

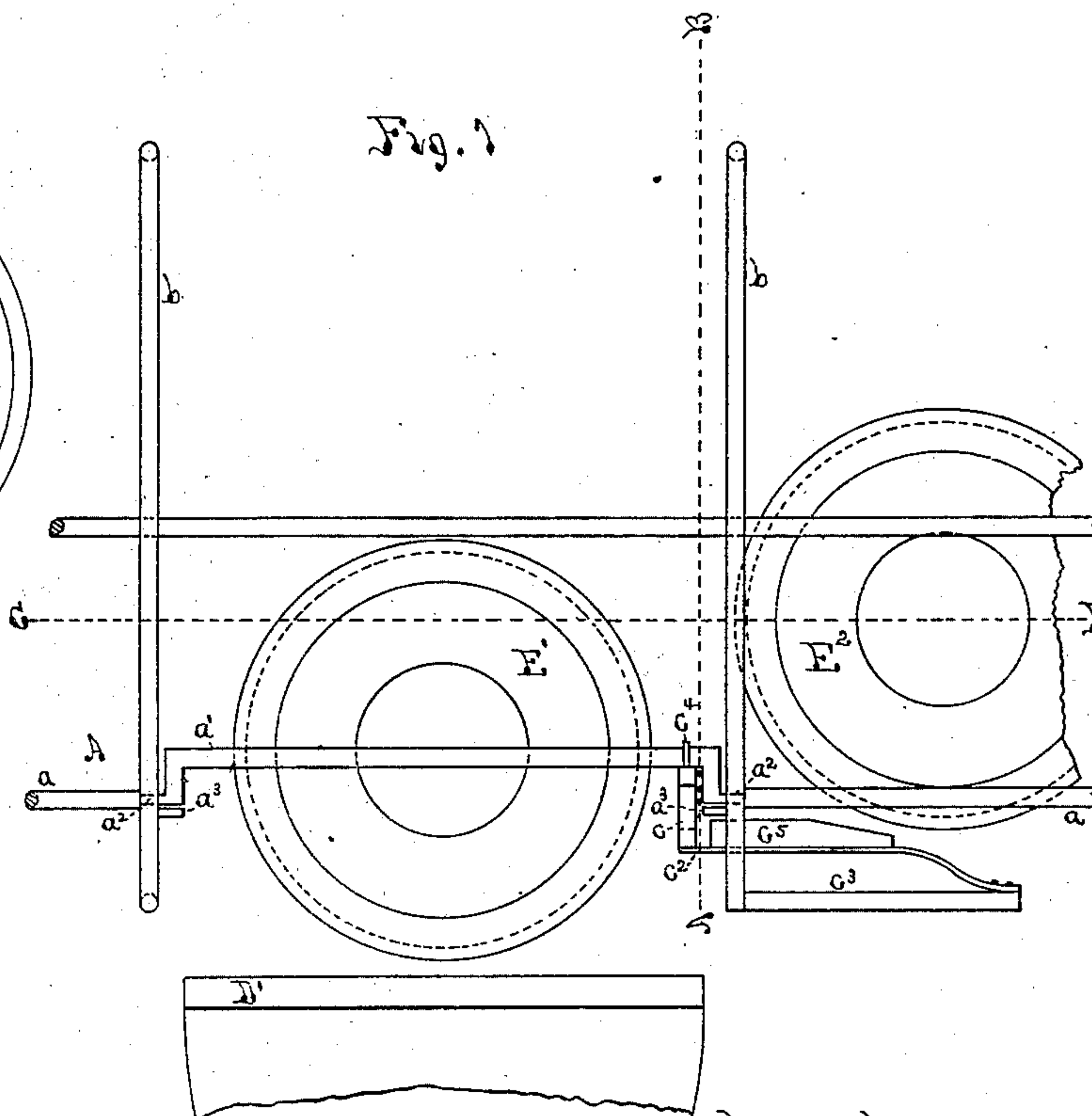
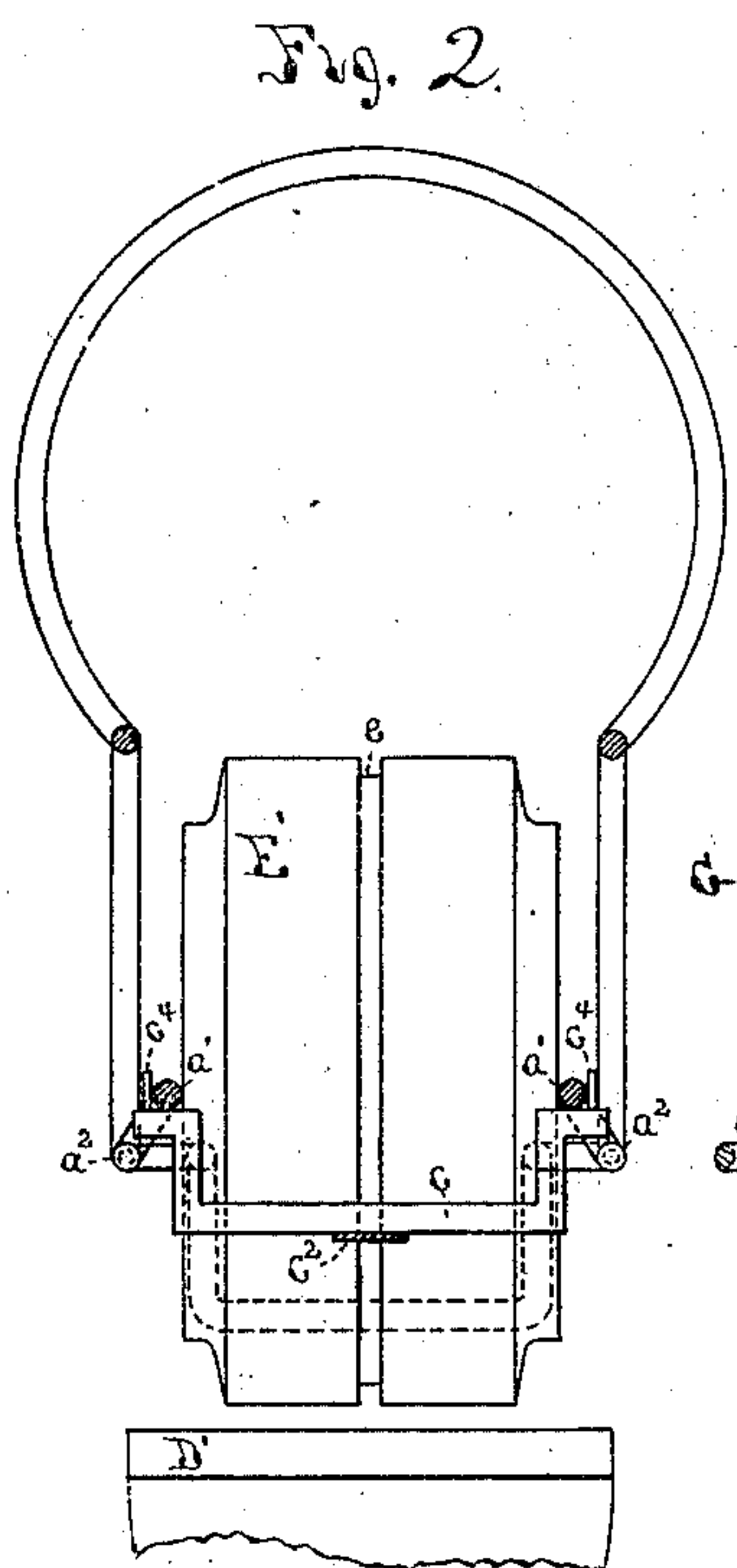
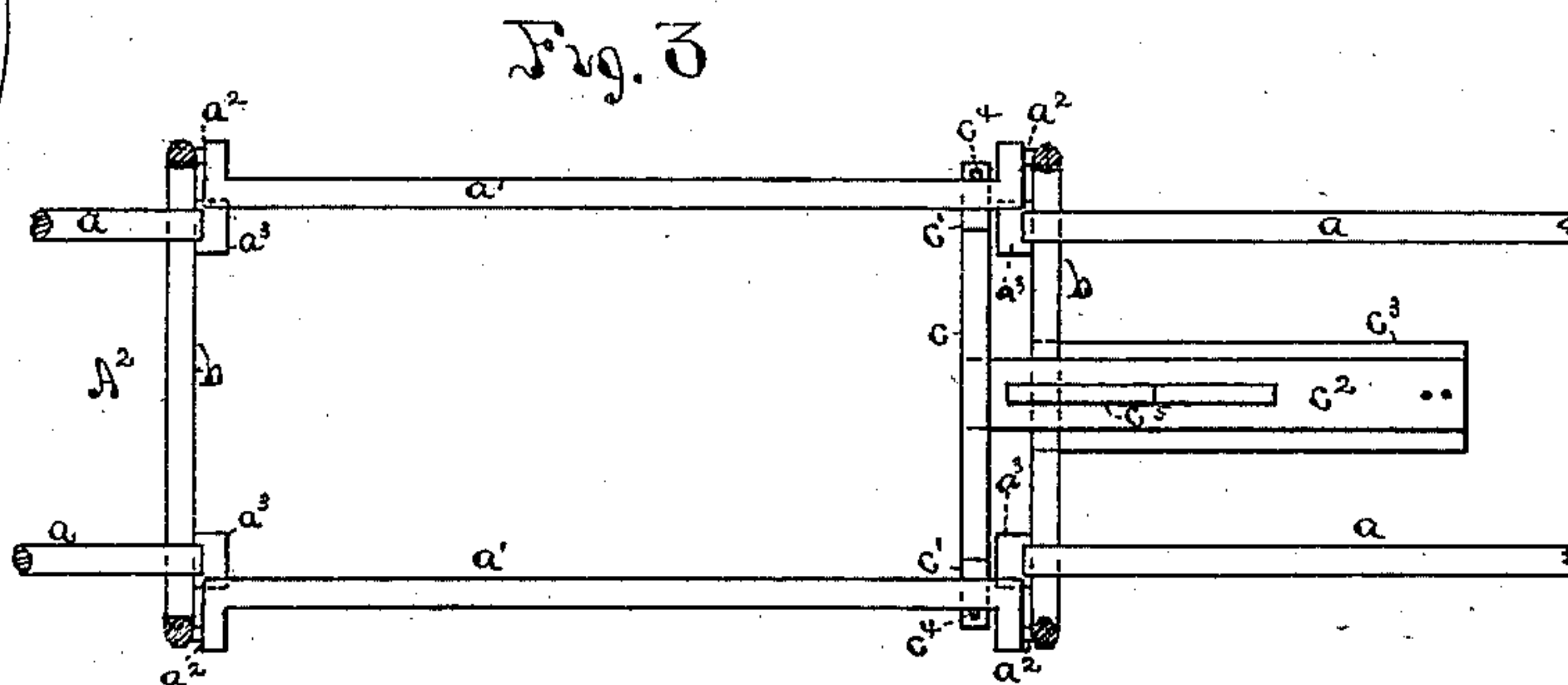
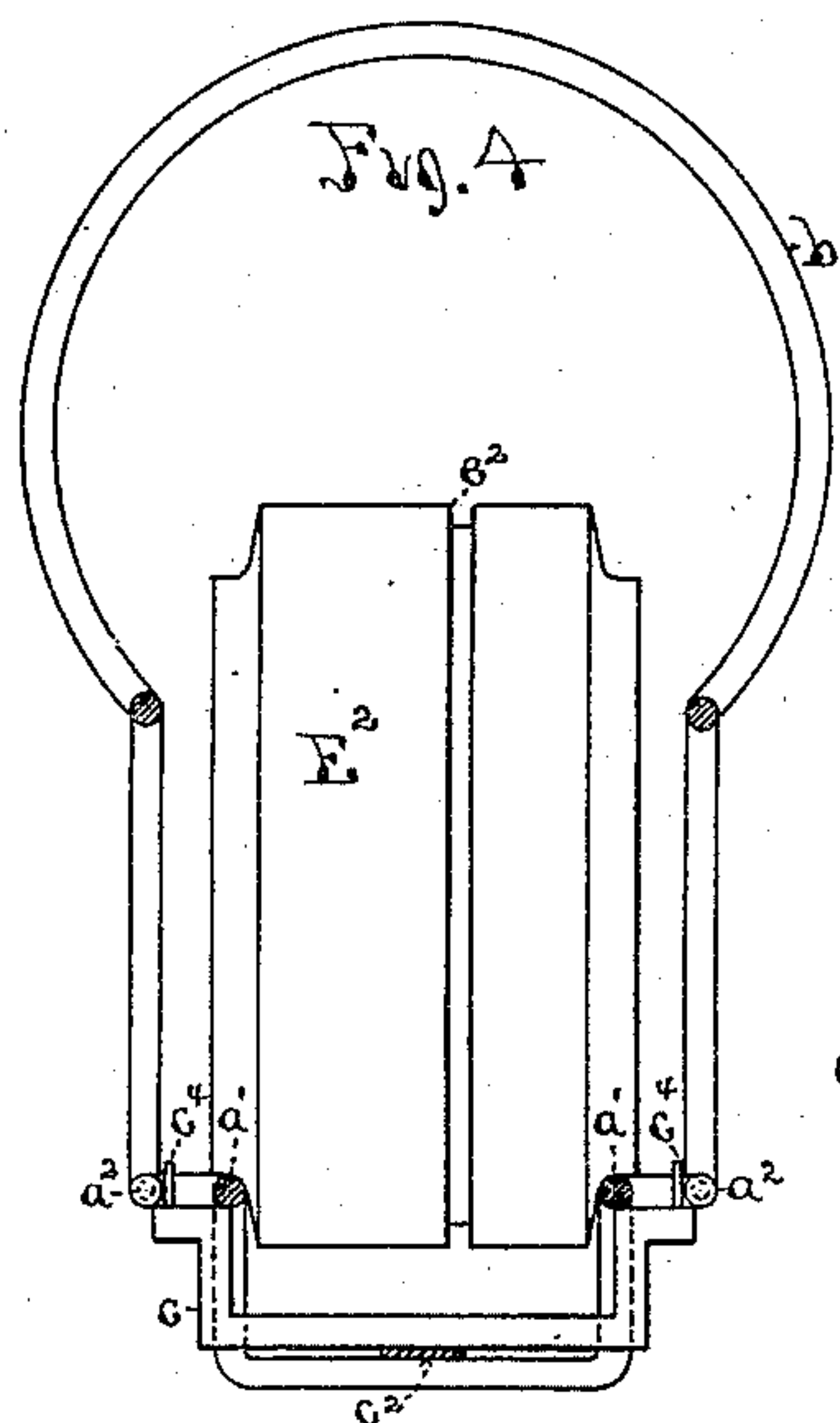
(No Model.)

D. H. RICE.

CASH CARRYING APPARATUS.

No. 314,263.

Patented Mar. 24, 1885.



Witnesses

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DAVID HALL RICE, OF LOWELL, MASSACHUSETTS.

CASH-CARRYING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 314,263, dated March 24, 1885.

Application filed February 9, 1885. (No model.)

To all whom it may concern:

Be it known that I, DAVID HALL RICE, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a certain new and useful Improvement in Cash-Carrier Systems, of which the following is a specification.

My invention relates to cash-carrier systems; and it consists in certain improvements in mechanism therefor shown in the applications for Letters Patent filed by me, respectively, January 20, 1885, Serial No. 153,400, and February 2, 1885, No. 154,625, substantially as hereinafter described and claimed.

In the drawings, Figure 1 is a side view of a portion of the track and carriers traversing the same, provided with my improvements. Fig. 2 is a transverse section of the same upon the line A B of Fig. 1, and to the left of said line. Fig. 3 is a top plan view of the same below the line C D of Fig. 1, with the carrier and baskets removed. Fig. 4 is a transverse section similar to Fig. 2, with the basket omitted, showing the working parts in a different position.

The track A², formed of two rails, *a a*, is made, as shown in my said former applications, and provided with drop-sections *a' a'*, pivoted upon horizontal pivots *a² a²*, placed outside of and parallel to the track at the end of short arms, these pivots being supported in the frames *b b*. The frames *b b* are suspended on brackets or from the ceiling, or in any other convenient manner. The track-sections *a' a'* are swung aside on their pivots to allow the proper carrier to pass through the track at the desired station and swung into line with the track *a a* to form a passage-way for carriers intended to pass by said station, as in my said former applications; but the principle of their operation is changed by arranging them so that their normal position shall be out of line with the track *a a*, and they shall only be brought into line with the track by the carrier which is to pass over them, being at all other times ready to allow a carrier to drop through the track into the basket beneath. The effect of this change is that I dispense with all locking devices for locking the sections *a' a'* into line with the track and all attachments for unlocking the same by the carrier, thereby greatly simplifying the construction of the parts.

To sustain the track-sections *a' a'* in an open position, I employ a bar, *c*, so formed as to have its two ends, *c' c'*, come under the rail-sections and form shelves underneath them, sustaining them in an open position, as shown in Figs. 1, 2, and 3. The bar *c* is held in this position by the spring *c²*, which has its free end attached to the lower side of the former and its other end connected to the platform *c³*, which is rigidly attached to frame *b*. Two pins, *c⁴ c⁴*, in the ends of the bar *c* limit its upward movement by coming in contact with the outsides of rail-sections *a' a'*, as shown, and hold the sections in the proper open position.

On top of spring *c²* is fixed a narrow tongue, *c⁵*, projecting upward into the path of the carrier and lying parallel to the rails of the track. This tongue is so proportioned that when a carrier runs onto it the weight of the carrier will press down on spring *c²* and lower the bar *c*, when the rail-sections *a' a'* will drop down from the position shown in Fig. 2 to that shown in Fig. 4, or from an open to a closed position. Short sleeves *a³ a³*, Fig. 1, attached under the ends of rails *a a*, sustain the ends of track-sections *a' a'* when closed, and give stability to the track. After the carrier has thus closed the track-sections *a' a'*, it runs onto them and holds them down by its weight, as shown in Fig. 4, until it has passed over them, when they rise to an open position, as at first. In order that a carrier may pass through the rail-sections, it has a groove cut around it in position to register with the tongue *c⁵*, and pass over the latter without pressing it down, as shown in Figs. 1 and 3, when the carrier will drop through the track into the basket D' below.

E' is the carrier, which is made cylindrical, and as described in my second above-mentioned application, and *e* is the groove registering with tongue *c⁵*. E² is another carrier, which is made with its groove *e²* not to register with the tongue *c⁵*. It is obvious that the carrier E' will always drop through between the track-sections *a' a'*, while the carrier E² will always pass over them.

Another set of track-sections and attached mechanism precisely like these described is provided in the track beyond those shown at another station for carrier E², except that the tongue corresponding to *c⁵* therein is placed to

register with groove c^2 on carrier E^2 , thus insuring its stopping at such other station.

It is intended to use these carriers upon inclined tracks, allowing them to roll by force of gravity, and to elevate them to the tracks by the elevator mechanism described in my said former applications.

Various modifications of the mechanism for connecting the shelves $c' c'$ with the tongue c^5 and two such tongues may be used, each connected to one of the said shelves, and the carrier made to press upon them simultaneously, without departing from the spirit of my invention. Instead of spring c^2 , a counterbalanced lever may be employed, if preferred.

What I claim as new and of my invention is—

1. In combination with the rails $a a$, the normally-open rail-sections $a' a'$, the yielding platforms $c' c'$, supporting the same in that position, the tongue or bar placed in the path of the carrier, and mechanism, substantially as set forth, connecting said bar and said platforms, adapted to withdraw the latter from beneath the track-sections and allow the same to close when said bar is pressed upon by the carrier, substantially as described.

2. In combination with the rails $a a$, the track-sections $a' a'$, the bar c , provided with end parts, $c' c'$, supporting said rail-sections, the spring c^2 , and the tongue c^5 , placed within the path of the carrier, substantially as described.

3. In combination with the rails $a a$, the normally-open rail-sections $a' a'$, their yielding supporting-platforms $c' c'$, and yielding pressure devices connected thereto, substantially as described, for holding the latter in position, having one or more parts of the same lying within the path of the carrier and adapted to be struck by the same, and thereby to withdraw said platforms from beneath said

track-sections and allow the same to close, substantially as described.

4. In combination with the rails $a a$, the rail-sections $a' a'$, normally open, their supporting-platforms $c' c'$, the spring c^2 , connected therewith, the tongue c^5 , lying within the path of the carrier, and the carrier E' , provided with a groove, e , registering with said tongue and allowing the carrier to pass without pressing thereon, substantially as described.

5. In combination with the rails $a a$, the track-sections $a' a'$, normally open, their supporting-platforms $c' c'$, the spring c^2 , connected therewith, the tongue c^5 , lying within the path of the carrier, and the carrier E^2 , provided with a circumferential groove, e^2 , not registering with the tongue, thereby allowing the same to be pressed by the carrier and the track-sections to be closed, substantially as described.

6. In combination with the elevated track A^2 , a normally-open trap-section supported in such open position by yielding supports or shelves and yielding-pressure mechanism connected thereto, having a portion thereof projecting within the path of carriers traversing said track, and two carriers, $E' E^2$, adapted to traverse said track, one of said carriers being made of a size or diameter in its parts passing contiguous to said projecting portion of the pressure mechanism adapted to pass by it without operating it, and the other being made of a size or diameter in its corresponding parts adapted to strike and move said projecting portion in passing, and thereby withdraw said supports and allow said trap-section to close and said carrier to pass over the same, substantially as described.

DAVID HALL RICE.

Witnesses:

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