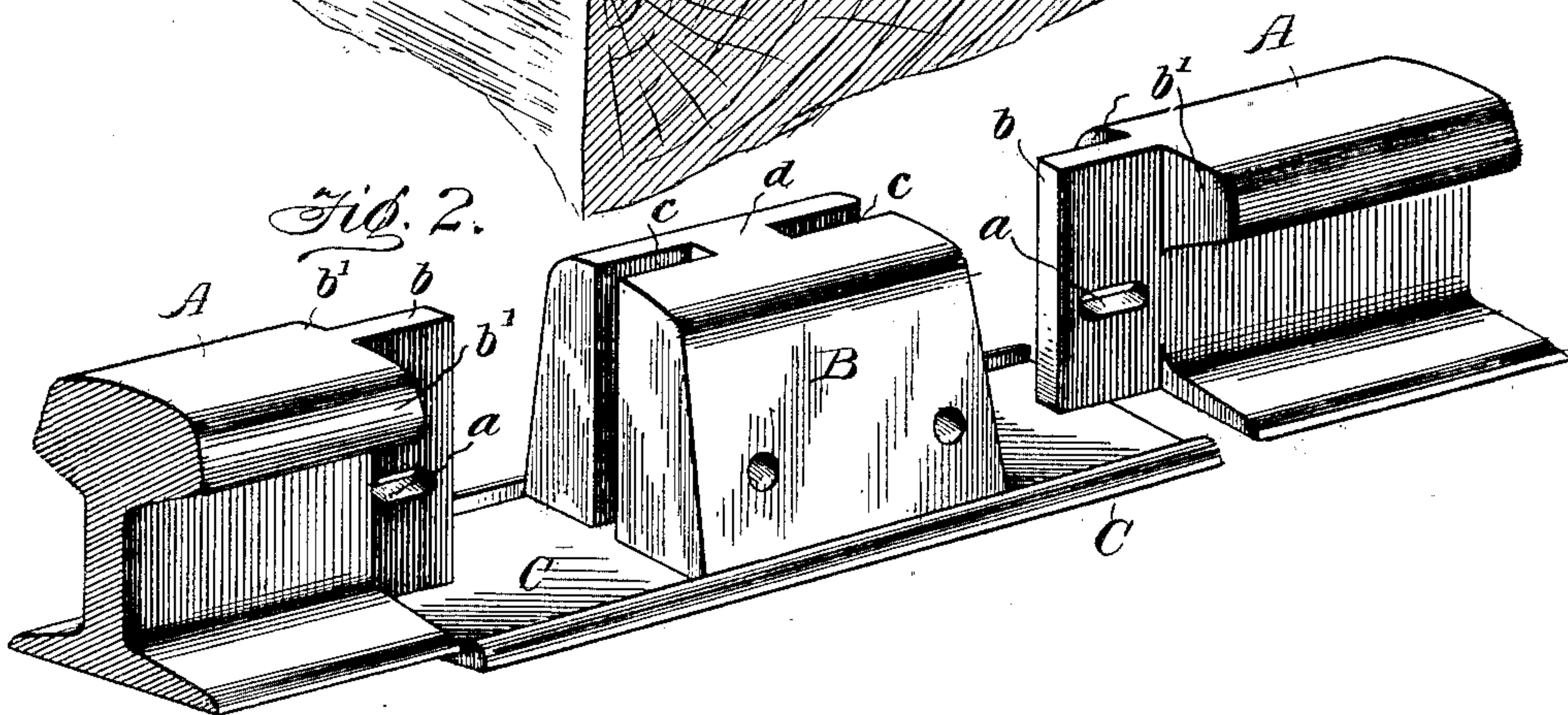


Fig. 3.

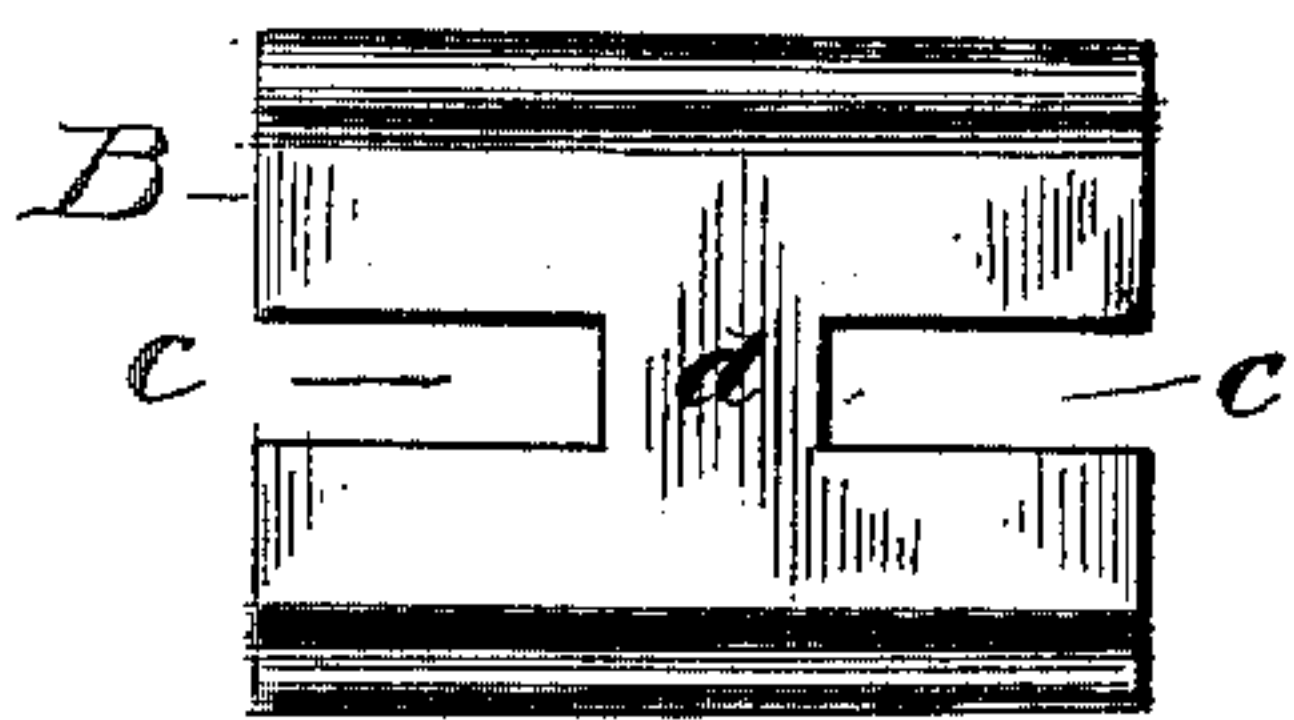
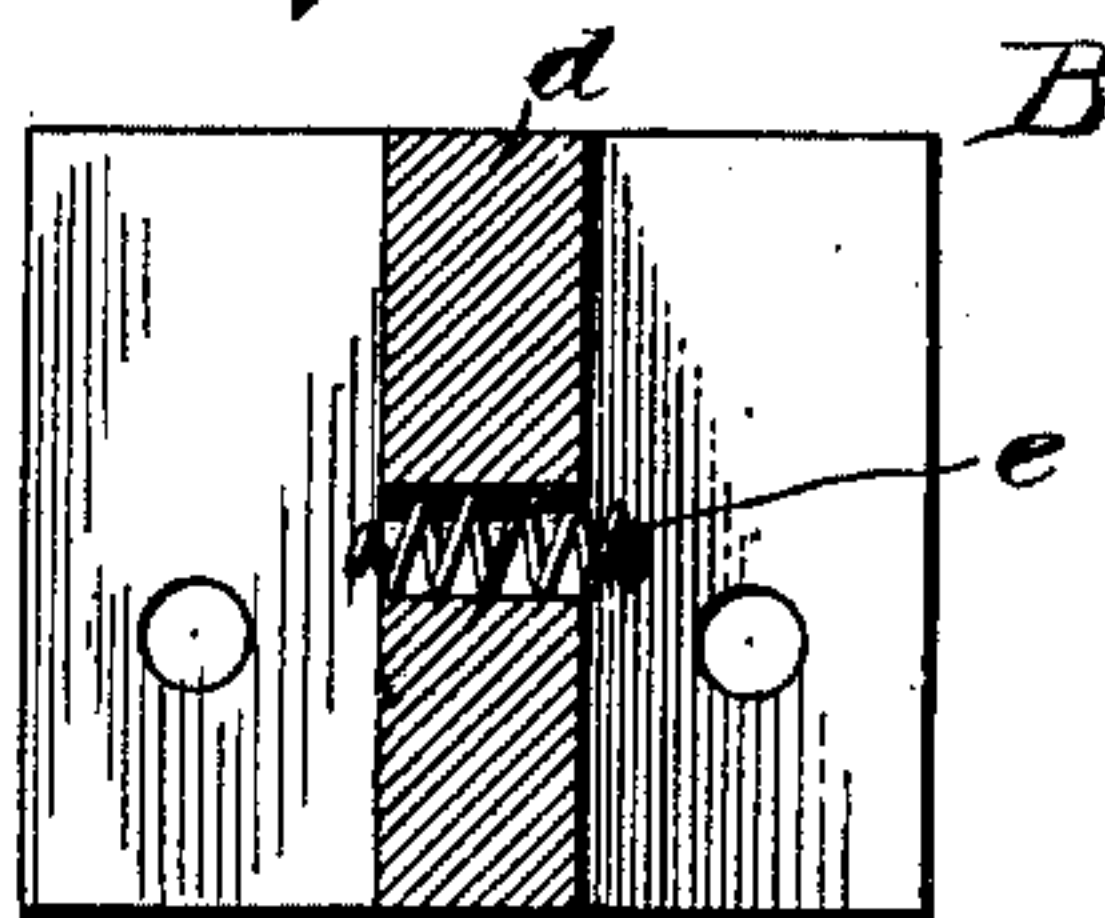


Fig. 4.



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RAILROAD-RAIL JOINT.

SPECIFICATION forming part of Letters Patent No. 675,645, dated June 4, 1901.

Application filed December 3, 1900. Serial No. 38,467. (No model.)

To all whom it may concern:

Be it known that I, JAMES LEDGER WOOD, of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Railroad-Rail Joints; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

As already stated, my invention relates to railroad-rails; and its object is not only to provide a joint that will obviate the disagreeable clatter incident to the inequalities of the ordinary joint when the wheels of the car are passing from one rail to another, but also to furnish means for connecting the rails so that they will be rigidly and securely united at their ends.

The invention consists in certain novel details of construction, as well as in the combination of parts hereinafter described and claimed, which will be particularly defined in the claims.

Referring to the drawings, Figure 1 is a perspective view of the railroad-joint complete. Fig. 2 is a similar view with the parts disassembled. Fig. 3 is a top plan view of the connecting-block, and Fig. 4 a longitudinal section through the same.

A represents the rail, each end of which is formed with a central tongue *b*, through which is an elongated slot *a*. The tongue may be of any desired length, but must be flush with the top and base of the rail, with its outer end equidistant from the shoulders *b'* throughout its depth.

B represents a connecting-block provided at each end with a vertical groove *c*, into which the tongues of the contiguous rails fit snugly. The tread and base of this block B must be flush with the tops and bottoms of the rails between which it is located, and its sides should spread from the under side of the tread toward the base, so that the bottom of the block will be of the same width as the base of the rail. In other words, it is not webbed as the rail is, thus affording more strength and rigidity at the joint. The central partition *d* of the block B is provided with a suitable hole for a copper coil-spring *e* to rest in. (See Fig. 4.) Each end of this spring should con-

tact with the ends of the adjacent rail when properly positioned. The object of the spring is to more thoroughly adapt my improved rail-joint to cars propelled by electricity. However, I make no claim at present for this spring, reserving the right to do so in another application.

g g are bolts extending from side to side of the block B through slots *a a* in tongue *b*.

C represents a channeled base-plate upon which the ends of the rails and connecting-block are seated. The channel in this base-plate should be somewhat deeper than the lower edge of the rail is thick, so that its sides will embrace the lower portion of block B. Thus when the spikes *g' g'* are driven in the cross-ties the several parts will be rigidly united and held securely in place.

I am fully aware of Patent No. 410,149 and claim nothing therein shown or described; but

What I do claim, and desire to secure by Letters Patent, is—

1. The combination with a railroad-rail terminating at each end in a tongue flush with both the tread and base of the rail, of a connecting-block of the same depth as the rail and formed with grooves to receive the tongues of the contiguous rails, all substantially as and for the purpose set forth.

2. The combination with a railroad-rail having a tongue at each end thereof formed flush with both the tread and base of the rail and with an elongated hole through each tongue, of a connecting-block of the same depth as the rail having grooves adapted to receive the tongues of the rails, and bolt-holes registering with those in the tongues, all substantially as and for the purpose set forth.

3. The combination with a railroad-rail having a tongue at each end thereof flush with both the tread and base of the rail, and a connecting-block of the same depth as the rail, formed with grooves to receive the tongues of the contiguous rails; of a channeled base-plate adapted to seat and retain in place both the rails and block, with the assistance of spikes, all substantially as and for the purpose set forth.

4. The combination with a railroad-rail having a tongue at each end thereof formed

flush with both the tread and base of the rail,
and with an elongated hole through each
tongue, of a connecting-block of the same
depth as the rail, provided at each end with
5 a groove adapted to receive the tongue of the
adjoining rail, the connecting-block being
formed with holes registering with the holes
in the tongues, and suitable bolts adapted to
pass through the holes in the block and
10 tongues; and a channeled base-plate adapt-

ed to seat and retain in place both the rails
and block, with the assistance of spikes, all
substantially as and for the purpose set forth.

In testimony that I claim the foregoing as
my own I affix my signature in presence of 15
two witnesses.

JAMES LEDGER WOOD.

In presence of—

JAMES R. MANFIELD,
T. H. ALEXANDER.