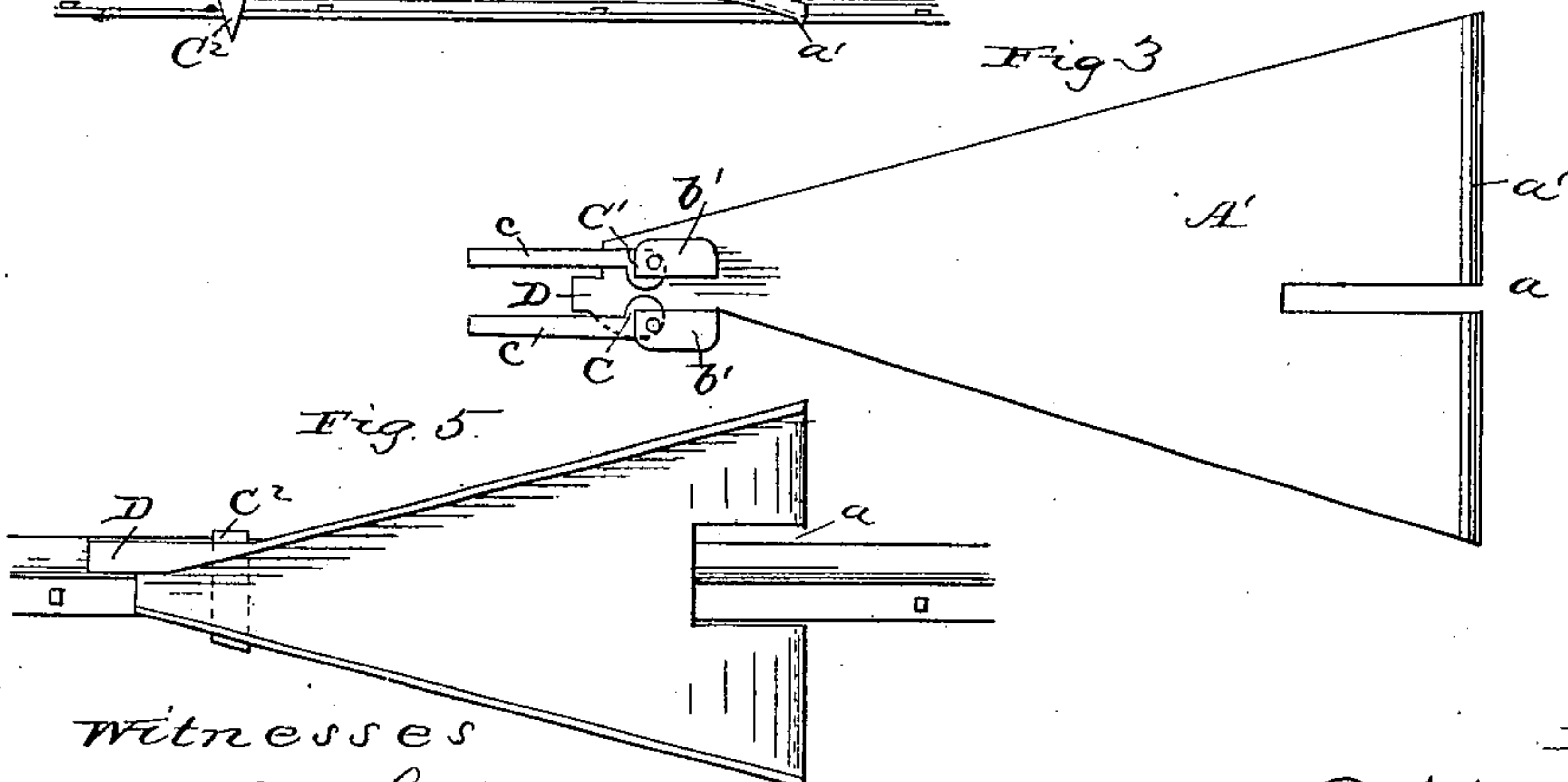
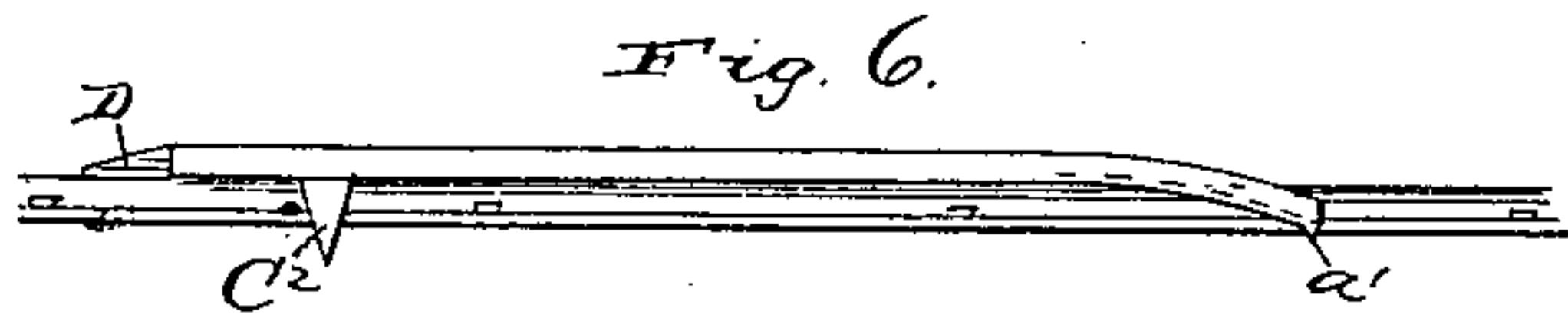
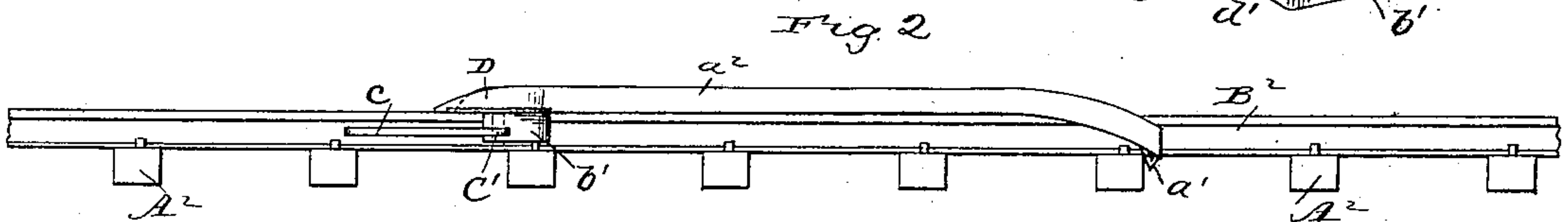
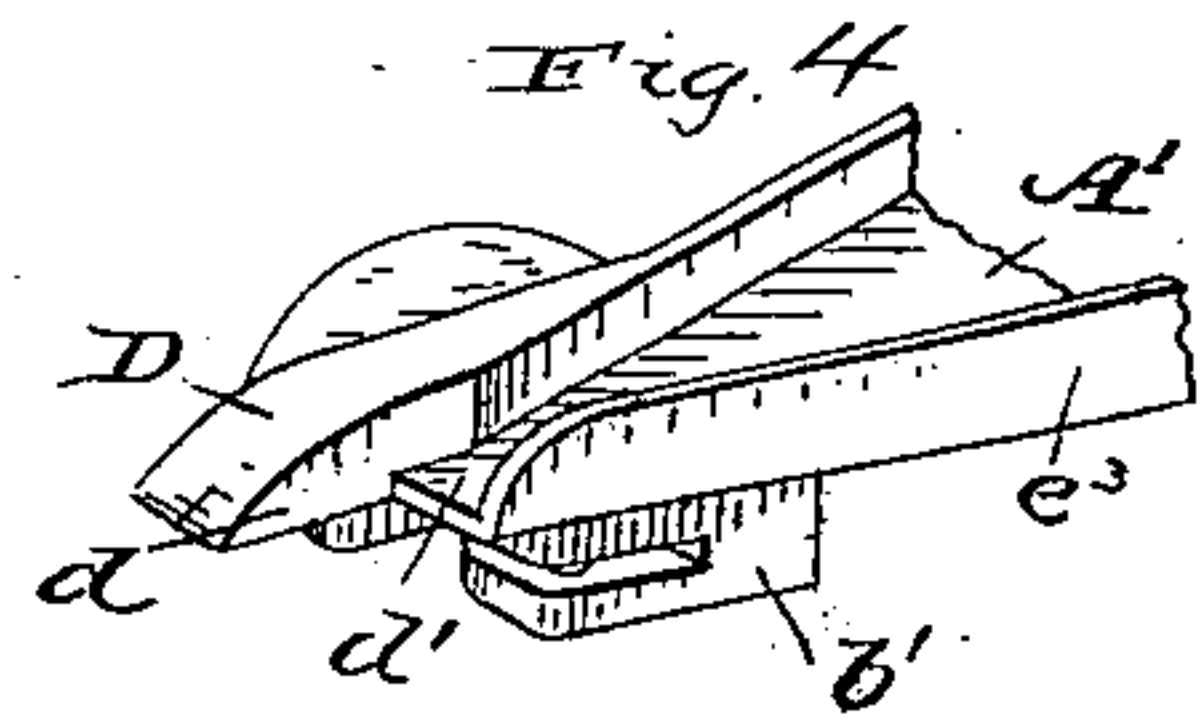
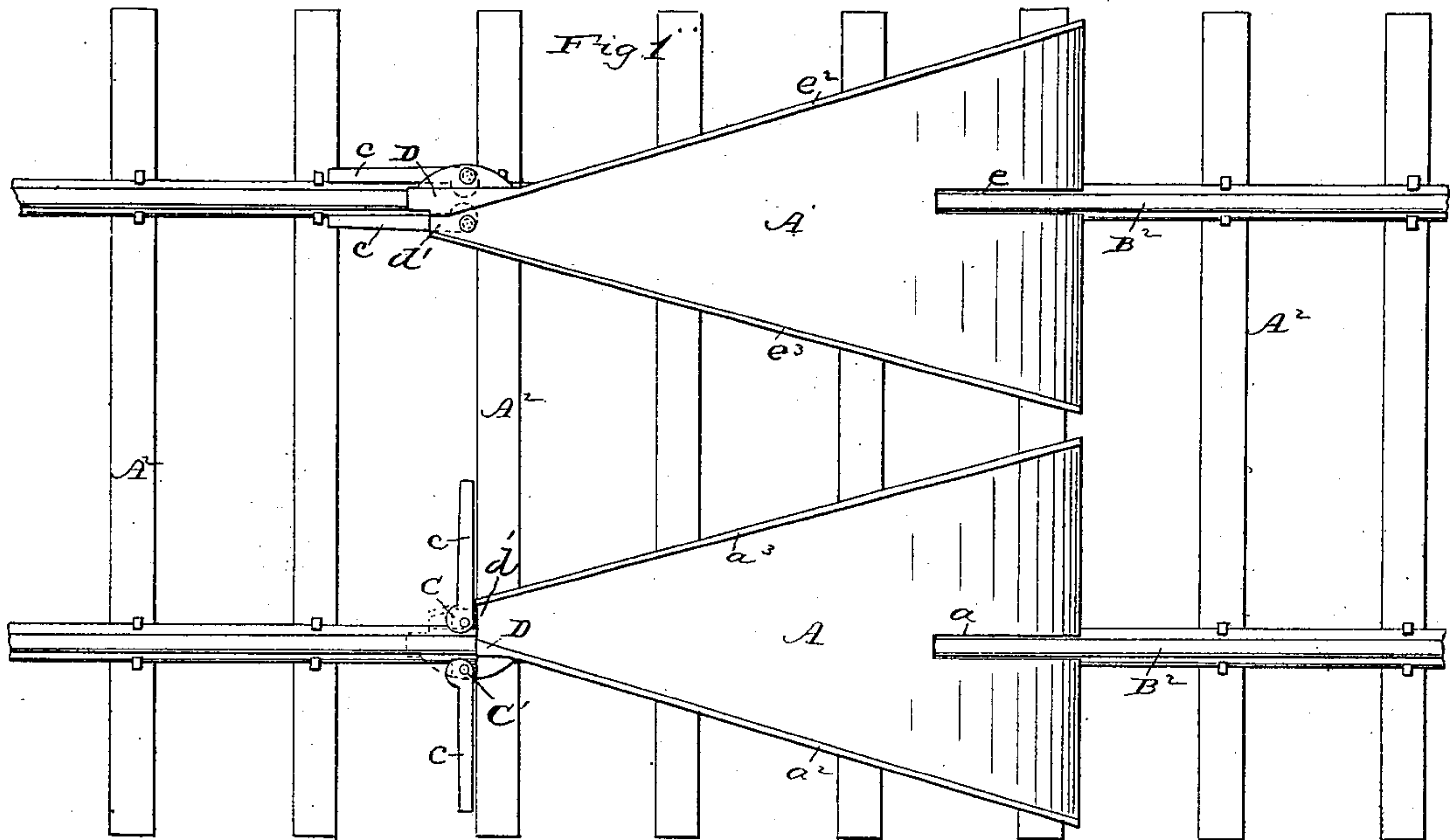


(No Model.)

A. REED.
CAR REPLACER.

No. 284,758.

Patented Sept. 11, 1883.



Witnesses
H. A. Low
A. J. Houghton

Inventor
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UNITED STATES PATENT OFFICE.

ALBERT REED, OF BINGHAMTON, NEW YORK.

CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 284,758, dated September 11, 1883.

Application filed March 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALBERT REED, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Car-Replacers, of which the following is a specification, reference being had therein to the accompanying drawings.

Figure 1 is a plan view of a portion of a railroad-track having my invention applied thereto. Fig. 2 is a side elevation. Fig. 3 is a bottom view of one of the sections of the replacer. Fig. 4 is a perspective of a portion of the front end of one of said sections. Fig. 5 is a top plan view of a slightly-modified form, and Fig. 6 is a side elevation of that shown in Fig. 5.

In the drawings, A^2 A^2 represent the sleepers or ties of a track of ordinary character, and B^2 are the rails secured thereto.

The car-replacer is constructed in two parts or sections, which, throughout the greater portions thereof, are substantially similar, they differing somewhat, however, in detail. The left-hand section is formed with a base-plate, A , which is substantially triangular in plan, it flaring or widening backward from the front ends. This plate is made of metal, cast or wrought, in any suitable or preferred way. At the broader or rear end it is provided with a slot or elongated aperture, a , by which the rear or wide end can be held firmly in proper position relatively to the rail B^2 . At the rear end it has a flange, a' , or equivalent, which can be inserted into the ground, or can be placed against the side or edge of one of the ties or sleepers, so as to assist in holding the replacer in proper position longitudinally.

a^2 a^3 are upwardly-projecting flanges or side rails, which are high enough to prevent the wheels of a car that is being replaced from escaping from the base-plate A . At the front end the replacer is provided with downwardly-projecting brackets or strong supporting-pieces $b' b'$, which can be cast with or riveted or otherwise firmly secured to the lower faces of the base-plate. In one of these supports there is pivoted a cam, C , and in the other a cam, C' , the cams having handles c , suitably hung, by means of which they can be turned in and out. The cams are so situated as that when the replacer is in position upon a rail

they can be locked beneath the tread thereof, and be forced more or less tightly against its web, so as to firmly lock the forward or narrow placer thereon.

D represents a strong inclined rail-section or frog-piece, which is firmly attached to or formed with the side rail or flange a^2 of the replacer-section A . This rail-section or frog-piece is so situated that when the replacer is in position it lies directly above the rail B^2 , the inner edge, d , coinciding with the inner edge of the permanent rail, and each incline having its upper edge arranged to begin with and extend from the upper edge of one of the permanent flanges down to the surface of the permanent rail. The other (right-hand section of the replacer) has a base-plate, A' , a slot, e , side flanges e^2 e^3 , supports $b' b'$, and cams C C' , substantially similar to those above described on the other section. The side-flange a^2 of the left-hand section extends across the rail B^2 from the outside to the inside, and the side flange e^2 of the other section extends across its rail to the inside in a similar way. The inside flange, a^3 , converges toward the flange a^2 , as does the flange e^2 toward the flange e^3 on the other section. A throat or passage, d' , is thus formed on each rail-section, it being situated just inside of the inner face of the rail. When the wheels of the displaced car are moving forward, they will be guided by one or the other of the side flanges of the sections until they reach the passage d' . At this time the threads of the wheels begin to ride upon the rail-sections of the frog-pieces $D D$, which strongly support the wheels and allow them to gradually and smoothly pass downward to the permanent track.

The two sections of the replacer may, if preferred, be joined together, though for most purposes I prefer to have them separate for several reasons, among others that they may conform to any qualities of level.

A replacer of the character I have described is much superior in many respects to those which have been heretofore used. With one of this character the whole of a misplaced train can be drawn readily back into position upon the track, whereas with those that have been heretofore used it has been necessary, generally, to move the replacer in one direction or another for nearly every truck. If one truck or

set of wheels should be upon one side of the rail and another upon the other, they can both be brought back into position upon the track without moving the replacer or guide.

5 Some of the features of my improved construction can be varied without departing from the others. Thus in making replacers for street-cars the cam can be dispensed with, and vertically-arranged studs or stops C² can be
10 used, as shown in Figs. 5 and 6. If the latter be extended and brought to a point or sharpened, they can be used to provide a very strong fastening, either by driving them into the sleepers or wooden supports of the rails or by
15 driving them into the ground.

What I claim is—

In a car-replacer, two base-plates, each expanded upon both sides of the permanent rail, and provided with two upwardly-extending

flanges, one along each side of the base-plate, 20 and one having its rear end upon one side of the permanent rail, and the other having its rear end upon the other side of the permanent rail, both flanges continuously converging to the point at which the wheel 25 escapes, and both being rigid with the base-plate, from one end thereof to the other, in combination with a rigid incline beginning with and extending from the upper edge of one of the flanges down to the surface of the per- 30 manent rail, substantially as set forth.

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

ALBERT REED.

Witnesses:

ELDON R. CARVER,
ALBERT HOTCHKISS.