

(No Model.)

J. H. CROWLEY & B. M. TEMPLE.

2 Sheets—Sheet 1.

SPLIT SWITCH.

No. 277,684.

Patented May 15, 1883.

Fig. 1.

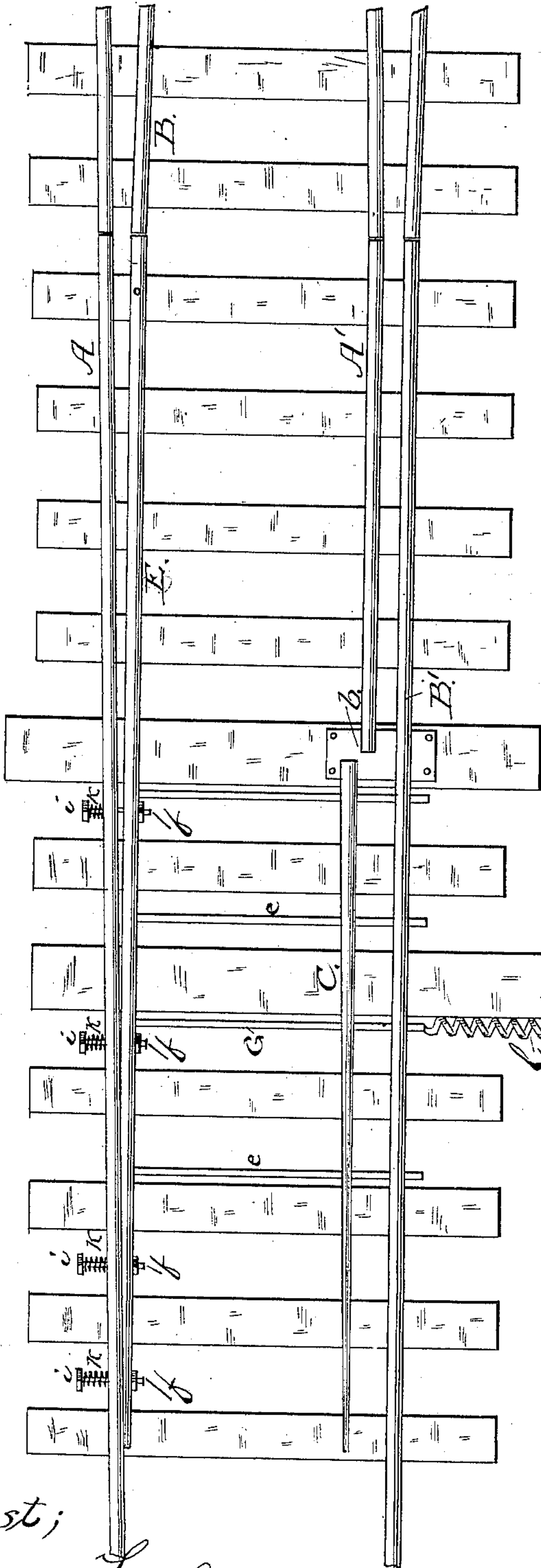
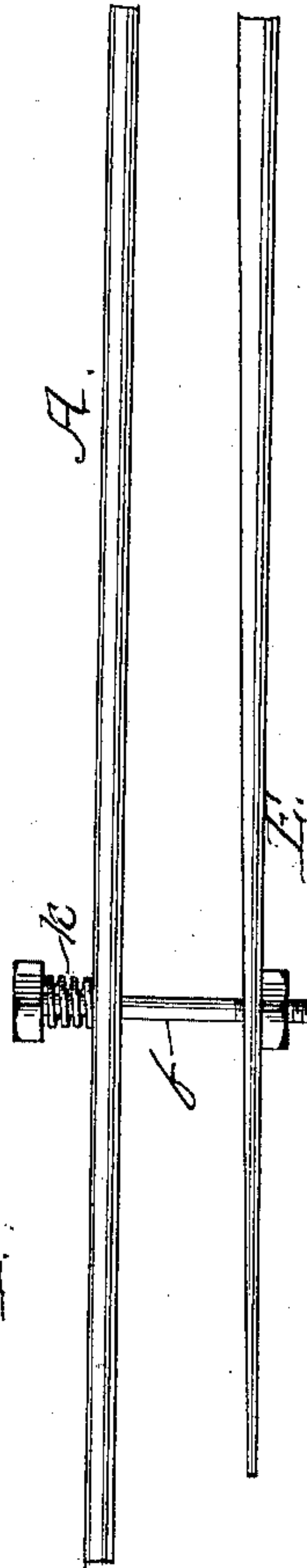


Fig. 3.



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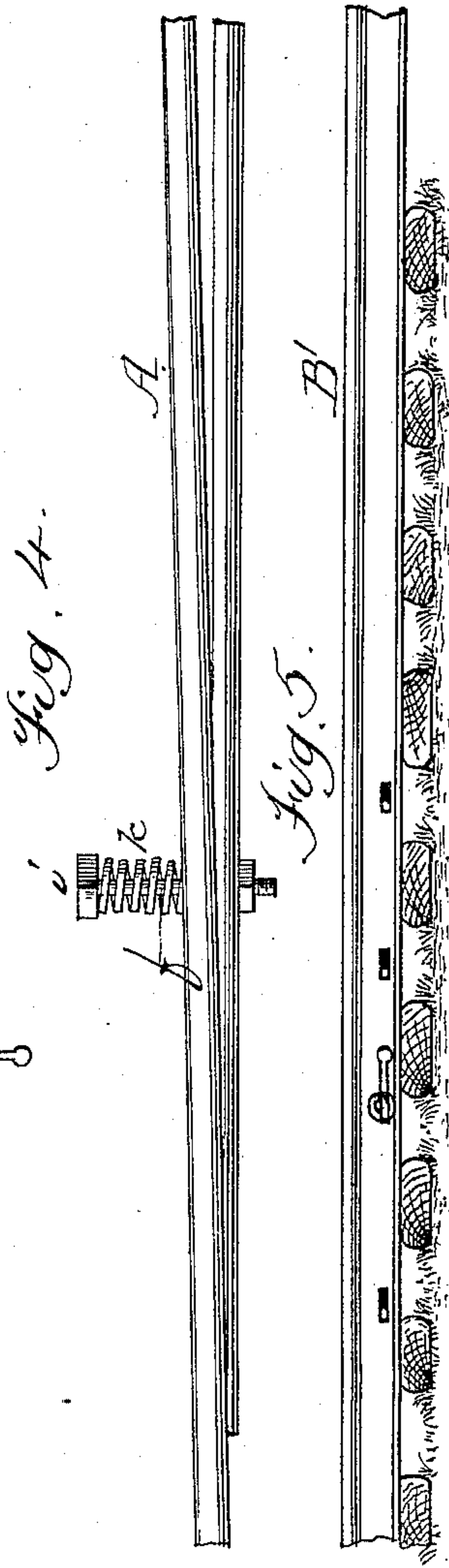
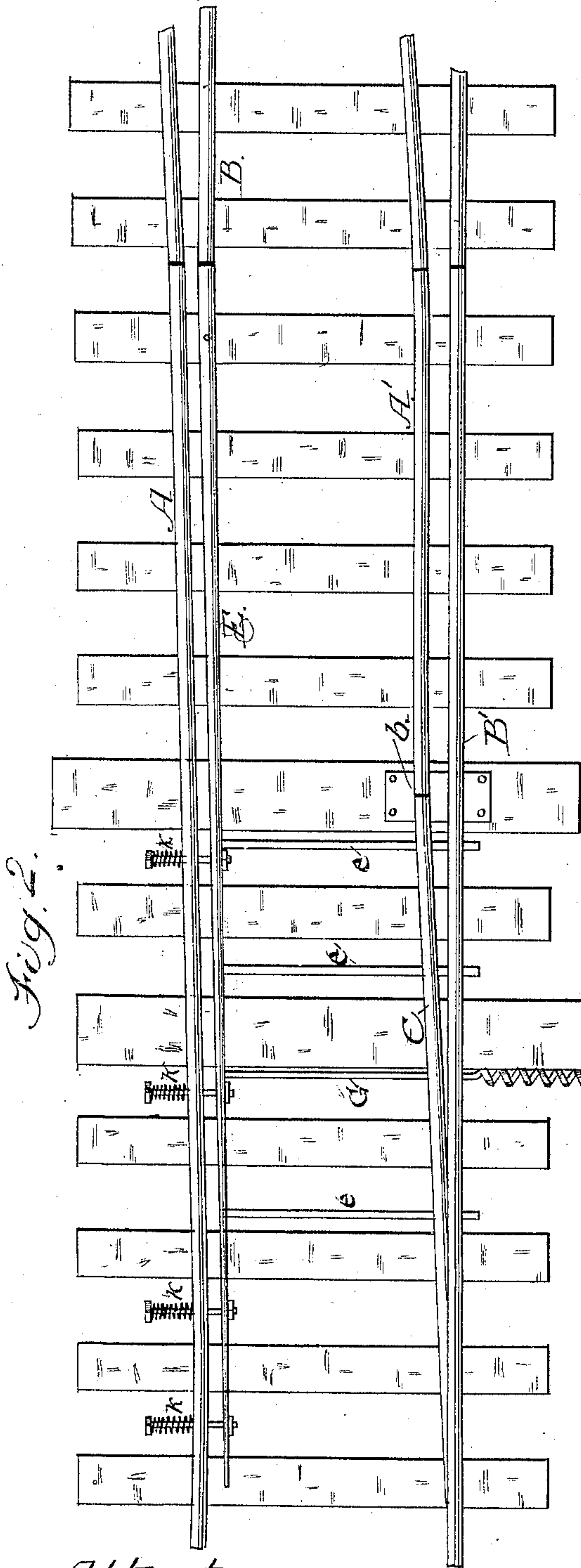
2 Sheets—Sheet 2.

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UNITED STATES PATENT OFFICE.

JOHN H. CROWLEY AND BERNARD M. TEMPLE, OF GALVESTON, TEXAS.

SPLIT SWITCH.

SPECIFICATION forming part of Letters Patent No. 277,684, dated May 15, 1883.

Application filed April 17, 1883. (No model.)

To all whom it may concern:

Be it known that we, JOHN H. CROWLEY and BERNARD M. TEMPLE, of the city of Galveston, county of Galveston, and State of Texas, have invented certain Improvements in Split Switches; and we hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan view of the switch and sections of main and side tracks, showing the side track cut out. Fig. 2 shows the switch in position to shunt from the main track to the side track. Figs. 3, 4, and 5 are details.

Our invention relates to split switches; and the object of our invention is to provide a switch which will be normally in condition to prevent a train from running on the main track from the siding, and yet always keep the main track in condition for the rapid movement of trains, and at the same time to allow the shunting of a train from the main track to the side track with all the present facilities.

Our invention consists in a switch having one pivoted switch-rail in the main track and split so as to bear against the inside of a continuous rail, merging the side track with the main track, in combination with a short split rail which is adapted to shift bodily from against the main-track rail and pass out of line with the end of the side-track rail, the whole adapted to be operated by springs and lever, as will be hereinafter fully described, and specifically pointed out in the claims.

In order that those skilled in the art may make and use our invention, we will proceed to describe the manner in which we have carried it out.

In the said drawings, A represents one rail of a side track, which merges into one rail, B, of the main track, as shown. A' is the other rail of the siding, and B' the other rail of the main track. Connected with or pivoted to the rail B, at *a*, is a split switch-rail, E, adapted to have its free end lie against the fixed rail at the point where the side-track rail A and the main-track rail B merge. The side-track rail A' is rigid down to the point *b*, where it has a short section of switch-rail, C, which connects it with the main-track rail B'. The short switch-rail C is not pivoted, as is usual with

switch-rails, but moves bodily to and from the rails A' B', and this movement must be to such an extent that when the rail C is not set to shunt a train from side track to main track the flange of the wheel will pass between the end of track A' and switch-rail C and the engine or car will be derailed. Normally the switch stands as seen in Fig. 1—that is, with the siding cut out—so that the main track is entirely clear, and this requires that switch-rails E and C shall be rigidly secured together, with a distance between them less than the gage of the road. Tie-rods *e e*, having their ends secured to switch-rail E, pass through or under, as desirable, switch-rail C, and are permanently fixed thereto at a point less than the gage of the track, so that switch-rails E C move together. Short bars or arms *ff* project from the side of switch-rail E and through and beyond the web of the track-rail where the side-track rail A and the main rail merge. These bars *ff* are provided with heads *i i*, and beneath the heads, between them and the outside of the rail, are heavy coiled springs *k k*, the distension of which normally holds switch-rail E so as to make the main track continuous, as seen in Fig. 1, and this of course removes switch-rail C from the side track, A', so a train attempting to enter the main track from the side track would be derailed.

When it is desired to throw the side track into connection with the main track it is done by means of a bar, G, secured to switch-rail C and having, if desired, a spring-section, *l*, and operated by a lever, L, which forces rail C to connect the main and side track rails by compressing springs *k k* and pulling switch-rail E away from the main rail and bringing switch-rail C over to connect rails A' and B'.

It is intended that a switchman shall hold the lever so as to shunt the train until the train has passed, and, upon his releasing the lever, springs *k k* throw the switch-rails to their normal position. If it be found desirable to fasten the lever L, and it is forgotten to again release it, a train passing on the main line in one direction will have its safety insured by moving onto the siding, where it can slow up, presuming no other train is on the siding at a point to collide, and the safety is insured in the other direction by the flange of the wheel crowding switch-rail E over against the main

rail and distending the spring-section *l* in the well-known manner.

It will be observed that as switch-rail C is fastened to switch-rail E by the tie-rods *e* the movement of C is in arcs on radii from the pivot of the switch-rail E, so that the thin end of rail C moves farther than the opposite end.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a split switch, a pivoted switch-rail E, in combination with a shorter switch-rail, C, both of which vibrate between fixed track-rails and in the same plane with said track-rails, the latter, C, adapted to move bodily to and from the main rail, for the purpose set forth.

2. The combination, in a railroad-switch, of the main-track rail having the pivoted rail E, provided with a spring-retracting mechanism to hold it against the juncture of the side track, the side-track rail provided with the short section C, adapted to be moved, as described, tie-rods *e e*, and bar G, all constructed, arranged, and operated as set forth.

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BERNARD MOORE TEMPLE.

Witnesses:

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PATRICK HENRY.