

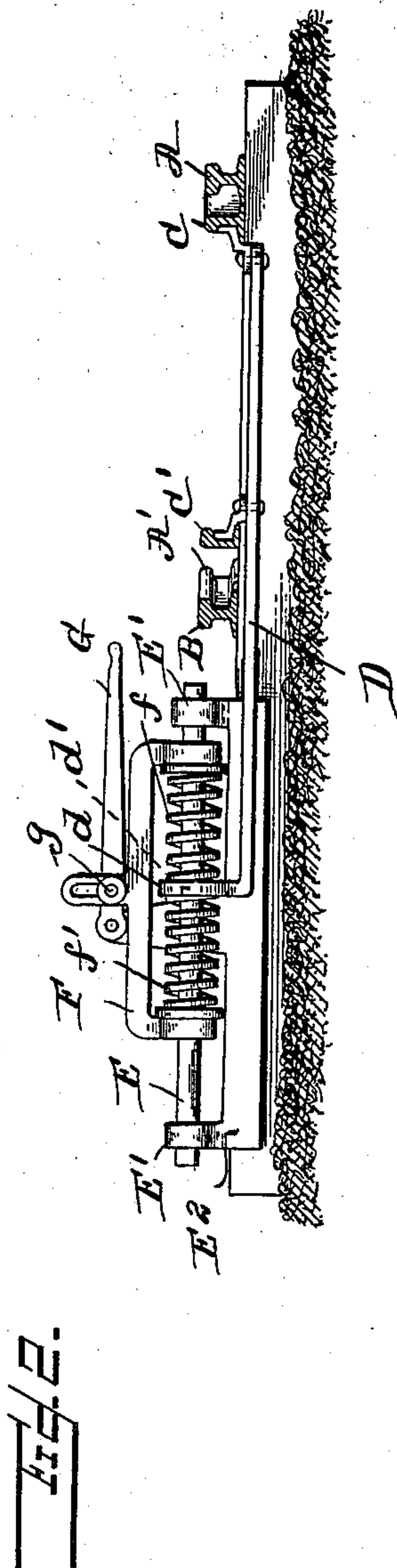
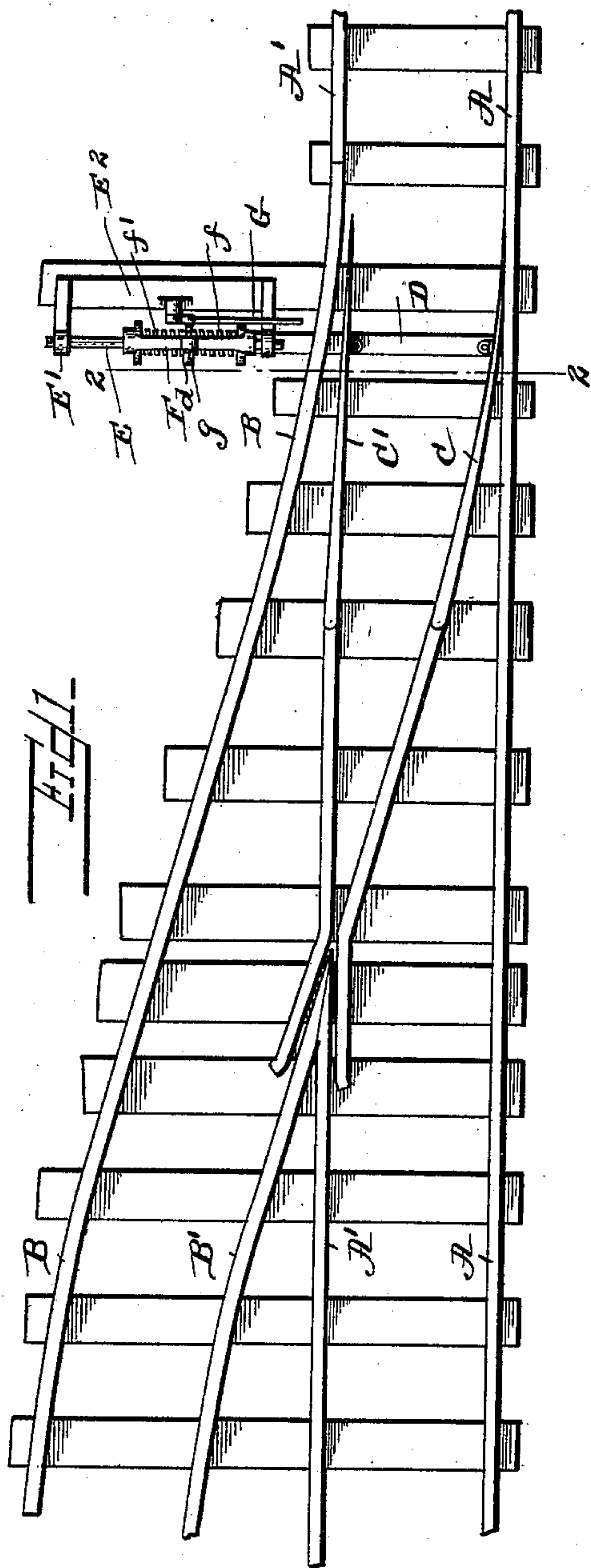
No. 661,054

Patented Nov. 6, 1900.

D. ISARD.
RAILROAD SWITCH.

(Application filed July 28, 1900.)

(No Model.)



WITNESSES:

Jose B. Heller,
M. H. Ellis.

INVENTOR

Daniel Isard

BY

Harding Harding
ATTORNEY

UNITED STATES PATENT OFFICE.

DANIEL ISARD, OF CAMDEN, NEW JERSEY.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 661,054, dated November 6, 1900.

Application filed July 28, 1900. Serial No. 25,205. (No model.)

To all whom it may concern:

Be it known that I, DANIEL ISARD, a citizen of the United States, residing at Camden, county of Camden, and State of New Jersey, have invented a new and useful Improvement in Railroad-Switches, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention has for its object to provide a railroad-switch in which the corresponding tongue-rail in both movements of the switch will be held by a spring against its corresponding fixed rail, so that any tendency by passing trains to move it from such contact will be resisted by the spring and the spring will return it to its proper position. Speaking generally, I accomplish this result by moving the movable switch-rails in either direction through spring action, which tends to hold the rails in proper position and which will if they are moved return them to the proper position.

I will now describe the embodiment of my invention illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of my improved switch. Fig. 2 is a sectional view on the line 2 2 of Fig. 1.

A A' are the rails of the main track.

B B' are the rails of the switch or siding, and C C' the switch-rails. These switch-rails are secured so as to be movable with the link D. This link D has the upturned end d , through an orifice d' in which passes the shaft E. This shaft has its bearings in the frame E', fixedly secured to a support E².

F is a yoke the ends of which surround the shaft E. Between each end of this yoke F and the end d of link D and surrounding shaft E are the springs f and f' .

G is a lever pivotally connected at its lower end to the support E², and above said point, as at g , is pivotally connected with yoke F midway thereof.

In operation if the lever G be moved in one direction the switch-rail C will be moved against the rail A, while if it is moved in the other direction the rail C' will be moved

against the rail B. In the first case the connection will be to shunt and in the other case to line. The operation for these movements is as follows: Supposing the lever G to be central, a movement of the lever toward the rails will move the yoke F and, through the medium of the spring f' , the link D. This movement brings the rail C against rail A, compressing spring f' . The spring f' resists any tendency of the rail C to separate from rail A and if there should be any separation will return rail C into contact with rail A. The movement of the lever G in the opposite direction through the medium of spring F acting on link D moves the rail C' into contact with rail B, the spring f being compressed and acting to resist separation of rails C' and B and in case of separation to return them into contact.

Having now fully described my invention, what I claim, and desire to protect by Letters Patent, is—

1. In a railroad switching device, in combination with the switch-rails, of a link adapted to move the movable rail or rails of a switch, a shaft there being an orifice in said link through which said shaft passes, a yoke surrounding said shaft, a spring surrounding the shaft between each end of the yoke and the link, and a lever having a fixed fulcrum and pivotally connected to said yoke.

2. In a railroad switching device, in combination with the switch-rails, of a link connected to a movable rail on the through-track, and a movable rail on the switch-track, a shaft, there being an orifice in said link through which said shaft passes, a yoke surrounding said shaft, a spring surrounding the shaft between each end of the yoke and the link, a lever having fixed fulcrum and pivotally connected to said yoke.

In testimony of which invention I have hereunto set my hand, at Philadelphia, Pennsylvania, on this 23d day of July, 1900.

DANIEL ISARD.

Witnesses:

M. F. ELLIS,
G. IRWIN HUTTON.