

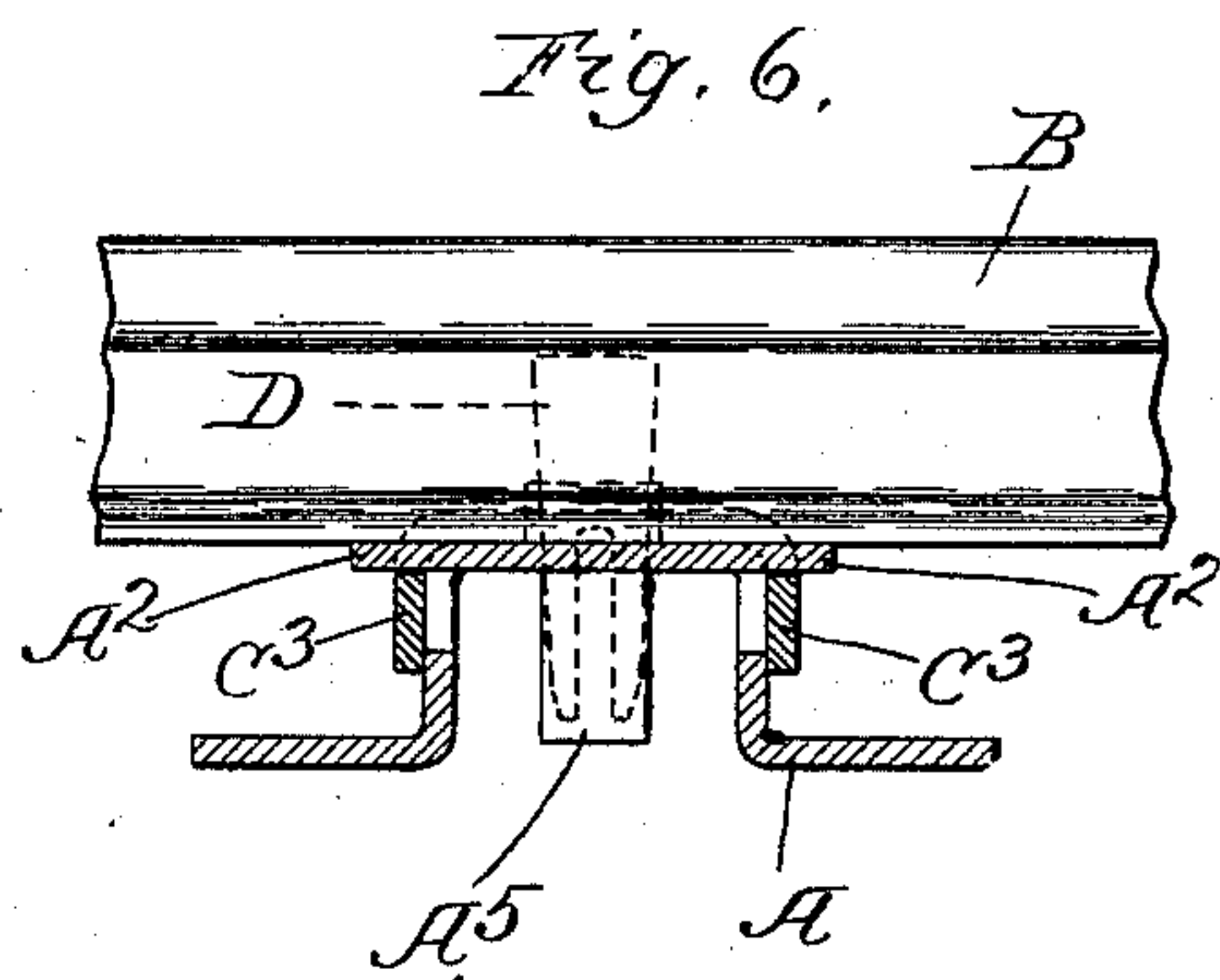
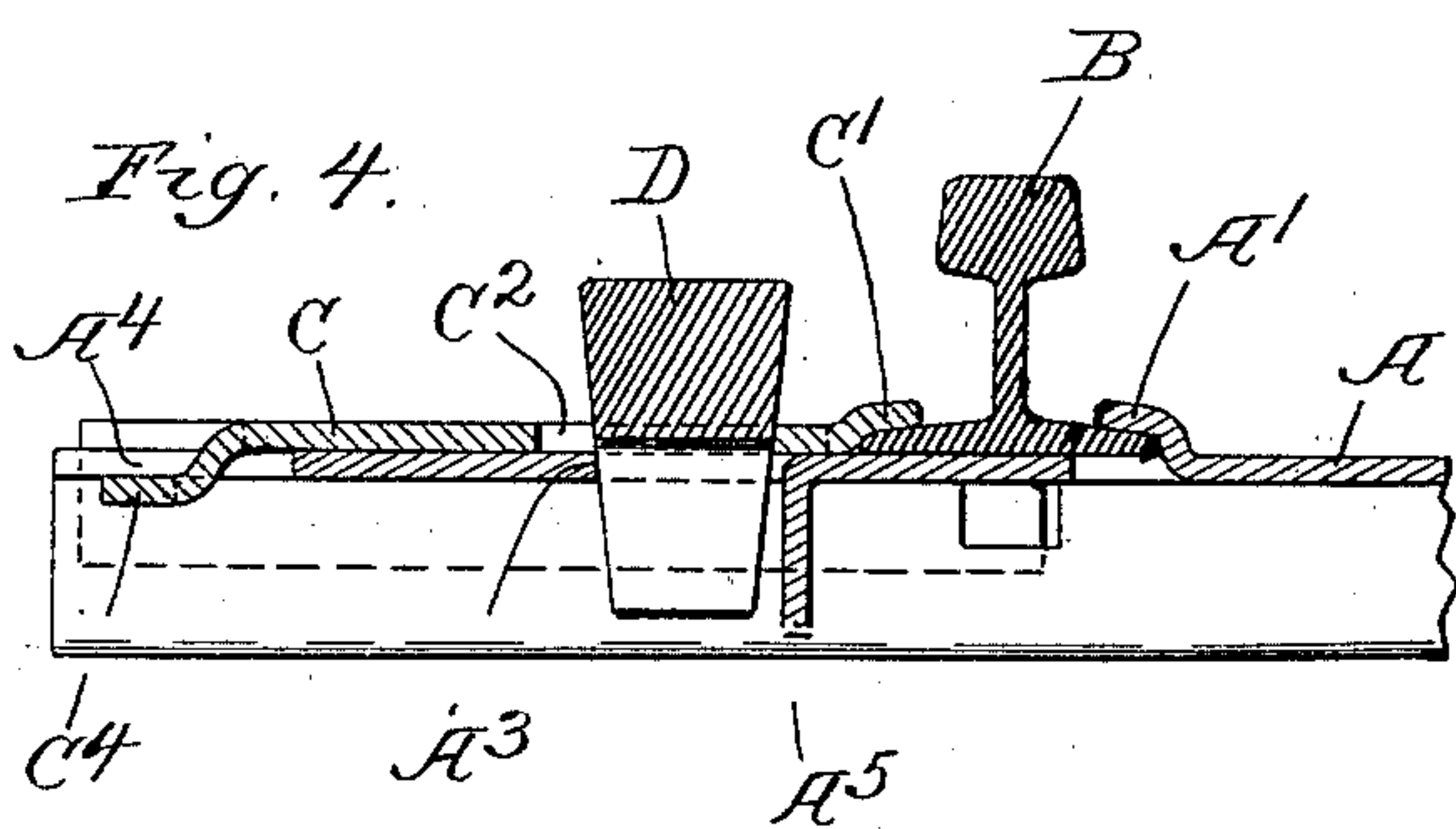
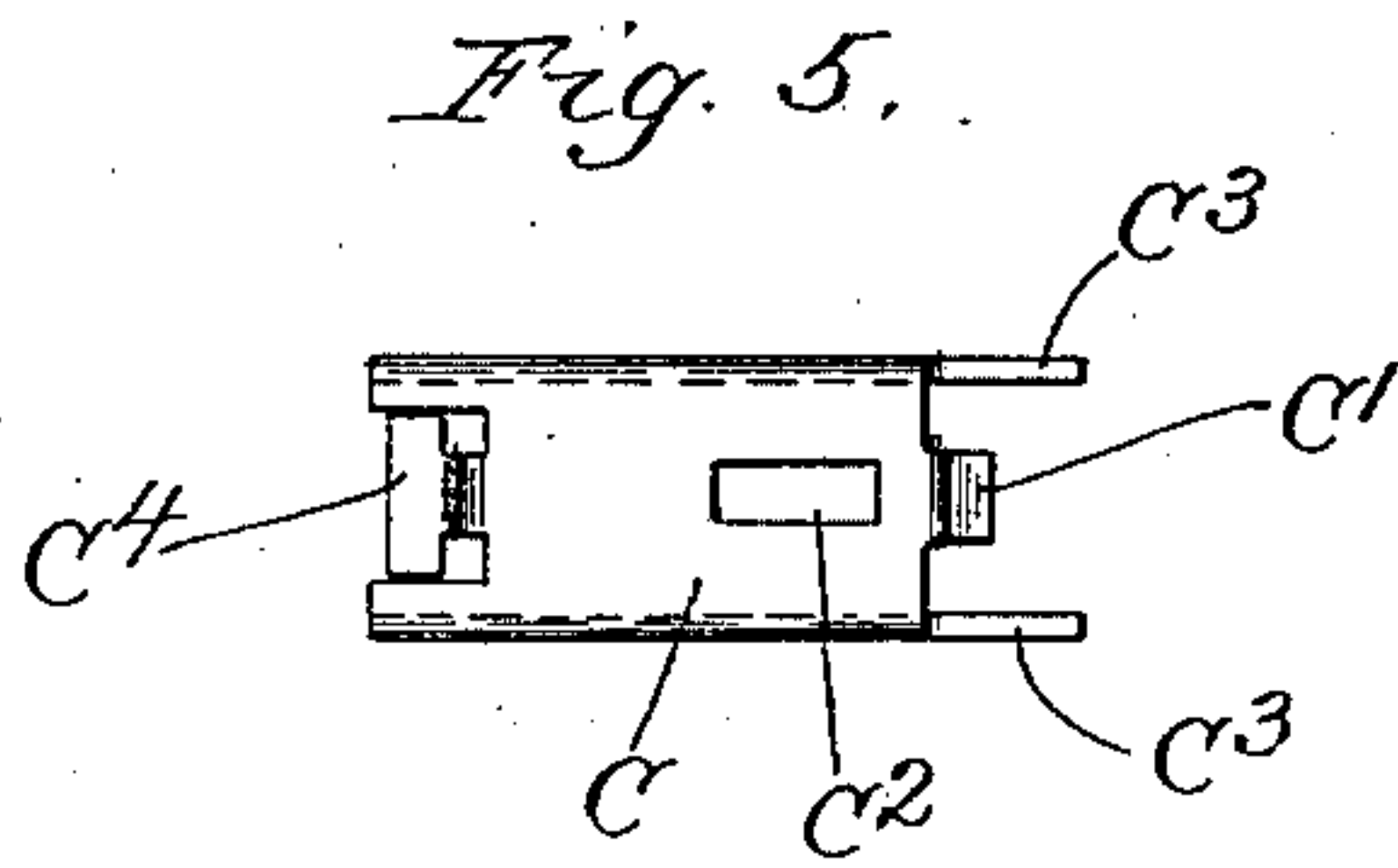
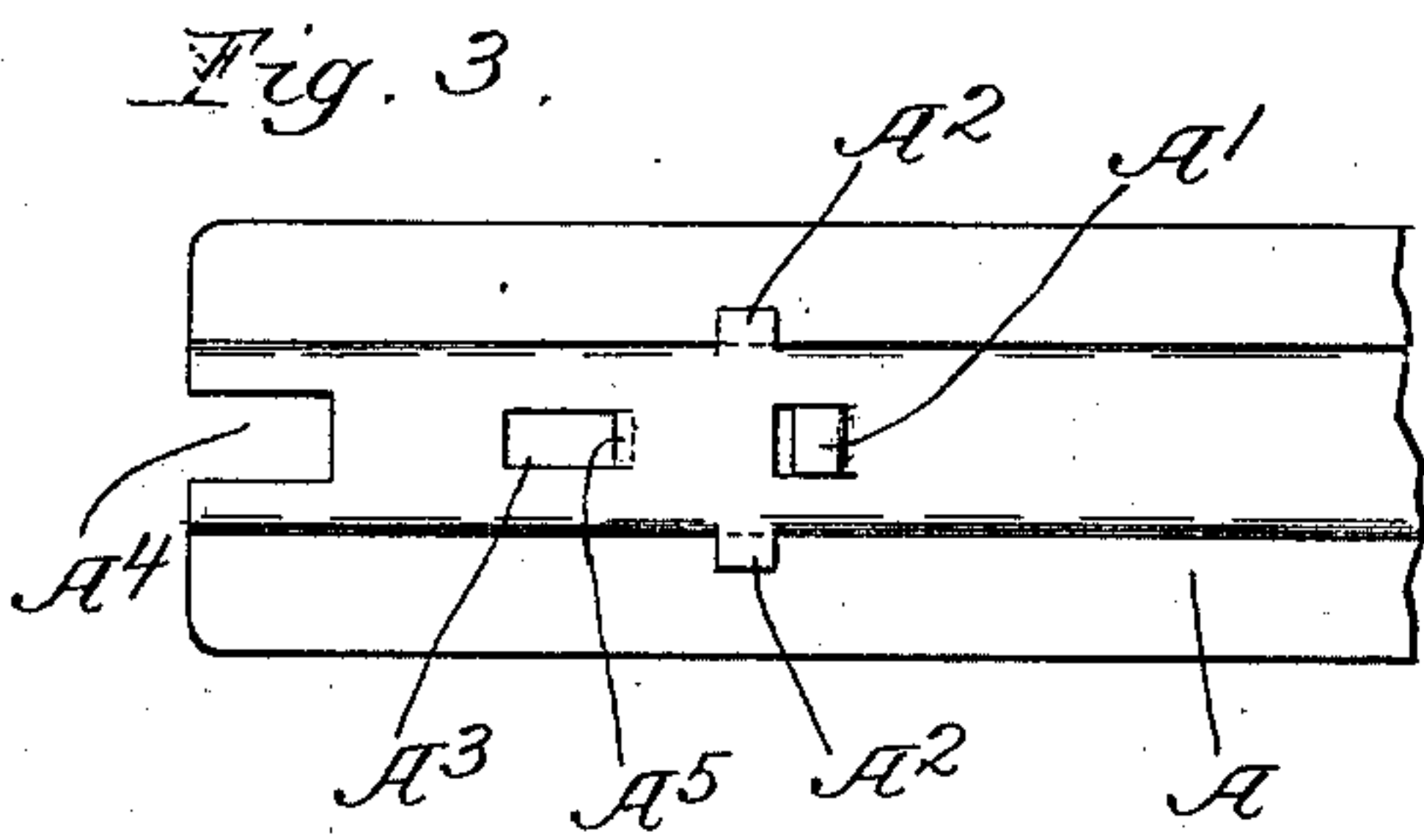
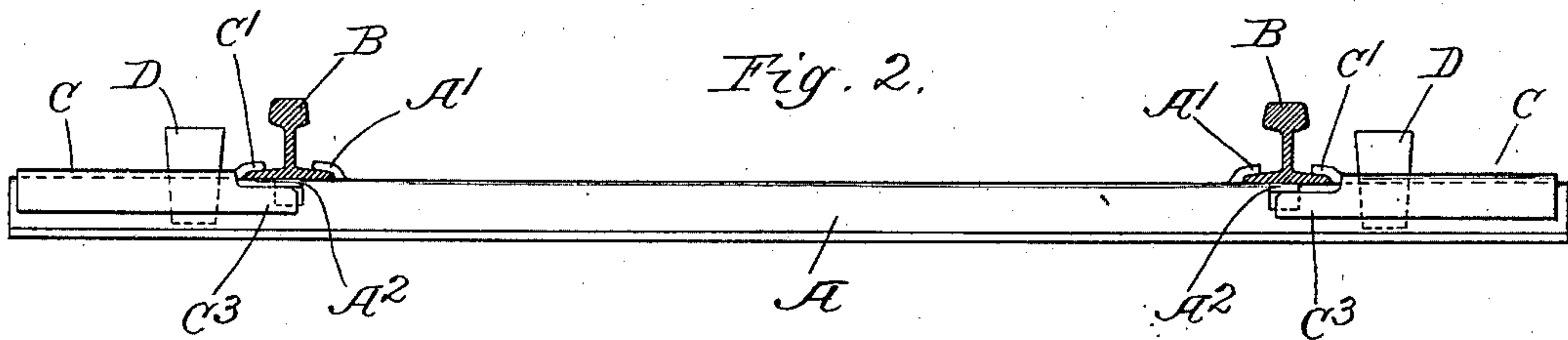
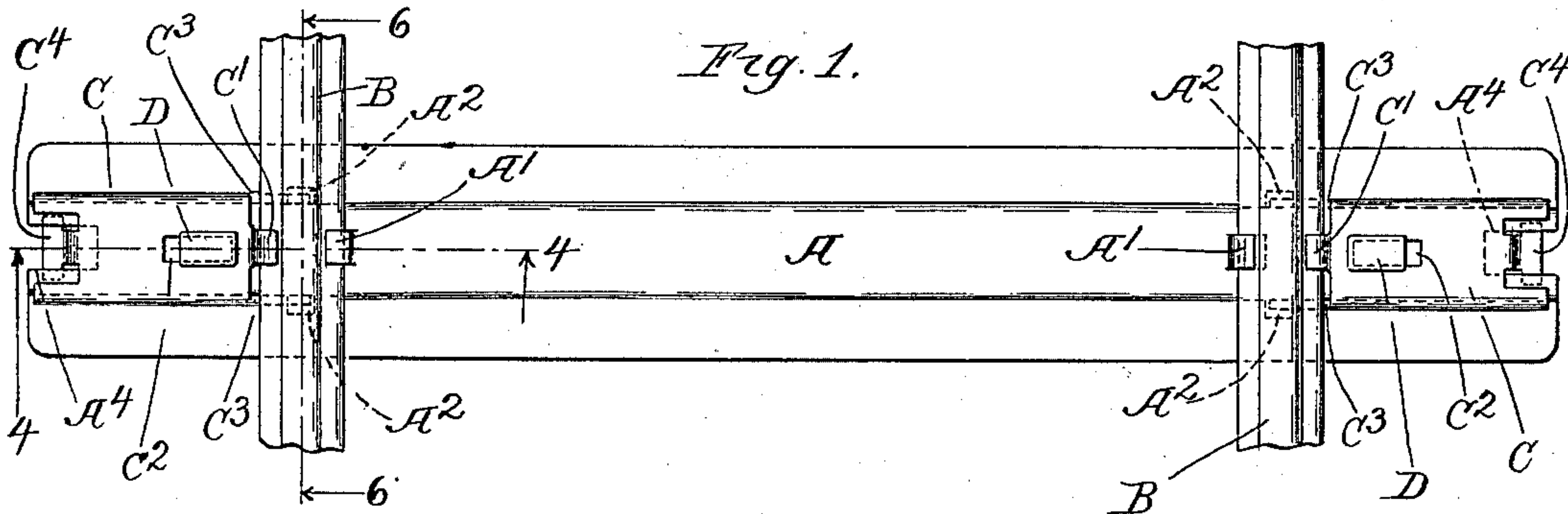
No. 671,606.

Patented Apr. 9, 1901.

C. OLDROYD.
RAILWAY TIE.

(Application filed Aug. 1, 1900.)

(No Model.)



Witnesses.

Edward T. Wray.
Lewis R. Kraft

Inventor.

Cyrus Oldroyd
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UNITED STATES PATENT OFFICE.

CYRUS OLDROYD, OF MORRISDALE MINES, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO WILLIAM F. BOND, OF SAME PLACE.

RAILWAY-TIE.

SPECIFICATION forming part of Letters Patent No. 671,606, dated April 9, 1901.

Application filed August 1, 1900. Serial No. 25,495. (No model.)

To all whom it may concern:

Be it known that I, CYRUS OLDROYD, a citizen of the United States, residing at Morrisdale Mines, in the county of Clearfield and State of Pennsylvania, have invented a certain new and useful Improvement in Railway-Ties, of which the following is a specification.

My invention relates to ties for railways, and has for its object to provide a new and improved tie of this description.

My invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a plan view of a tie embodying my invention. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a plan view of one end of the tie with the rail and holding-pieces removed. Fig. 4 is a section on line 4 4, Fig. 1. Fig. 5 is a plan view of one of the holding-pieces. Fig. 6 is a section on line 6 6, Fig. 1.

Like letters refer to like parts throughout the several figures.

The tie proper, A, is preferably pressed or stamped from a sheet of metal, such as steel or the like, and is given the desired shape. Each tie has attached to it near each end a holding-lug A' and two engaging parts A². These are preferably integral with the tie and are stamped out of the metal of the tie and then bent to the proper position. There is also an opening A³ stamped in the top of the tie near each end, which acts as the opening for the wedge which holds the parts together. This opening may be formed in any desired manner—as, for example, by partially cutting away the metal and forcing the piece A⁵ downwardly into the hollow of the tie. A portion of the tie is also cut away at A⁴. The rail B is placed upon the tie and is engaged at one side by the holding-lug A'. It is of course evident that fish-plates or other intermediate parts may be placed between the holding-lug and the tie, if desired, but I have omitted these parts, as they form no part of my invention. A holding-piece C, preferably made of sheet metal, is formed so as to fit the top of the tie and is provided with the holding-lug C', which is opposed to the holding-lug A' and which engages the opposite side of the rail, as shown in Fig. 2. This holding-piece is provided with an opening C², located over the opening A³ in the tie. A wedge D

passes through the openings C² and A³ and engages the parts so as to force the holding-piece toward the rail. This wedge has the inclined faces shown in Fig. 4 and also has the opposite faces inclined. The wedge D is split at the bottom, as shown, and when forced into position the split portions spread outwardly, so as to act as a key and prevent the accidental removal of the wedge by jarring or the like. The holding-piece C is provided on each side with an engaging part C³. Said engaging parts pass under the engaging parts A² on the tie, as shown in Fig. 2, and hold the holding-piece C against upward movement, thus insuring the clamping of the rail to the tie. At the other end of the holding-piece a suitable engaging device is provided, which engages the tie so as to hold that end down. As herein shown, this engaging device consists of a T-shaped piece C⁴, stamped out of the metal and integral therewith and bent downwardly, so that when the holding-piece is placed on top of the tie and moved forward toward the rail the ends of the T-shaped piece pass into the opening A⁴ and beneath the upper face of the tie, as shown in Fig. 4, thus preventing the holding-piece from moving upwardly.

I have described in detail a particular construction, so as to make my invention clear; but it is of course evident that the various parts may be changed in form, construction, and arrangement without departing from the spirit of my invention.

It will be seen that when my construction is used the tie and the several parts may be stamped out of metal, and hence a cheap, efficient, and durable construction obtained.

The holding-piece C, which fits on the top of the tie, is provided with downwardly-projecting side flanges, so as to form a grooved part which fits down over the top of the tie, the side flanges engaging the sides thereof. The engaging parts C³ are preferably formed by extending these side flanges, and the construction of the holding-piece is such that it may be fitted over the tie at a distance from the rail and then slid therealong toward the rail, so as to connect the several engaging parts.

The use and operation of my invention are

as follows: When the several parts are finished and properly adjusted, the rails are placed in position upon the top of the tie so as to be engaged by the holding-lugs A'. The holding-pieces C are then placed on top of the tie, at its end, and moved forward toward the rail. When in this position, the engaging parts C³ pass beneath the engaging parts A² on the tie, and the T-shaped engaging part at the other end of the holding-piece also engages the material of the tie on each side of the opening A⁴. The wedge D is then placed in position and driven down into the rail. This wedge tightly forces the holding-piece C against the rail or some part associated therewith and binds the several parts in position. The split ends of the wedge are formed outwardly, and thus prevent the accidental removal of the wedge.

It will be seen that the parts can be quickly and easily placed in position and that when in position the rail is firmly held in place and accidental displacement of the parts prevented.

I claim—

1. A railway-tie formed from sheet metal having a holding-lug to engage one side of the rail and opposite laterally-projecting lugs for engaging a holding-piece for the other side of the rail, all of said lugs integral with the sheet-metal tie.

2. A railway-tie formed from sheet metal, having on its top a lug punched out of the metal and bent upwardly to engage the rail and opposite laterally-projecting lugs or parts punched out of the metal and bent upwardly so as to project from the sides of the tie.

3. A railway-tie formed from sheet metal, having on its top a lug punched out of the metal and bent upwardly to engage the rail and opposite laterally-projecting lugs or parts punched out of the metal and bent upwardly so as to project from the sides of the tie, and a cut-way portion at each end to receive engaging parts on the holding-pieces for the rails, substantially as described.

4. The combination with a metal railway-tie, having a projecting holding-lug for the rail and laterally-projecting engaging parts, of a holding-piece provided with a holding-lug for the rail and having engaging parts which engage the laterally-projecting parts on the rail, and a wedge adapted to pass through openings in the holding-piece and the rail and engage them when driven inwardly so as to force the holding-piece toward the rail.

5. The combination with a metal railway-tie of a holding device for the rail, comprising a holding-lug and opposed engaging parts, said lug and parts integral with and on the tie, a holding-piece adapted to be placed on top of the opposite flange of the rail and provided with a holding-lug for the rail, said holding-piece provided also with engaging parts which

engage opposed parts on the tie, and a wedge-shaped part which, when driven into position, forces the holding-piece toward the rail and thus locks the parts in position.

6. The combination with a metal railway-tie of a holding device for the rail, comprising a holding-lug and opposed engaging parts, said lug and parts integral with and on the tie, a holding-piece adapted to be placed on top of the tie and provided with a holding-lug for the rail, said holding-piece provided with engaging parts which engage opposed engaging parts on the tie, and a wedge adapted to be driven into openings in the holding-piece and the tie and provided with engaging faces which engage both parts so as to force the holding-piece toward the rail.

7. The combination with a metal railway-tie of a holding device for the rail, comprising a holding-piece provided with a holding-lug for the rail, a projecting part or parts near one end of said holding-piece which engage lugs on the rail, so as to prevent the upward movement of the holding device, and a suitable engaging device at the other end of said holding-piece which engages the rail when the parts are in position.

8. The combination with a railway-tie of a holding device for the rail, comprising a holding-lug on the tie, a separable holding-piece on top of the tie and provided with downwardly-projecting side flanges, a holding-lug on the holding-piece, a projecting part or parts on said holding-piece, engaging parts on the tie, beneath which said projecting part or parts pass, so as to hold the holding-piece against upward movement, and a binding device for preventing lateral movement of the holding-piece and the tie.

9. In a sheet-metal railway-tie, the combination of a lug, integral with said tie and adapted to engage one flange of the rail, with two other lugs integral with said tie, on the opposite side of and below the rail, a longitudinally-movable clamping device on the tie formed so as to engage the lower sides of the two lugs and the upper side of the associated flange of the rail, and a key or the like to hold such movable part in fixed relation to the tie.

10. In a sheet-metal railway-tie, U-shaped in cross-section, the combination of a lug integral with and on the tie, to engage one flange of the rail, with two other lugs integral with and formed on the vertical portions or sides of the tie, a rail-clamping device adapted to engage the lower sides of the last two lugs and the upper side of the associated rail-flange, and a key for holding said clamping device in rigid relation to the tie.

CYRUS OLDROYD.

Witnesses:

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A. E. TRIMBLE.