

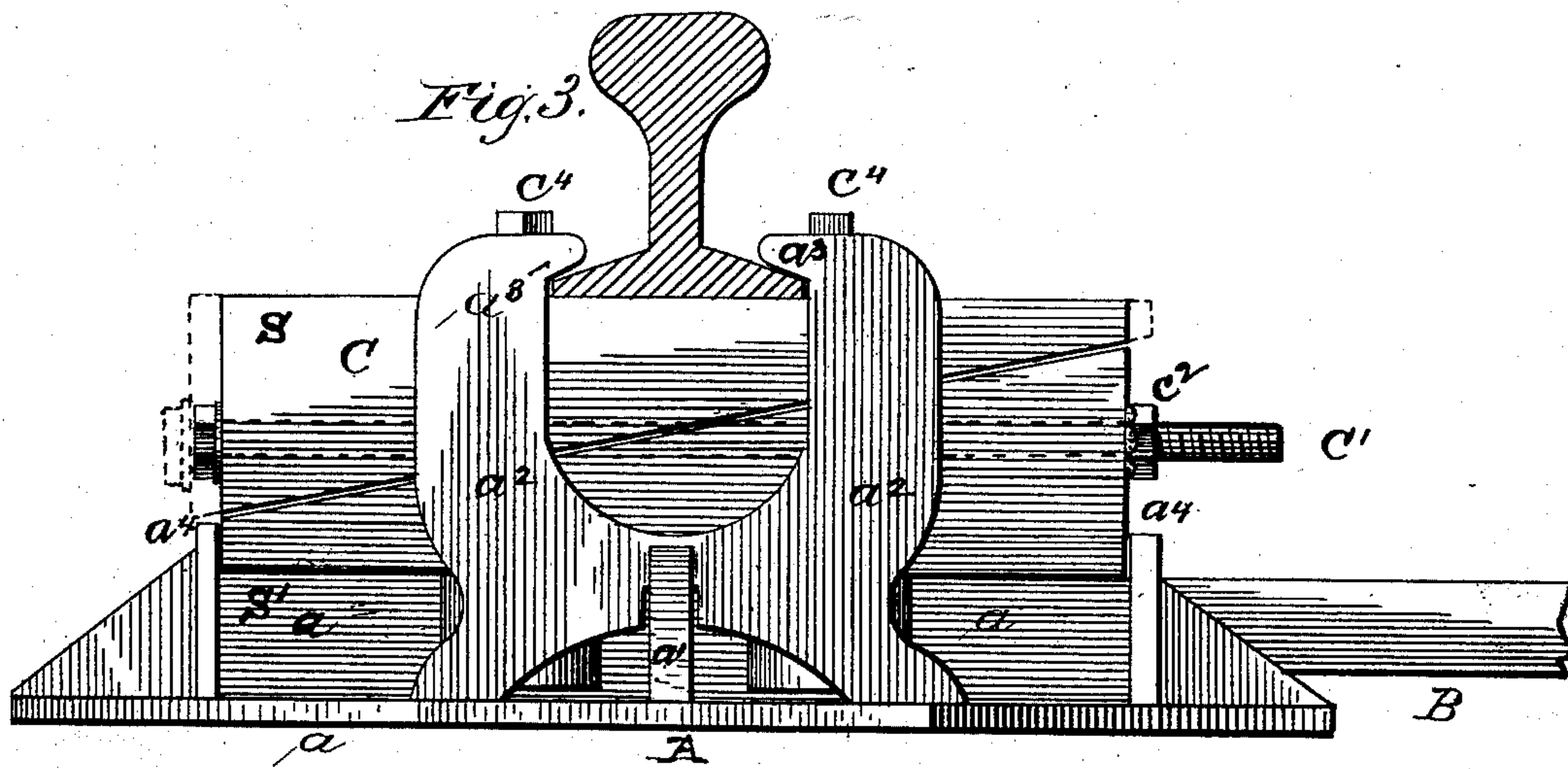
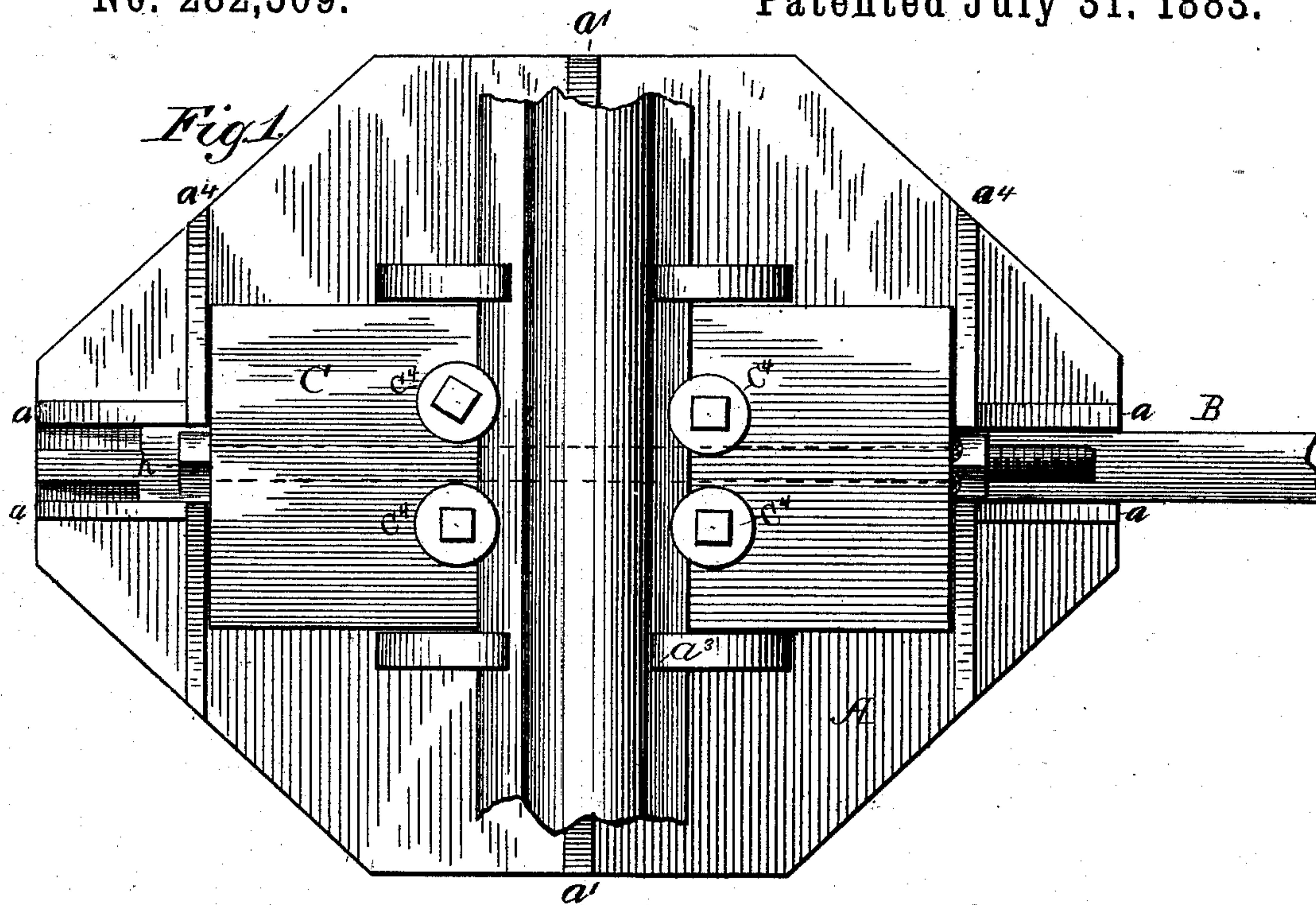
(No Model.)

2 Sheets—Sheet 1.

L. HAAS.
RAILROAD CHAIR AND TIE.

No. 282,309.

Patented July 31, 1883.



Witnesses

Jas H. Baxter
Chas M. Young.

Inventor:

Levi Haas.
By Myer & Co
Atty.

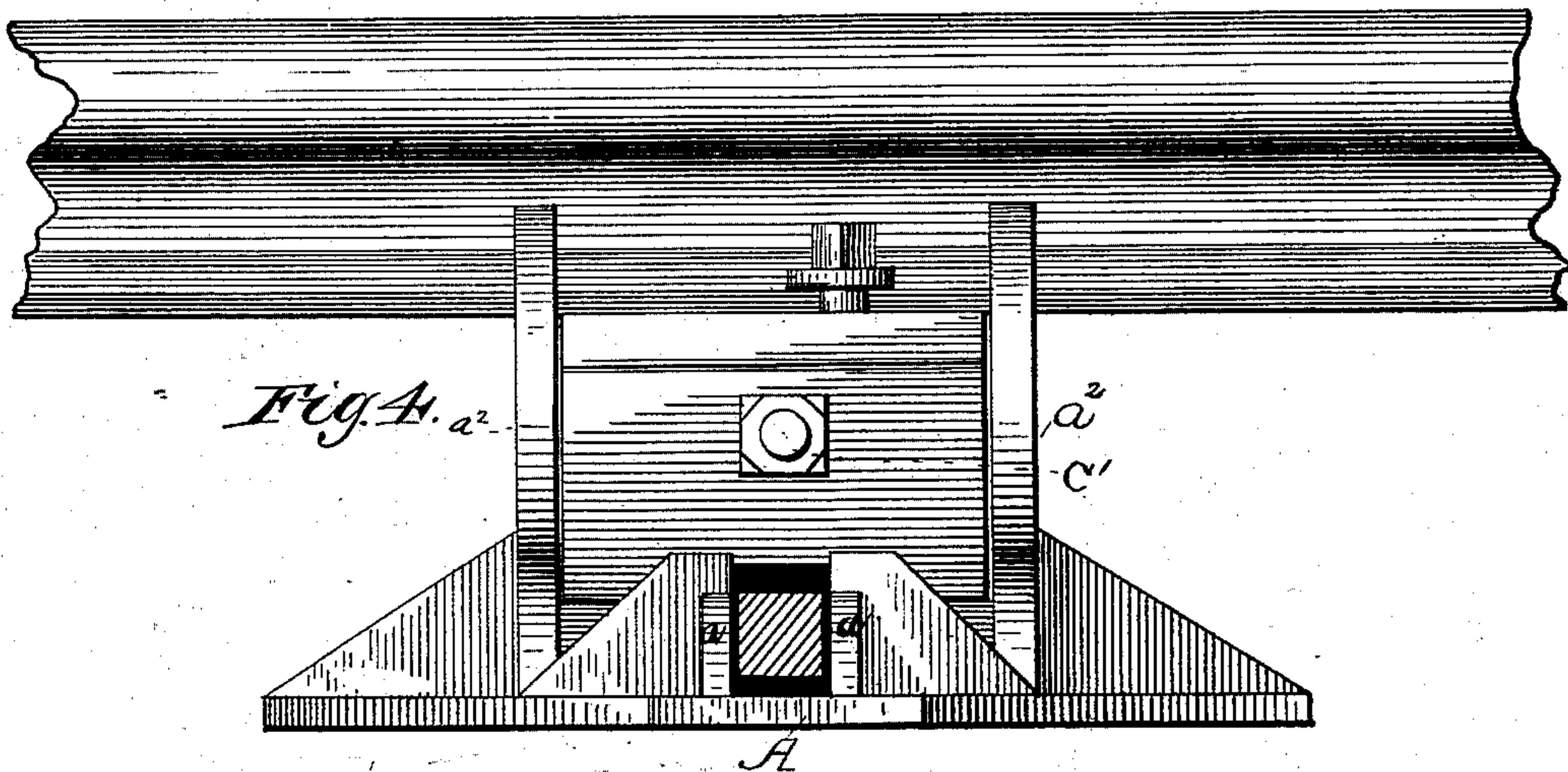
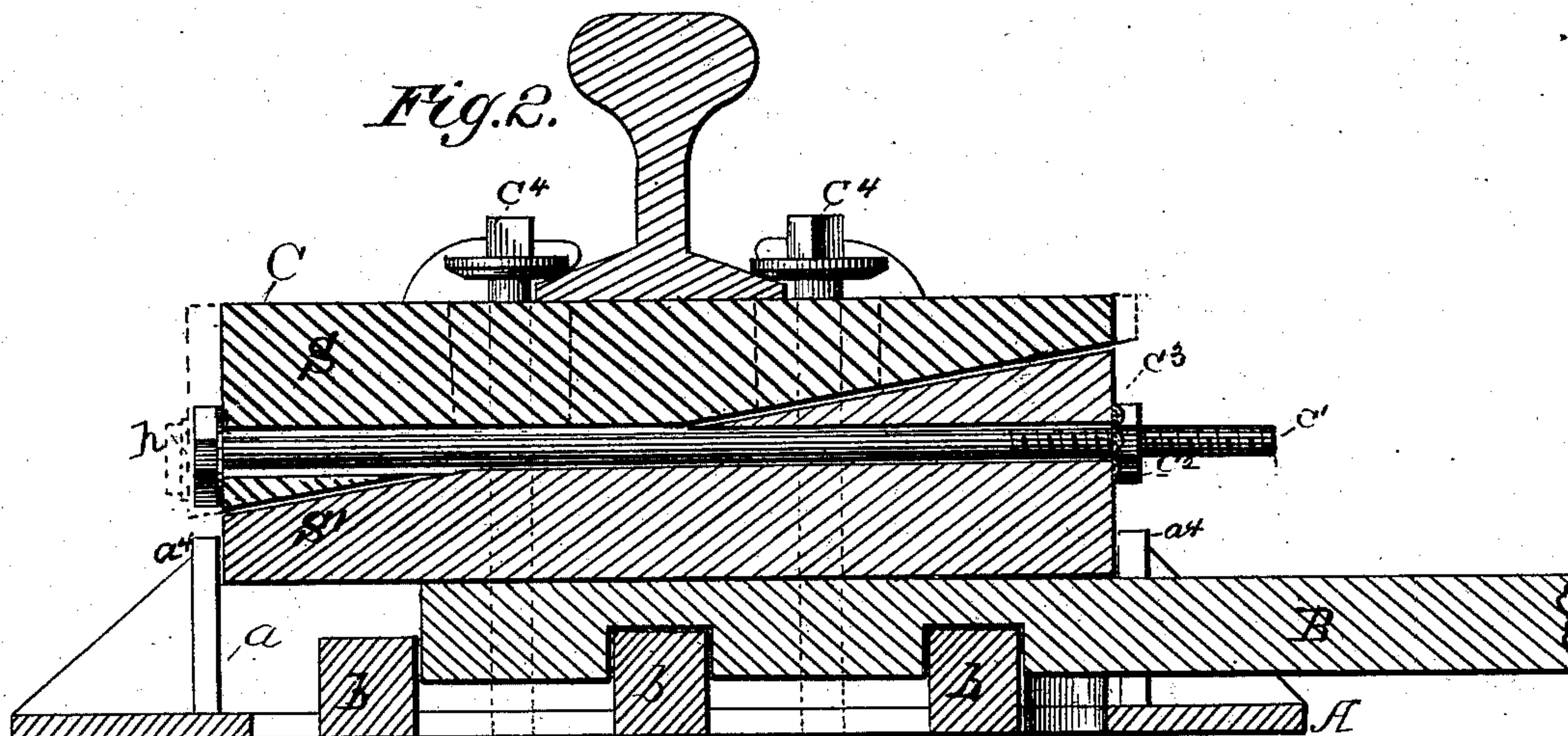
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UNITED STATES PATENT OFFICE.

LEVI HAAS, OF CHESTER, PENNSYLVANIA.

RAILROAD CHAIR AND TIE.

SPECIFICATION forming part of Letters Patent No. 282,309, dated July 31, 1883.

Application filed August 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, LEVI HAAS, a citizen of the United States of America, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Railroad Chairs and Ties, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to improvements in railroad chairs and ties; and it has for its object to readily tighten and loosen the rails; to provide for the use of light rails on ties adapted for large or heavy rails; to enable the taking up and putting down the chair and tie without liability of disarrangement; to permit the ready removal and replacement of the rail-support; to facilitate the laying of the track, and to securely fasten the individual rails upon their support.

20 To these ends the nature of my invention consists in the employment of obliquely halved or sectioned rail-supports with the sections or halves adjustably bolted or connected together; in the provision of peculiarly-constructed chairs, and of bolts having locking-nuts, which are fitted with packing, preferably made of tow or tarred rope, substantially as hereinafter more fully set forth.

30 In the accompanying drawings, Figure 1 is a plan view of my improved chair and rail-support or furnishings for railroad-tracks. Fig. 4 is an end view thereof. Fig. 2 is a longitudinal section thereof. Fig. 3 is a side elevation thereof.

35 In carrying into practice my invention I use a bed-plate, A, upon which is cast or constructed a longitudinal socket or trough formed by the vertical walls a , cross-pieces b , web a' , projecting at right angles to the said socket, on either side thereof, and in line parallel to the rail and plates, pieces a^2 , having hooks or cleats a^3 and vertical plates a^4 , projecting transversely on either side of the said socket, all being cast integral of cast or wrought iron. The upper edge of each plate a^2 has formed or cast thereon, at each corner, an inward-projecting hook or cleat, a^3 , providing a space between each pair for the reception of the lower flanges or base and the web of the rail, the hooks themselves being adapted to overhang and fit upon the upper surfaces of the lower

rail-flanges. These plates, with their said hooks or cleats, form the chairs.

The metallic tie-rod B connects the rail-support bed-plates A and the rails indirectly together, and it has formed therein recesses, as shown, for reception of the cross-pieces b , which are cast solid with the bed-plate and located, as shown, in socket a , thus rigidly tying the parallel rails together.

C is the rail-support, rectangular in form, and adapted to fit between the plates a^2 and to rest on the top edges of the socket a and the web a' of the bed-plate A, its upper surface resting about on line with the base of the hooks or cleats a^3 of said side pieces. This support is constructed in two oblique sections or halves, S and S', the section severing it longitudinally, or from end to end. Bolts C^4 , passing vertically through the said support and the base-plate A, effect the securing thereof in position upon the said plate. The vertical bolt-apertures in section S for the reception of bolts C^4 are enlarged into slots to enable the adjustment of section S. (See Fig. 2.) This construction is rendered necessary, in order that section S may be so adjusted as to press the rail rigidly between it and the hooks or cleats a^3 of plate a^2 .

A bolt, c' , passed longitudinally through the support and provided with nuts c^2 , having upon their inner surfaces projections or teeth which engage and bear against the ends of the support, serves to hold its sections together and to permit their adjustment one upon the other. This adjustment of the sections of the support also enables the tightening up of the parts and compensation for wear, or, when desired, the loosening and ready taking apart of said sections of the support.

The toothed nuts c^2 are packed with washers c^3 , fitted upon the bolt c' , and, taking into its thread as the nuts are screwed "home," prevent, in a measure, the vibrations from the train passing upon the track loosening the nuts. The washers are preferably made of tow or tarred rope to more thoroughly wedge the nuts in a locked position upon their bolts.

I claim and desire to secure by Letters Patent—

1. The base-plate A, having cast integral therewith a longitudinal socket, cross-pieces b , web a' , side plates, a^2 , having hooks or cleats

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 a^3 and vertical plates a^4 , in combination with tie-rod B and rail-support C, substantially as shown, and for the purpose described.

5 2. The combination, with the base-plate A, having the side plates, a^2 , of the obliquely sectioned or halved rail-support C, with its sections connected together by adjusting-bolts c' and nuts c^2 , with washers, substantially as and for the purpose described.

10 3. In combination with the rail-support C,

formed of two wedge-shaped parts, the rods c' , having the toothed or lock nut c^2 , and washer c^3 , made of tow or tarred rope, substantially as and for the purpose stated.

In testimony whereof I affix my signature in 15 presence of two witnesses.

LEVI HAAS.

Witnesses:

I. E. COCHRAN, Jr.,

HARRY S. McILVAIN.