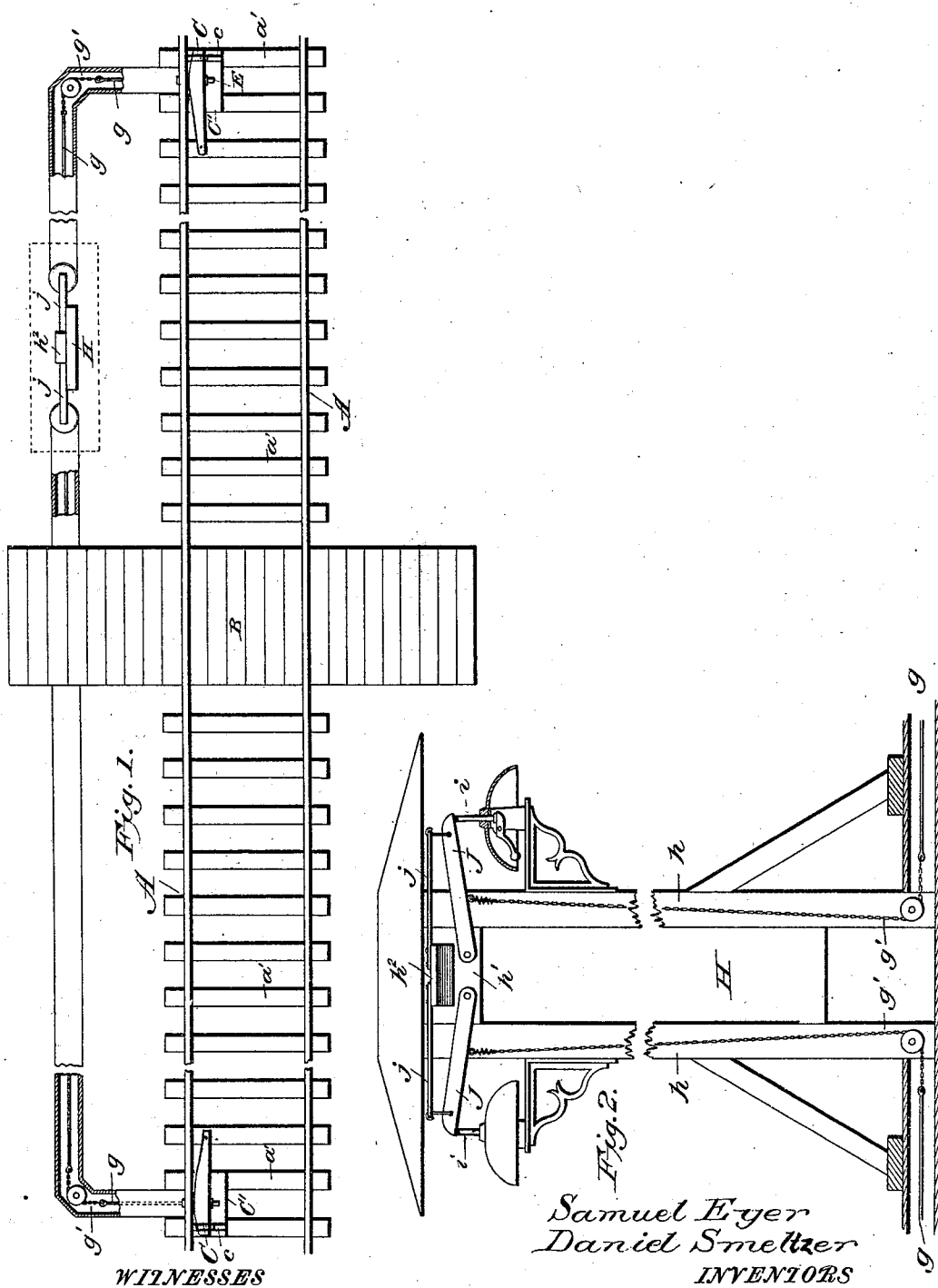


(No Model.)

S. EYER & D. SMELTZER.
RAILWAY CROSSING DANGER SIGNAL.

No. 517,097.

Patented Mar. 27, 1894.



WITNESSES

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UNITED STATES PATENT OFFICE.

SAMUEL EYER AND DANIEL SMELTZER, OF WAKARUSA, INDIANA.

RAILWAY-CROSSING DANGER-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 517,097, dated March 27, 1894.

Application filed March 22, 1893. Serial No. 467,222. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL EYER and DANIEL SMELTZER, citizens of the United States of America, residing at Wakarusa, in the county of Elkhart and State of Indiana, have invented certain new and useful Improvements in Railway-Crossing Danger-Signals; and we do hereby 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 letters of reference marked thereon, which form a part of this specification.

The object of this invention is to provide a railway signal which is simple and cheap in construction and effective in operation, and which is adapted to be placed at railway crossings to indicate the approach of trains. And the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view showing the application of our improvement to a railway. Fig. 2 is a side elevation of the alarm mechanism.

A designates the railway and B the crossing. On each side of the crossing, at a suitable distance therefrom and adjacent to one of the rails of the railway, is located a lever C which is pivoted at one end to the ties a' , the free end being retained in place by a suitable guide c . The lever C, is held in its normal position, that is adjacent to the rails by a spring. The movement of the free end of the lever C, away from the rail actuates the alarm mechanism by drawing upon the connections g and g' which are attached at one end to the lever and extend therefrom around suitable guide pulleys to the alarm mechanism.

The alarm mechanism is supported by a suitably braced structure H having bells for sounding an alarm, the bell-hammers being pivoted to the standards and actuated by rods i which extend through the upper part of the bell as shown in Fig. 2. To the upper end of the structure are pivoted levers J J the outer ends of which lie over the rods i of the bells and are held in such position by flat springs j which extend from a bracket

h^2 and are connected to the levers at their outer ends. The connections extending from the levers C C are attached to the levers J J so that when they are drawn upon the outer ends of said levers will be caused to strike against the rods i and sound an alarm. The ends of the connections which are attached to the under side of the levers J J are provided with springs which assist in keeping the connections taut and prevent undue pressure on the bars which actuate the bell hammers.

In operation when a train is approaching the crossing the flanges of the wheels on one side of each track will strike against the lever C and move the same away from the rail and such movement being imparted to the levers J through the connections g and g' will draw upon said levers to cause them to strike the rods i and sound an alarm. When the wheel passes the lever it will be returned by the spring to its normal position, and as each wheel on one side of the train of cars passes the lever the bell will be sounded.

In Fig. 1 of the drawings we have shown the device applied to a single track railway so that an alarm will be sounded when the trains approach the crossing in either direction, and it will be understood that in the case of a double track railway the levers will be positioned only on that side of the crossing from which a train approaches.

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

1. In a railway signal for crossings, the combination, of levers pivoted adjacent to one of the rails of the track on opposite sides of the crossing, rods and flexible connections which extend from the track levers to levers which actuate the alarm mechanism, the last mentioned levers having springs for holding the free ends of the same elevated and at the same time exert a tension upon the flexible connections and rods which lead therefrom to the track levers, and springs interposed between the point of attachment of the connections to the track lever and lever which actuates the alarm mechanism, substantially as shown.

2. In a railway signal for crossings, the com-

ination, of the levers C, C, located adjacent
to one of the rails, connections extending
therefrom to a lever J which is pivoted to a
support and connected to a spring j, and a
5 spring interposed between the point of at-
tachment of the connections to the levers C
C and lever J, for the purpose set forth.

Witness our hands and seals this 6th day
of March, 1893.

SAMUEL EYER. [L. S.]
DANIEL SMELTZER. [L. S.]

Witnesses:

ANTHONY LECHLITNER.
SAML. C. HARRINGTON.