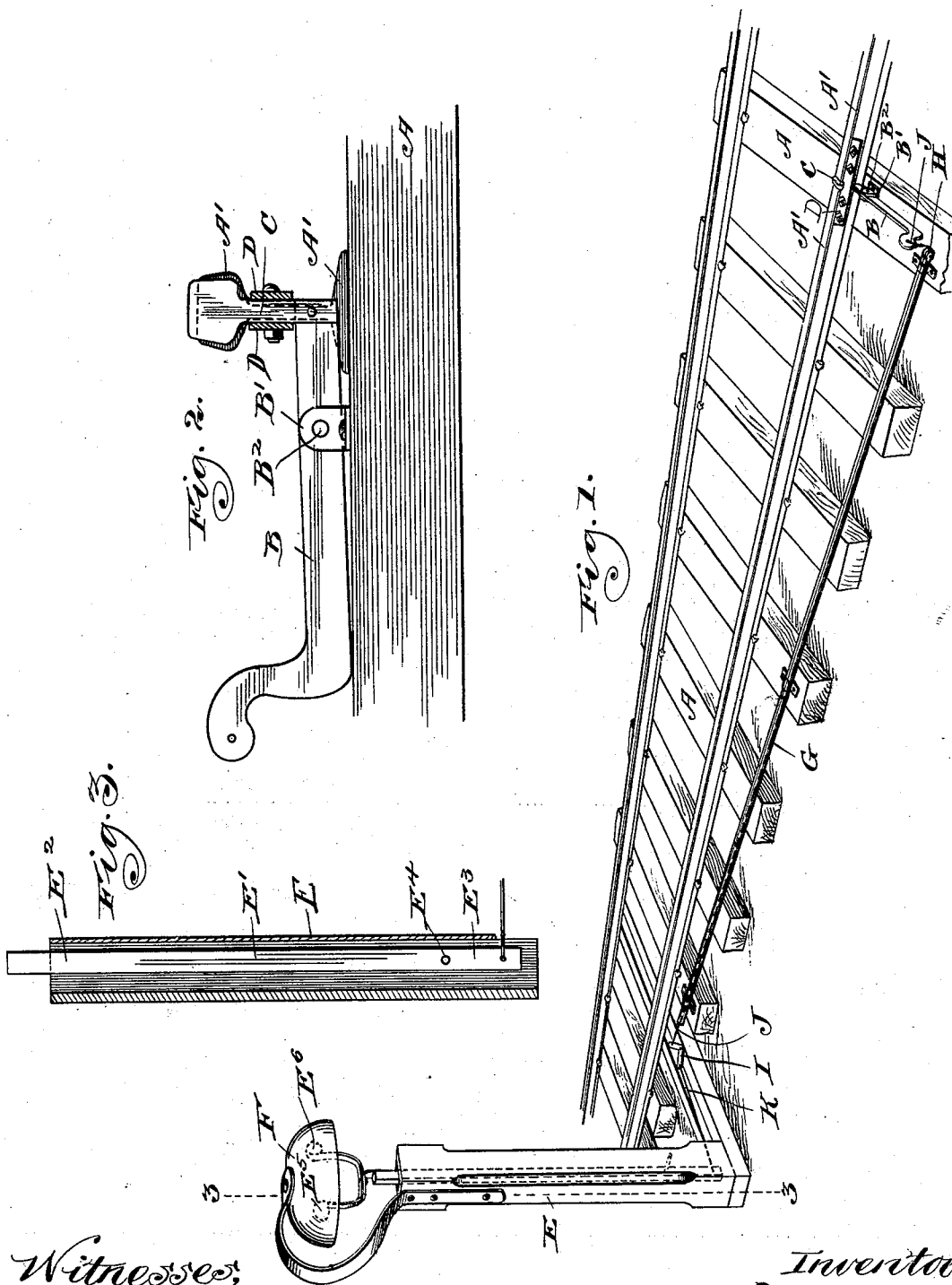


(No Model.)

A. T. ROBERTS.
RAILWAY ALARM.

No. 507,286.

Patented Oct. 24, 1893.



Witnesses:
J. A. Manna,
E. E. Johnson. *Per*

Inventor:
A. T. Roberts,
L. L. Morrison,
Att'y.

UNITED STATES PATENT OFFICE.

ALFRED T. ROBERTS, OF WINNEBAGO, ILLINOIS.

RAILWAY-ALARM.

SPECIFICATION forming part of Letters Patent No. 507,286, dated October 24, 1893.

Application filed November 22, 1892. Serial No. 452,829. (No model.)

To all whom it may concern:

Be it known that I, ALFRED T. ROBERTS, a citizen of the United States, residing at Winnebago, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Railway-Alarms, of which the following is a specification.

The object of my invention is to provide means for heralding the approach of trains at railway crossings; and it consists of certain new and useful features of construction and combinations of parts hereinafter fully described and specifically pointed out in the claims.

Referring to the accompanying drawings which form a part of this specification, Figure 1 is an isometric view of a section of railway track provided with my improvements. Fig. 2 is a detailed view of parts shown in Fig. 1. Fig. 3 is a vertical section, at the dotted line 3—3 in Fig. 1 of parts there shown.

Like letters of reference indicate corresponding parts throughout the several views.

A A' are, respectively, the ties and rails composing a railway track.

B is a lever horizontally mounted in a suitable bearing B' on a pivot B².

C is an upright, pivot-jointed by its lower end to the short arm of the lever B, interposed between the ends of two adjacent rails and projecting above the treads thereof.

D are fish-plates which secure the rails A' together and contribute to form a way for the upright C to travel in.

E is a hollow column vertically erected upon any suitable foundation.

E' is a lever consisting of a long arm E² and a short arm E³ and mounted on a pivot E⁴.

E⁵ E⁶ is a double-headed hammer mounted on the free end of the long arm E² of lever E'.

F is a bell so mounted upon the column E that it may be alternately struck by the branches E⁵ E⁶ of the hammer.

G is a pipe secured to any suitable bearings. Obviously any other suitable covering could be substituted for the part G.

H is a pulley mounted at the end of the pipe G.

I is a bell-crank mounted upon any suitable bearing.

J is a wire passed through the pipe G, under the pulley H and connecting the free end of the lever B with one arm of the bell-crank I.

K is a wire connecting the other arm of the bell-crank I with the lower end of the short arm E³ of the lever E'.

Each wheel on one side of a train of cars passing over the tracks A' strikes and forces downward the upright C, thereby elevating the free end of the lever B, which pulling upon the wire J oscillates the bell-crank I and operating through the wire K swings the lever E', causing the hammer E⁵ E⁶ to strike upon and sound the bell F.

I claim—

1. In a railway alarm, in combination, the rails A', a lever horizontally mounted on a pivot in a suitable bearing, a vertical upright pivot jointed by its lower end to the short arm of the horizontal lever, interposed between the ends of the adjacent rails A' and projecting above the tread thereof, substantially as and for the purpose specified.

2. In a railway alarm, in combination, the rails A', the lever B mounted on a pivot B² in a bearing B', the upright C pivot-jointed by its lower end to the short arm of the lever B, the hollow column E, the lever E' pivotally mounted therein, the hammer E⁵ E⁶ mounted thereon, the bell F adapted to be struck by the hammer E⁵ E⁶, the bell-crank I, the wire K connecting the lower end of the lever E' with said bell-crank, the pipe G and wire J passing therethrough and connecting the lever B with the bell-crank I, when all of said are constructed, arranged and connected substantially as and for the purpose specified.

A. T. ROBERTS.

Witnesses:

L. L. MORRISON,
NELLIE BUNKER.