

No. 657,044.

Patented Aug. 28, 1900.

A. A. STROM.
RAILWAY SWITCH.

(Application filed July 11, 1900.)

(No Model.)

Fig. 1.

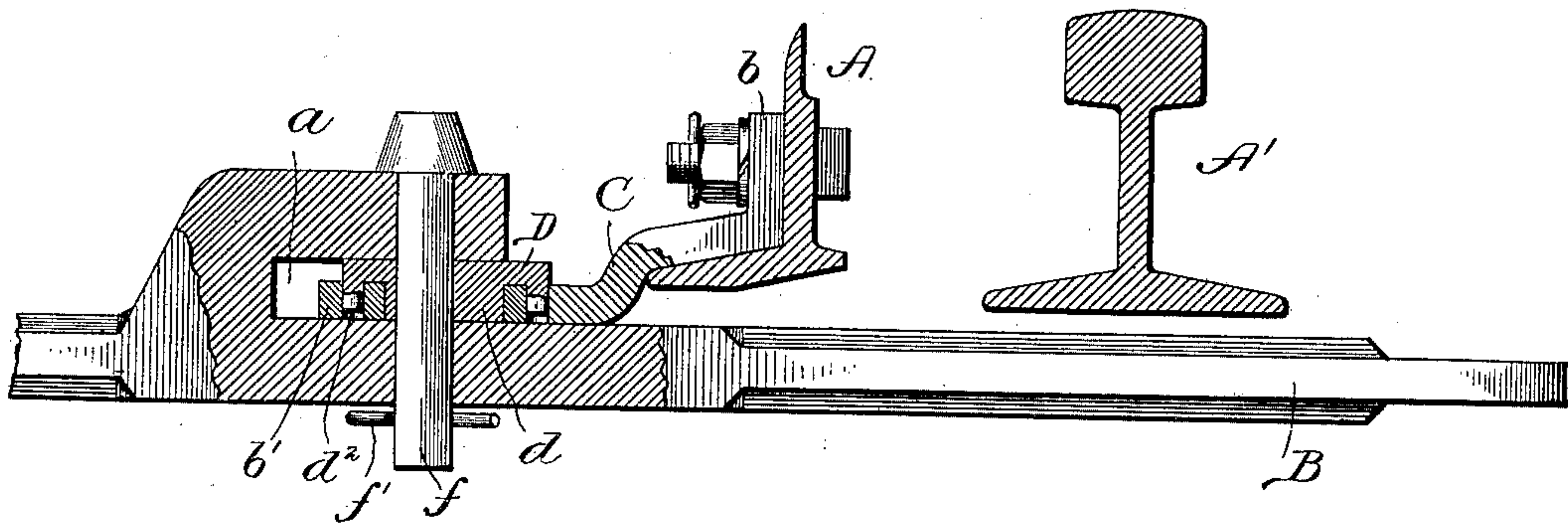


Fig. 2.

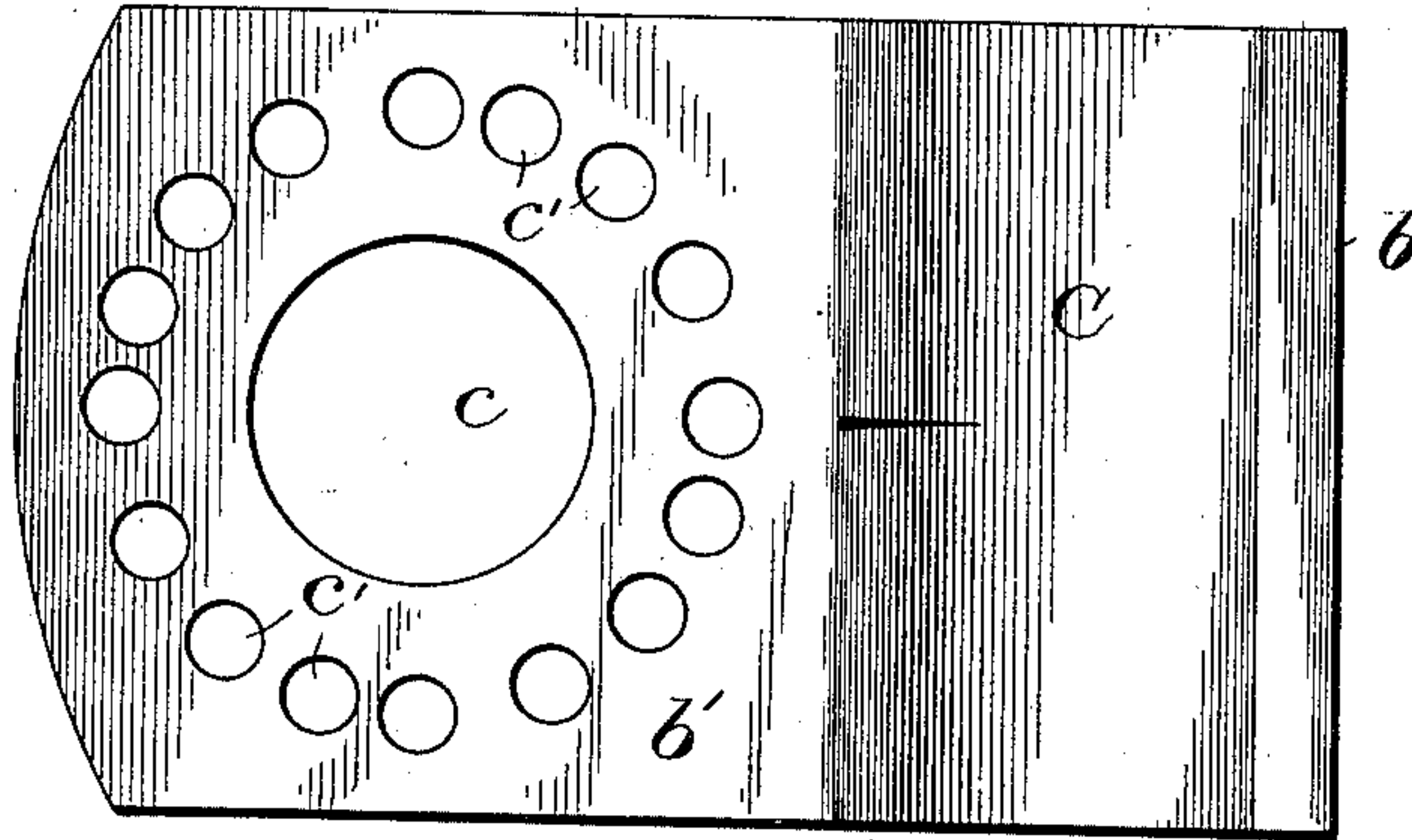


Fig. 3.

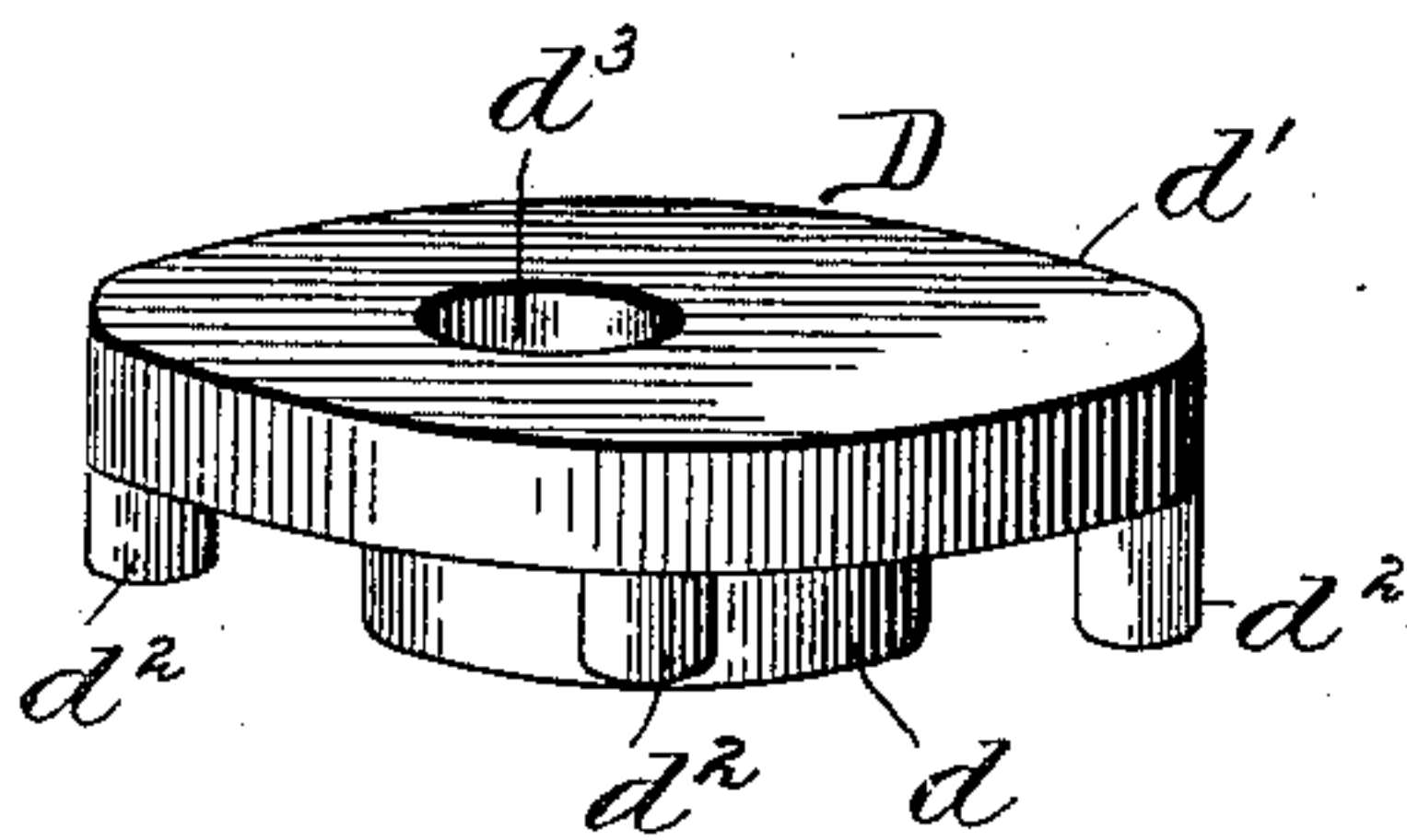
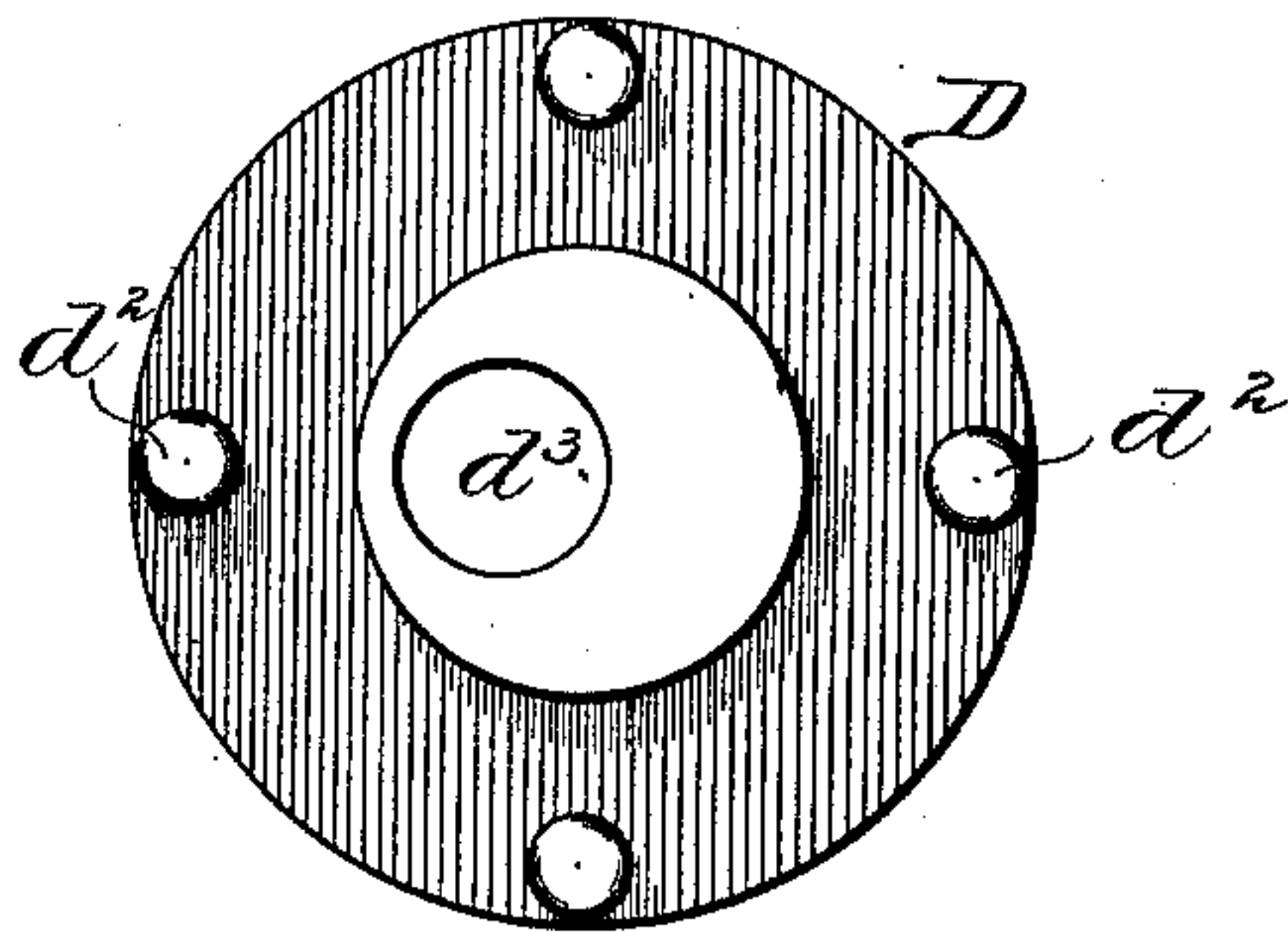


Fig. 4.



Witnesses:
E. S. Gaylord,
John Anders Jr.

Inventor:
Axel A. Strom,
By Pyunforth, Pyunforth & See,
Attorneys.

UNITED STATES PATENT OFFICE.

AXEL A. STROM, OF AUSTIN, ILLINOIS, ASSIGNOR TO THE STROM MANUFACTURING COMPANY, OF CHICAGO, ILLINOIS.

RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 657,044, dated August 28, 1900.

Application filed July 11, 1900. Serial No. 23,215. (No model.)

To all whom it may concern:

Be it known that I, AXEL A. STROM, a citizen of the United States, residing at Austin, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Railway-Switches, of which the following is a specification.

My invention relates to an improvement on the connecting means between switch-rails set forth in my Letters Patent of the United States No. 625,961, dated May 30, 1899.

The object of my present improvement, which involves the same principle of construction and operation as the switch-rail-adjusting mechanism forming the subject of my aforesaid patent, is to facilitate the manufacture of the device and render it stronger and more durable. This object is accomplished by the construction set forth in the accompanying drawings, in which—

Figure 1 shows a cross-section of a point-rail switch equipped with my improvement. Fig. 2 is a plan view of the clip detail provided with an opening for receiving the adjustable eccentric which connects the tie-bar with the clip, and through the medium of the clip with a switch-rail, the opening in the clip being surrounded by holes to receive a stud or studs depending from the eccentric for retaining the latter in adjusted position; Fig. 3, a perspective view of the eccentric, and Fig. 4, a bottom plan view of the same.

A' denotes one of the main or track rails of a split switch, and A is the adjacent point-rail. The two point-rails, of which only one is shown in Fig. 1, are connected by one or more tie-bars B, each terminating at one end or, preferably, at each of its opposite ends in a jaw *a* to embrace clip C, rigidly fastened through its head portion *b* to the inner side of the switch-rail. The clip C for each point-rail contains in its tail portion *b'* a circular opening *c*, surrounded by a series of holes *c'* at proper intervals. In the opening *c* is adjustably seated an eccentric D, shown as a circular body *d* to fit the clip-opening *c* and having a concentric circumferential flange *d'*, from the under side of which about the body *d* depend studs *d²*, of which four are shown, though only one is indispensably necessary, more than one being preferred for the additional strength and durability thereby

afforded. An opening *d³* is provided eccentrically in the body *d* to produce the eccentric opening. The bifurcated end or jaw on the tie-bar embraces the tail portion of the clip, thereby embracing also and confining in its bearing the eccentric, and the tie-bar, clip, and eccentric are pivotally connected together by a pin *f*, passing through them and which is shown to be fastened against withdrawal by a cotter *f'*.

The setting of the eccentric is effected by introducing the body *d* into the clip-opening *c* and the studs *d²* into openings *c'*, which coincide with them, whereby the eccentric is firmly held in adjusted position against displacement under the strain of the thrusts, to which the point-rail is subjected in use, and with the clip and eccentric placed in the tie-bar jaw to be embraced by it the pin *f*, passed through the tie-bar and clip, and the eccentric opening *d³* fastens the parts together and pivotally connects the eccentric with the tie-bar.

Access to an eccentric D in use may readily be had by removing the pin *f* and disconnecting the tie-bar to permit the eccentric to be taken out of the opening *c* and reset therein, with the studs *d²* on the eccentric entering holes *c'* in the clip to the required adjustment in the case of wear on the point-rail. The opening *d³* being eccentric to the flange *d'* turning the eccentric the extent of one or more holes *c'* sets the switch-rail that much closer to the main rail, so that under the normal throw of the switch-stand the point-rail will be brought, notwithstanding wear, to bear against the side of the adjacent rail A'.

By providing the stud or studs *d²* on the eccentric instead of on the clip, as in the construction set forth in my aforesaid patent, facility in the manufacture is afforded, since the eccentric and studs may be formed entire in one piece, while the stud on the clip has to be separately provided, and by thus forming the eccentric it is as easy to provide a plurality of studs as to provide only one, with the advantage that several studs entering the openings add to the strength of the structure and to its durability, since if one or more studs should be broken the other or others will suffice for firmly holding the eccentric in place.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a switch-rail and its tie-bar, of means for adjustably connecting the rail and bar comprising a clip having an opening and provided about said opening with a series of holes, and an eccentric adjustably seated in said opening and pivotally connected with the tie-bar and carrying one or more studs for engaging said holes to lock the eccentric in its position of adjustment within said opening.

2. The combination with a switch-rail and a tie-bar therefor provided with a jaw, of means for adjustably connecting the rail and

bar comprising a clip having an opening and provided about said opening with a series of holes, a flanged eccentric adjustably seated in said clip-opening and confined therein by being embraced by said jaw and having pivotal connection with the tie-bar, and studs depending at intervals from the flange of the eccentric to enter said holes in the clip and lock the eccentric in its position of adjustment within said clip-opening.

AXEL A. STROM.

In presence of—

D. W. LEE,
A. D. BACCI.