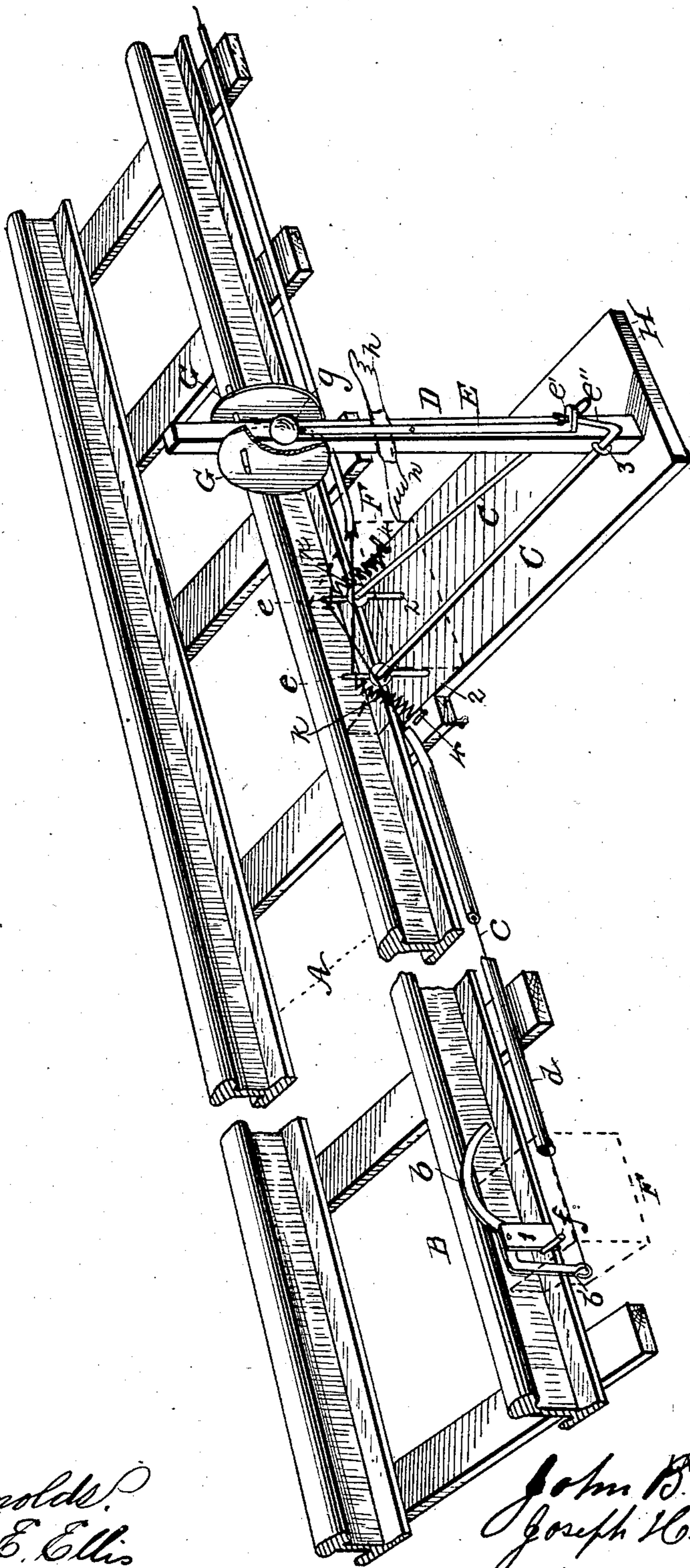


(No Model.)

J. B. DEEDS & J. H. BLAKE.
ALARM SIGNAL FOR RAILROAD CROSSINGS.

No. 294,207.

Patented Feb. 26, 1884.



WITNESSES

WITNESSES
J. W. Reynolds.
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~~REVENUE~~

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JOHN B. DEEDS AND JOSEPH H. BLAKE, OF TERRE HAUTE, INDIANA; SAID
DEEDS ASSIGNOR TO SAID BLAKE.

ALARM-SIGNAL FOR RAILROAD-CROSSINGS.

SPECIFICATION forming part of Letters Patent No. 294,207, dated February 26, 1884.

Application filed April 7, 1883. (No model.)

To all whom it may concern:

Be it known that we, JOHN B. DEEDS and JOSEPH H. BLAKE, of Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Alarm-Signals for Railroad-Crossings; and we do hereby declare that the following is a full, clear, and exact description of the invention, which 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.

Our invention relates to improvements in that class of invention known as "alarm-signals for railroad-crossings;" and it has for its object to provide certain means whereby the train, on nearing the crossings, will operate certain mechanism to produce an alarm, thus giving notice to persons of the approach of the train, and also frighten away live stock should any be in the vicinity of the crossing. To these ends we place about one-fourth of a mile (more or less) on both sides of the crossing a suitable lever or rocker bar fulcrumed in a standard forming a bearing therefor, and we fasten to the straight or depending arm thereof the end of a wire of suitable strength, which extends alongside the rail to the crossing, where its other end is fastened to an arm of a rocking rod which turns in suitable bearings, to which arm is also secured a spring. The other end of said rod is adapted, when the rocker-bar is actuated, to cause a vertically-pivoted rod to oscillate against a sonorous body, thus producing the alarm. The wire is designed to run through a pipe or tubing, and around the rocker-bar and spring is arranged suitable boxing for housing of the parts as a protection from the weather.

In the accompanying drawings, A represents the railroad-track, and at a suitable distance on each side of the crossing, adjacent to the side of the track, is fulcrumed a lever or rocker bar, B, in bearings 1, the arm *b* of which is curved and projects above the top of the track. The other arm, *b'*, is bent downward, and is formed with an eye at the end for the purpose of fastening thereto a wire, *c*, which wire runs within suitable pipe or tubing, *d*, to protect it from frost, to the crossing,

where it is connected to an upright arm, *e*, of a rod or rocker, C, said rod being in a position at right angles to the track, and bent into arms at each end in such manner that said arms are maintained in an upright position, and turning and supported in bearings 2 and 3, which bearings are arranged to support each end of the rod. Also, to the arm *e* is attached one end of a spring, K, of sufficient strength, the other end of which is secured to a pin, 4; or, as is evident, it may be secured by any suitable equivalent means.

D is a post of sufficient height, the bearings 3 for the rod or rocker C being arranged thereon on a horizontal line with bearings 2 for said rod. To the outside of post D is vertically pivoted a rod, E, which has a bent and slotted end, *e'*, up through which extends the upright arm *e''* of the rod or rocker C. This vertical rod E is adapted to oscillate from the motion imparted to it caused by the spring and by the depression of the rocker-bar by the wheels of a train coming from either direction, (for, while a description is given of the mechanism on one side of the crossing, it will be understood that it is similarly provided on the other side,) and this rod being provided on its upper end with a hammer or clapper, *g*, it strikes a bell, gong, or other sonorous body, G, on each side of the upper end of the post, to produce sound for the purpose intended.

h h are indicators or hands attached to rod E, which move up and down with the oscillation of the rod and tend to attract persons' attention to their danger.

f is a pin or stop to arrest the rocker-bar and prevent its curved arm from being thrown backward too far when drawn up by the resiliency of the spring.

At F F are shown in dotted lines suitable boxes to inclose the working parts, as a protection from the weather, which boxes it is intended shall have holes in the sides and top where it is necessary for any part of the mechanism to project therethrough.

H is a platform on which is erected the post, as are also other of the parts; but it is obvious that it could be dispensed with or other similar contrivance substituted.

It will be observed that the sounding body

is located to some distance beyond the side of the track, and the rod C is of length sufficient to connect the operating mechanism with the oscillating rod E for producing the alarm.

5 The operation is as follows: Each of the wheels of the cars passing over the rocker-bar depresses it and throws its depending arm *b'* backward, which draws the wire, and the wire thus drawn causes the rod or rocker C to turn
10 in its bearings, and the motion is thence imparted to the rod E, which oscillates the alternate depression of the curved arm of the rocker-bar by the wheels, and its restoration to position by the spring causes the oscillation of
15 the rod between the bells, thus producing the alarm.

Having thus described our invention, what we claim is—

20 1. In a railway-alarm signal, the rocker-bar fulcrumed in the bearings 1, the wire *c*, inclosed within tubing, both as described, in combination with the spring, and rod C, turning in bearings, one end of which rod extends

up through the slotted portion of rod E, and said rod E adapted to be oscillated by the alternate depression of the curved rocker-bar and its restoration to position by the spring, as set forth. 25

2. In a railway-alarm signal, a sonorous body secured to both sides of a post at or near its upper end, in combination with the vertical oscillating rod E, pivoted to said post, its upper end having a clapper and its lower end bent and slotted, the rod C, turning in bearings and its outer end entering the slot in rod E, spring *k*, wire *c*, and the rocker-bar, the whole connected and designed to be operated substantially as set forth. 35

In testimony that we claim the foregoing as our own we affix our signatures in presence of two witnesses. 40

JOHN B. DEEDS.

JOSEPH H. BLAKE.

Witnesses:

EDWARD J. BARRY,
E. C. EDMUNDS.