

(No Model.)

2 Sheets—Sheet 1.

A. J. MOXHAM.

COMBINATION CROSSING AND SWITCH FOR RAILROAD TRACKS.

No. 367,655.

Patented Aug. 2, 1887.

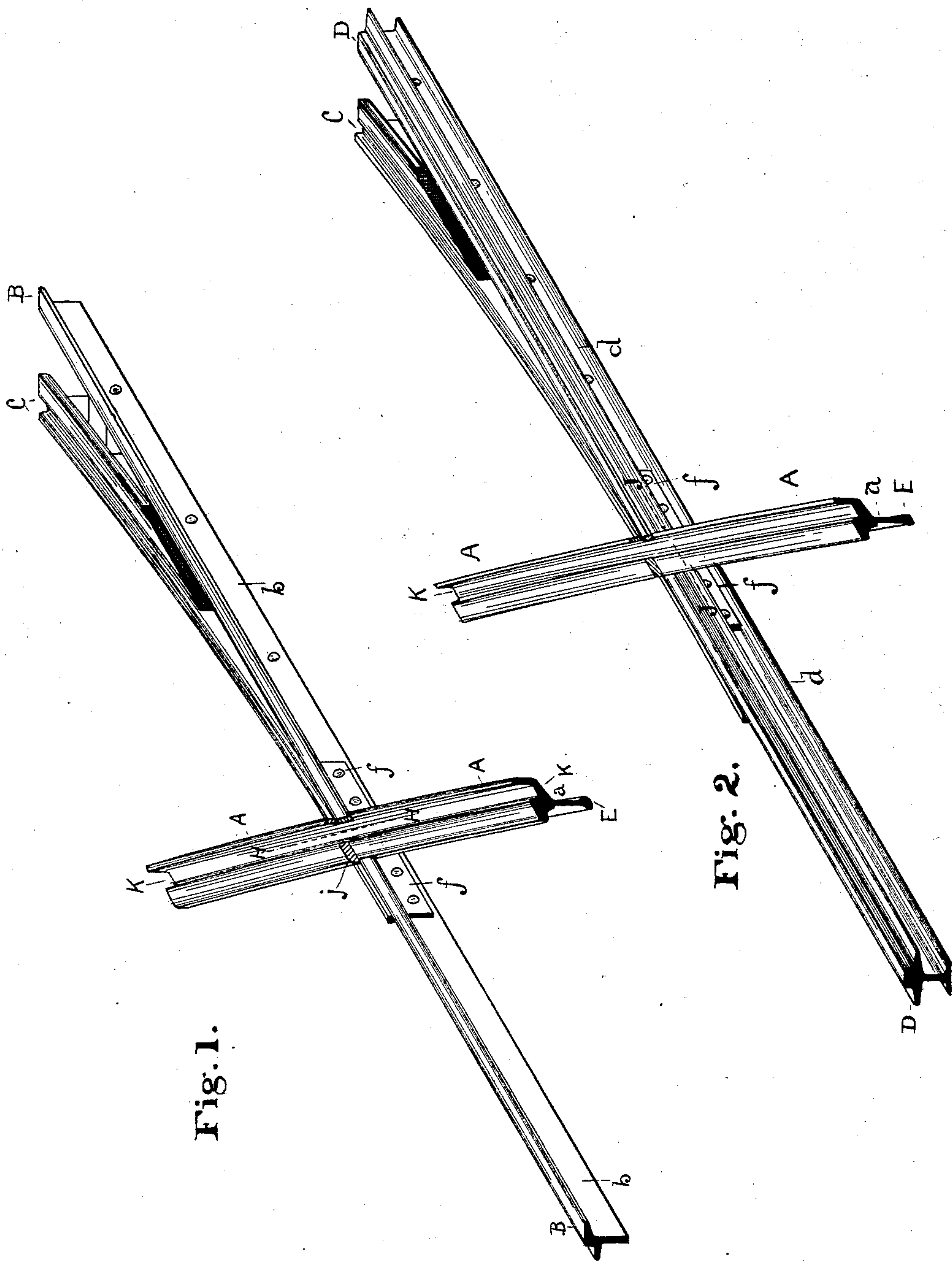


Fig. 1.

Fig. 2.

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Fig. 3.

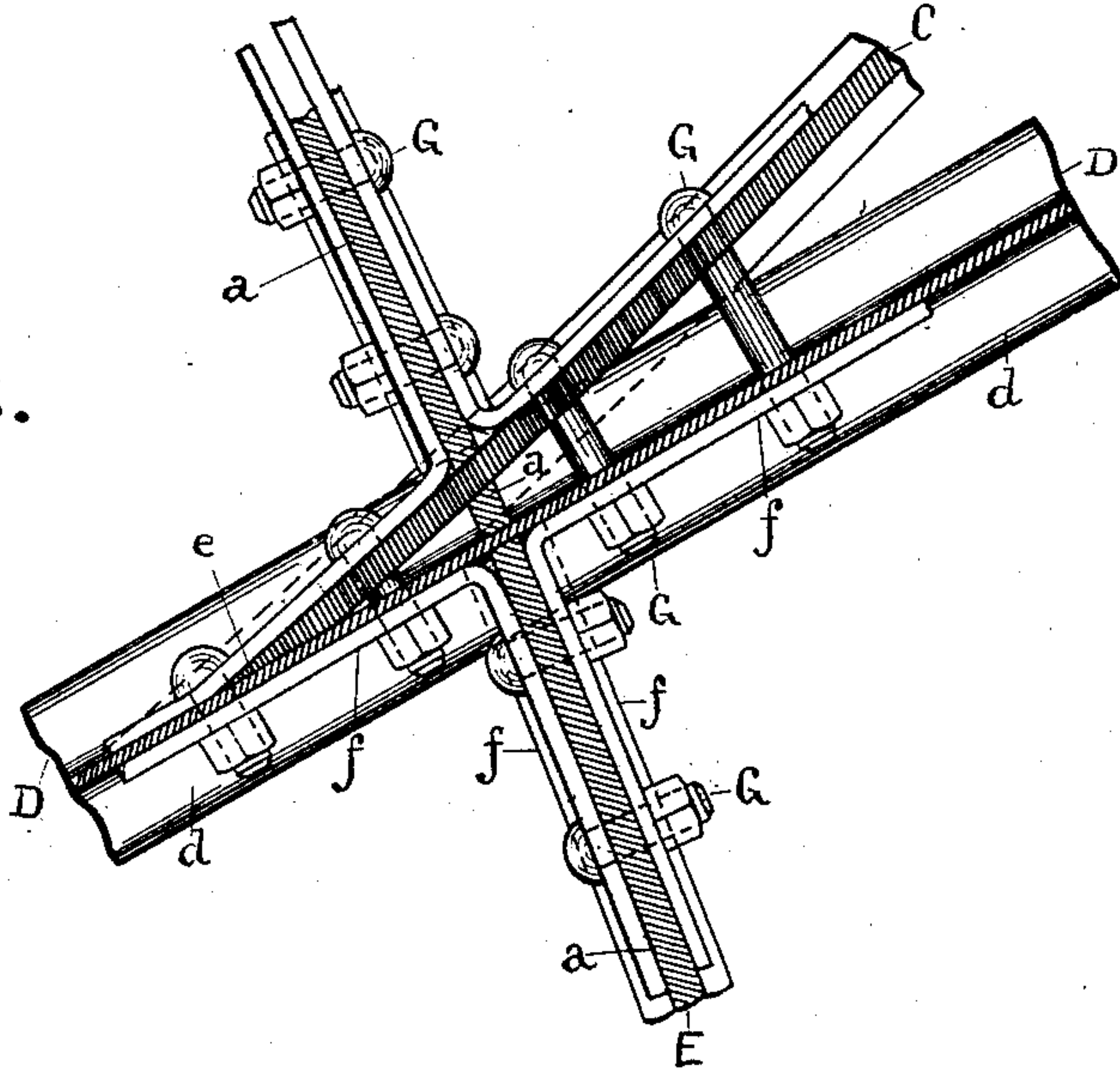


Fig. 4.

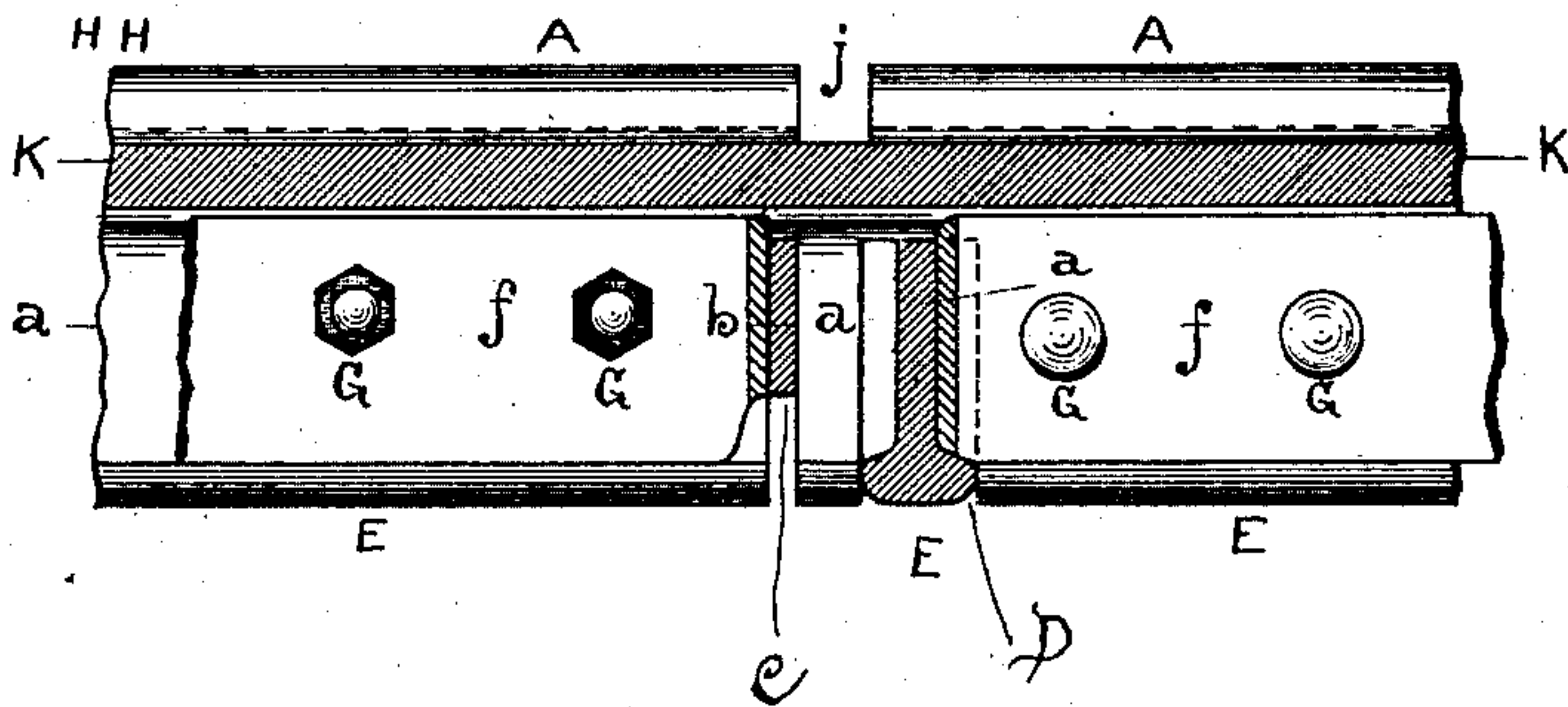
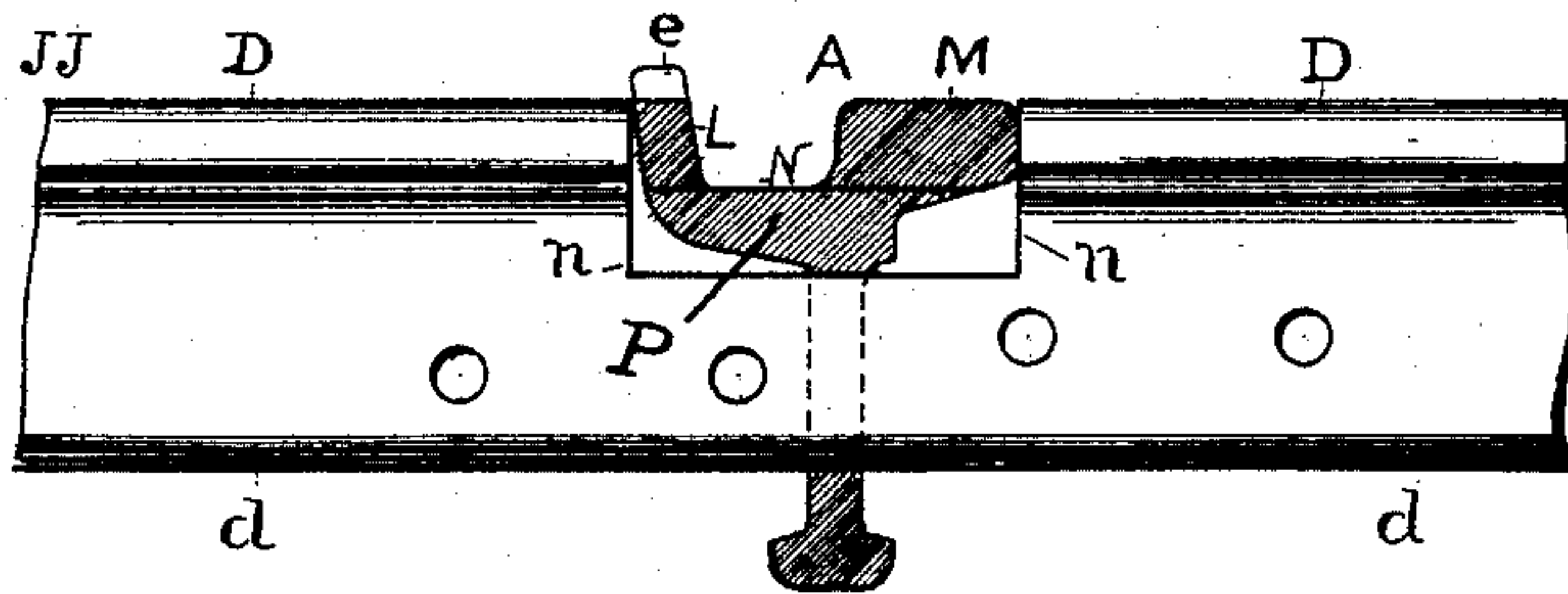


Fig. 5.



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UNITED STATES PATENT OFFICE.

ARTHUR J. MOXHAM, OF JOHNSTOWN, PENNSYLVANIA.

COMBINATION CROSSING AND SWITCH FOR RAILROAD-TRACKS.

SPECIFICATION forming part of Letters Patent No. 367,655, dated August 2, 1887.

Application filed May 28, 1887. Serial No. 239,605. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR J. MOXHAM, of Johnstown, in the county of Cambria and State of Pennsylvania, have invented a new and useful Combination Crossing and Switch for Railroad-Tracks, which invention is fully set forth and illustrated in the following specification and accompanying drawings.

The object of this invention is to provide a crossing and switch combined constructed of girder-rails; and the invention will first be fully described, and then particularly set forth in the claim.

In the accompanying drawings, Figure 1 shows in perspective the invention as utilizing a side-bearing girder-rail. Fig. 2 shows a perspective view utilizing a center-bearing girder-rail. Fig. 3 shows in plan a part of the crossing shown in Fig. 2, with the heads of the rails cut away, and showing how their webs are correlated and the fish-bars attached. Fig. 4 shows a part vertical section, taken at the line H H of Fig. 1, looking to the left. Fig. 5 shows a part vertical section taken at the line J J of Fig. 2.

In said figures the several parts are indicated by letters of reference, by means of which the invention will now be described.

A A indicate the crossing-rail shown as a girder guard-rail.

B indicates a side-bearing girder-rail, (always a straight rail.)

C is a guard-rail leading off from the straight track or rail B of Fig. 1, or rail D of Fig. 2 to the curve or switch. The rail D is a center-bearing plain girder-rail, (always a straight rail.)

E indicates the lower portion or foot of the web of the girder guard-rail, and *f f* indicate the plates which re-enforce the points of union of the different rails. Said plates *f* are preferably splice-bars, if the shape of the rails permit the use of splice-bars. If the rails are devoid of lower flanges, (as the rail B, Fig. 1,) ordinary plates may be used; or, if preferred, chocks can replace these said plates provided with feet or base-plates to act as rail-chairs.

The letters G indicate bolts, as clearly shown in the figures, and the letters *j* indicate the grooves cut through the head of the crossing-

rail to permit of the passage of the flanges of the car-wheels.

The letter N indicates the floor of the groove of the girder guard-rails, and L the guard of said rail, Fig. 5, where said guard is cut away to permit of the passage of the crossing-wheels.

M indicates the head of the guard-rail cut away for the same purpose, and *n n* show the cut through the head of the straight rail, the rails checking each other across—that is, the head of the rail has the right of way in the case of the guard-rail, the section P showing that part of the same which runs through and connects either side of the rail, while the web has the right of way in the other rail.

In Fig. 3 it will be observed that the web of the curved rail is provided with two notches, permitting it to straddle the two diverging webs of the rails C and D, leaving a section, *a*, between said divergent webs. Either construction is available and may be adopted. The construction shown in Fig. 3 is further exemplified in side elevation in Fig. 4.

By the method of construction hereinbefore described it will be observed that the webs of the various rails are cut and fitted together and secured to each other—the heads checked across and through and all obstructive parts planed level—grooves being cut through to permit of the passage of the car-wheel flanges, the structure being thus adapted for use in every direction. This combination crossing and switch may be attached to the cross ties of the track by any of the now well-known rail-chairs.

If the switch crossed be provided with a movable tongue, instead of having a stationary tongue, the construction in the main will be identical with that herein shown and described, excepting only that lifting-plates will be inserted in the crossing-rail on each side of the switch-piece crossed, and the flanges of the car-wheels thus be lifted over the movable tongue, leaving it free to move upon its pivotal point; or, if desired, the whole crossing-rail can be lifted enough to permit of the wheel-flanges of the passing car clearing in whole or in part the switch-tongue.

Having thus fully described my said railroad

crossing and switch as of my invention, I
claim—

5 A railroad crossing and switch combined
composed of girder-rails cut and fitted to-
gether at the necessary angles to direct the
courses of the cars, secured together at their
respective junctions, and at the divergent

ends of the switch to the main rails of the
track, substantially as and for the purposes
set forth.

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