

W. Hendershott,

Railroad Chair,

No. 47,820,

Patented May 23, 1865.

Fig. 1.

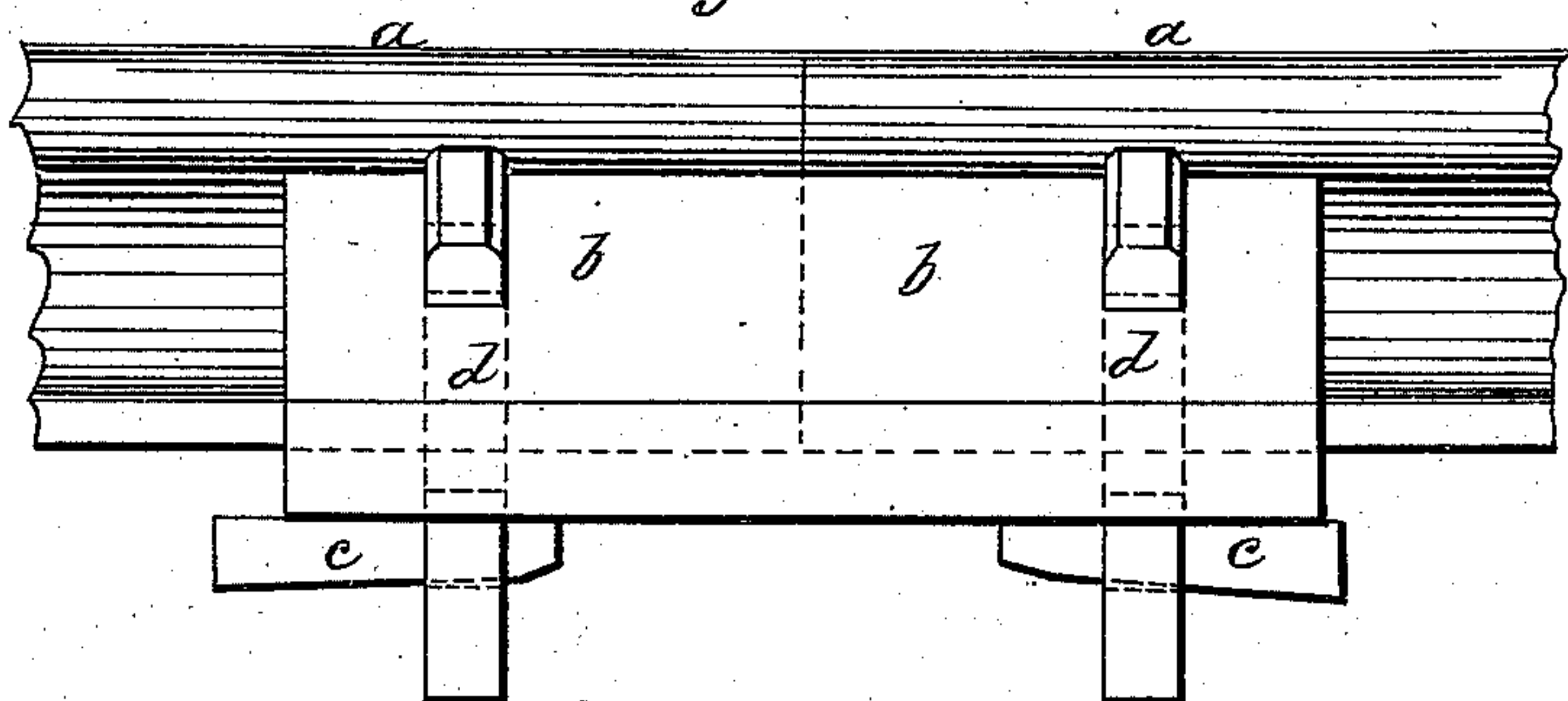


Fig. 3.

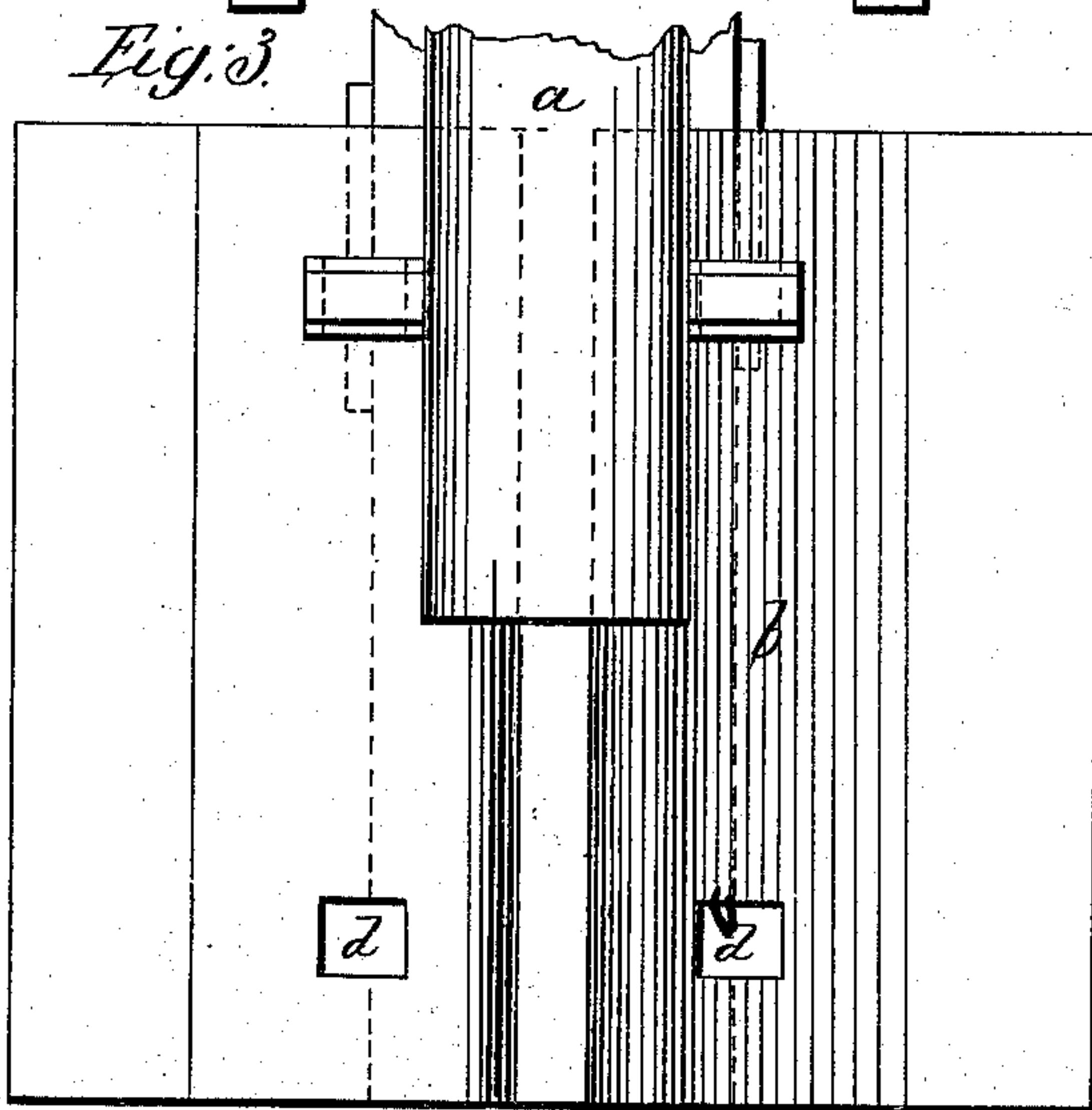
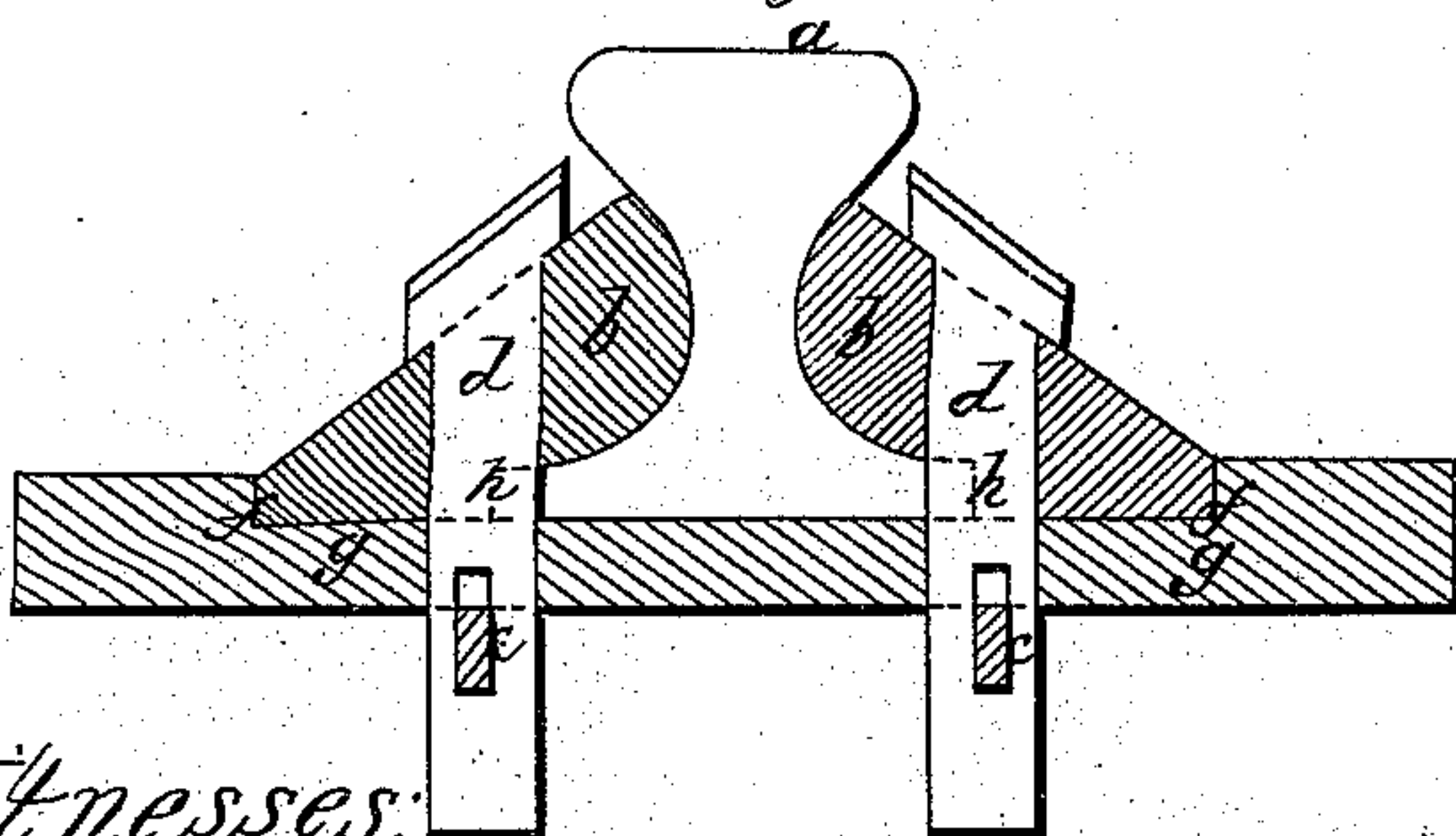


Fig. 2.



Witnesses;

H. U. Soper

W. F. Bly

Inventor;

W. Hendershott

# UNITED STATES PATENT OFFICE.

WELLS HENDERSHOTT, OF BATAVIA, NEW YORK.

## IMPROVED RAILROAD CHAIR AND COUPLING.

Specification forming part of Letters Patent No. 47,820, dated May 23, 1865.

*To all whom it may concern:*

Be it known that I, WELLS HENDERSHOTT, of Batavia, Genesee county, New York, have invented a new and Improved Rail Chair or Coupling; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

My rail chair or coupling to support and couple the ends of the rails together may be made of wood or cast or wrought iron. It is usually made in three parts—the base, letter *g*, and two cheeks or side pieces, *b b*, to fit into the hollow sides of the rail. It may be advisable to make the base of wrought-iron, with two sides turned up in order to form a shoulder for the bottom of the side pieces to rest against.

In making the chair all of wood except the bolts or spikes, or of cast-iron, I cast the base with shoulders, against which rest the side pieces on each side, as shown at letters *f f*. This base should be no larger or thicker than is sufficient to furnish a firm support. It may be about one foot long, and from six to eight inches wide, and about one-half of an inch thick at the sides, and one-quarter of an inch thick between the shoulders. The side pieces are made to fit into the hollow part of the rail, extending down and resting upon the base and against the shoulders, as seen at letters *f f*, Figure II. I bolt the side pieces and base firmly in the bolts, letters *d d*, and if it is desired to place the chair between the sleepers or cross-ties, I hold them securely by the keys *c c*; or, if the chair is placed upon the cross-tie, it should be secured with a spike driven into the tie.

In order to allow for the expansion and con-

traction of the rail caused by heat and cold, I make a slot in the flange or the edge of it where the bolt or spike passes through the rail, sufficiently long to allow such contraction and expansion.

By means of this rail chair and coupling I am enabled to sustain and couple the ends of the rails firmly, and the rail is very much strengthened by the two supporting sides fitted into the hollowing part thereof, and these supporting sides are fastened in a manner so as not to weaken the rails by having holes made to receive bolts passing through them horizontally, and it is evident that this chair and coupling may be placed between the sleepers or cross-ties, and that the rails will then be held and supported, and the upper surface kept upon a level, and much of the concussion of trains avoided.

I use the side pieces and the cross-tie in place of a base, or make the tie into a base with shoulders to hold the side pieces, and the cross-tie thus arranged is represented by letters *g g* in Fig. II. This arrangement saves and prevents much of the heavy concussion of heavy trains.

Having thus described my invention, what I claim is as follows, viz:

Making a rail chair and coupling with a base-plate, *g g*, with square flanges *f f* for the side pieces to rest against, with side or splice pieces, *b b*, having square shoulders *h h*, said splices and base being bolted or spiked to the cross-tie through long slots in the flanges of each side of the rail, or bolts may be secured by a key, all constructed substantially as described, and for the purpose herein set forth.

WELLS HENDERSHOTT.

Witnesses:

W. T. BLISS,  
H. U. SOPER.