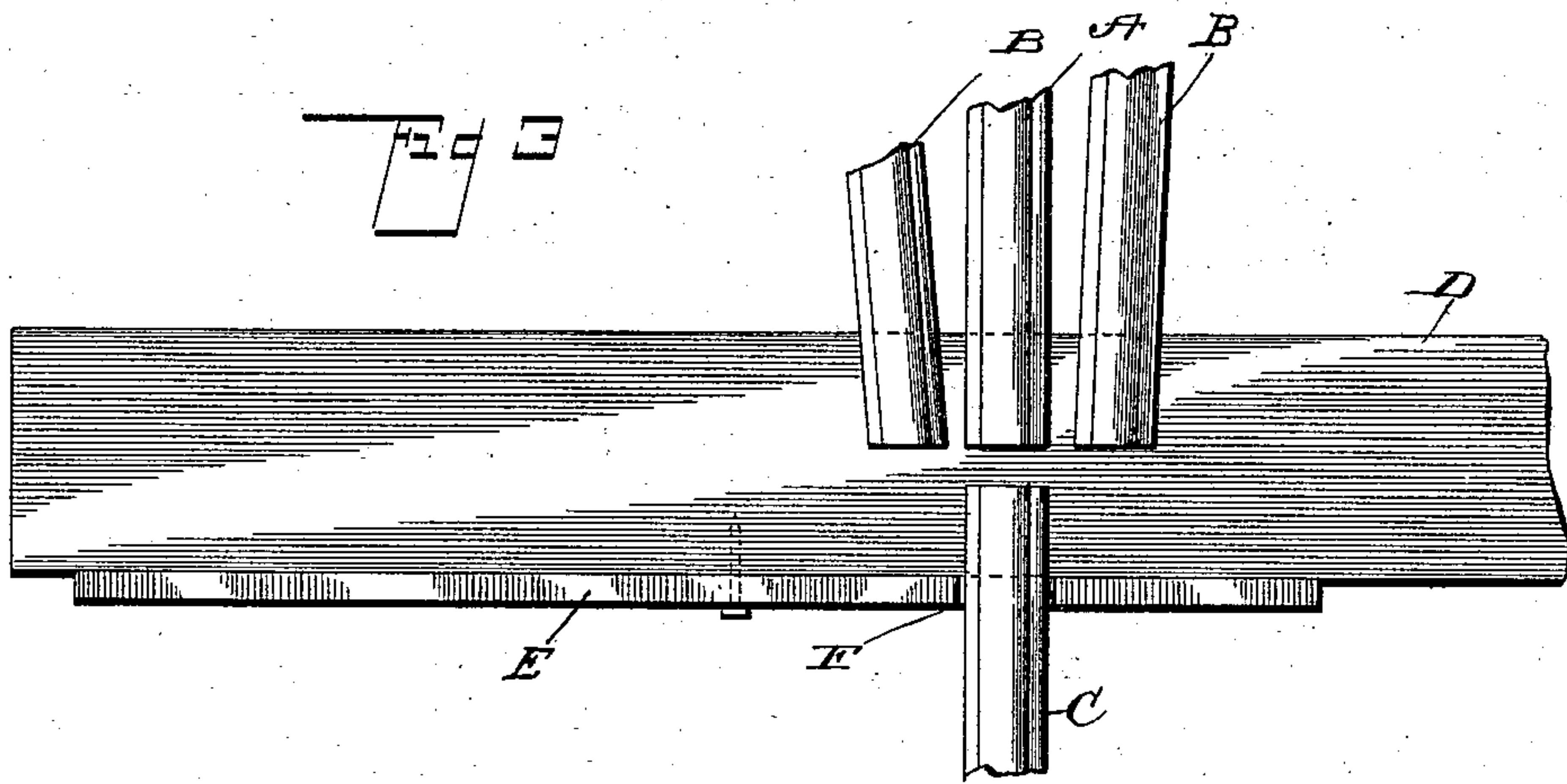
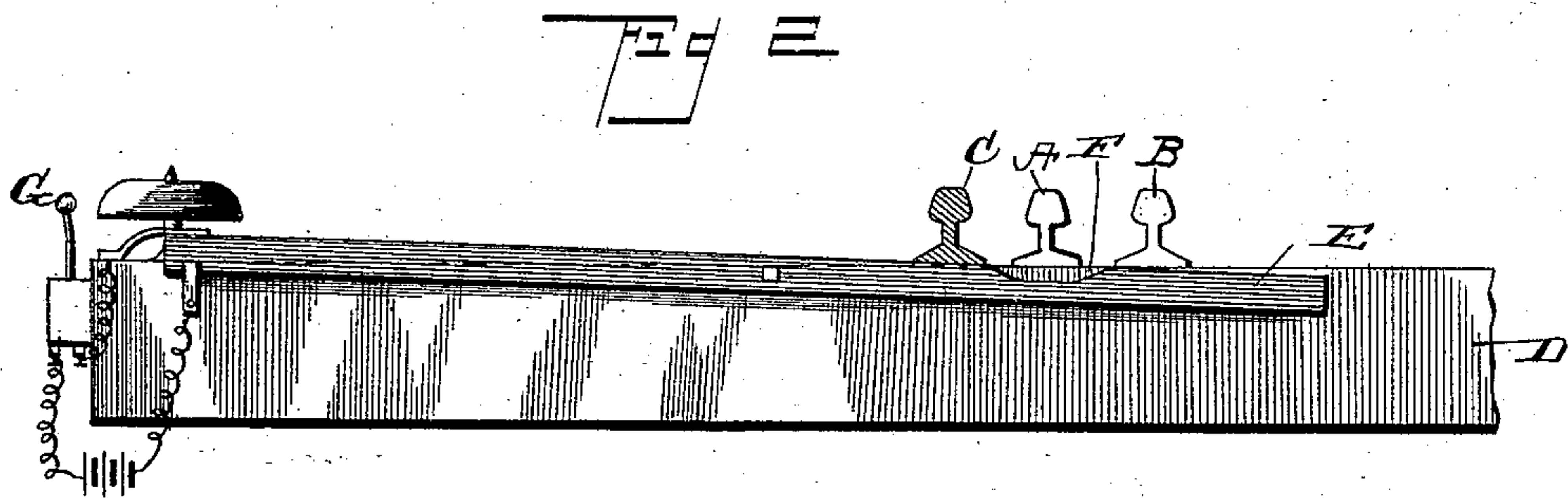
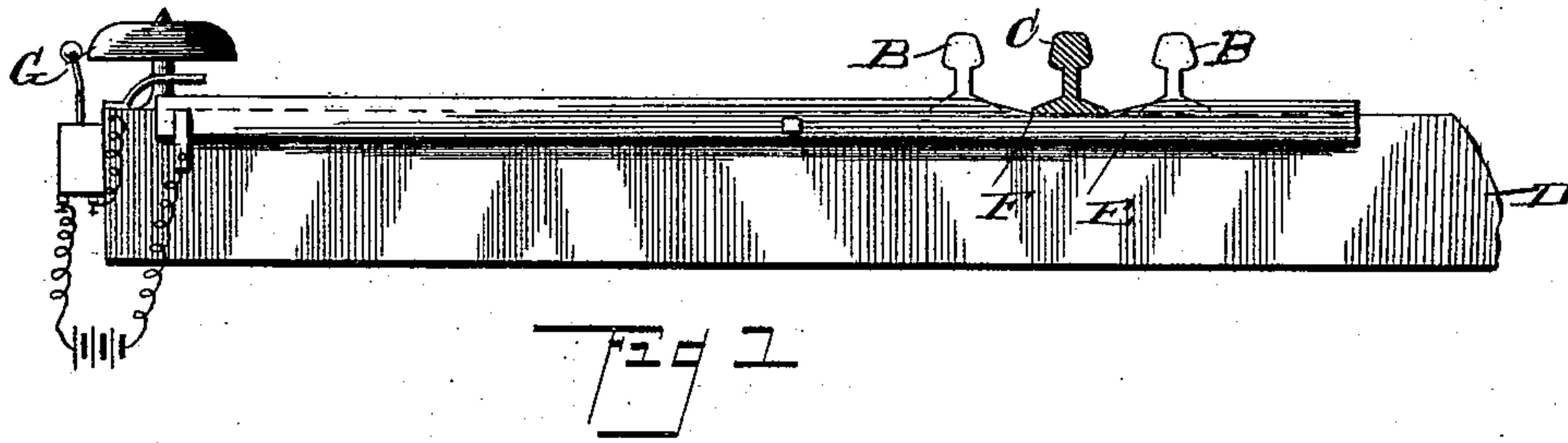


(No Model.)

F. HARRIS.
RAILROAD SWITCH SIGNAL.

No. 488,654.

Patented Dec. 27, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

FRANK HARRIS, OF GUILDHALL, VERMONT.

RAILROAD-SWITCH SIGNAL.

SPECIFICATION forming part of Letters Patent No. 488,654, dated December 27, 1892.

Application filed August 26, 1892. Serial No. 444,213. (No model.)

To all whom it may concern:

Be it known that I, FRANK HARRIS, a citizen of the United States, residing at Guildhall, in the county of Essex and State of Vermont, have invented certain new and useful Improvements in Railroad-Switch Signals; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention is a device for use on railroad switches by means of which an alarm will be sounded when the switch is open and it consists in certain novel features hereinafter described and claimed.

In the accompanying drawings, which fully illustrate my invention, Figure 1 is an elevation of my improved device showing it as it appears when the switch is closed; Fig. 2 is a similar view showing the switch opened, and Fig. 3 is a plan view.

The track is constructed in the usual manner and need not be described any further than to say that A designates the rail of the main line, B the siding rail, C the switch rail, and D the tie. Upon the side of the tie I pivotally secure the trip-bar or lever E, the pivotal point being near the rails, as clearly shown in Figs. 1 and 2, so that the weight of the bar will hold its inner end up against the rails. The bar is provided on its upper side with a notch or recess F in which the end of the switch rail rests when it is set for the main line, as shown in Fig. 1. When the switch

rail is moved toward the siding, it rides over the upper side of the bar and consequently depresses the inner end of the same as shown in Fig. 2. The outer end of the lever or trip-bar is adapted to sound an alarm such as a bell G which will ring as long as the bar is held up. The exact arrangement of this part of the device, however, is immaterial, as it may be changed at pleasure. A very efficient arrangement is to make the end of the lever, when raised, close a circuit which will sound an electric bell.

My device is obviously simple and advantageous. When the switch is closed, the outer end of the bar is lowered but as soon as the switch rail is moved to either side it will bear upon the upper side of the bar so as to raise the outer end of the same and cause the alarm bell to ring as long as the said end is raised. Inasmuch as the condition of the switch is thus made known at all times, accidents due to the switch being negligently left open are avoided.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is:—

A switch signal consisting essentially of an oscillatory trip-bar connected with an alarm and provided with a recess in its upper side in which the end of the switch rail rests when the switch is closed.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK HARRIS.

Witnesses:

PUTNEY R. FOLLANSBY,
G. T. FAIRCHILL.