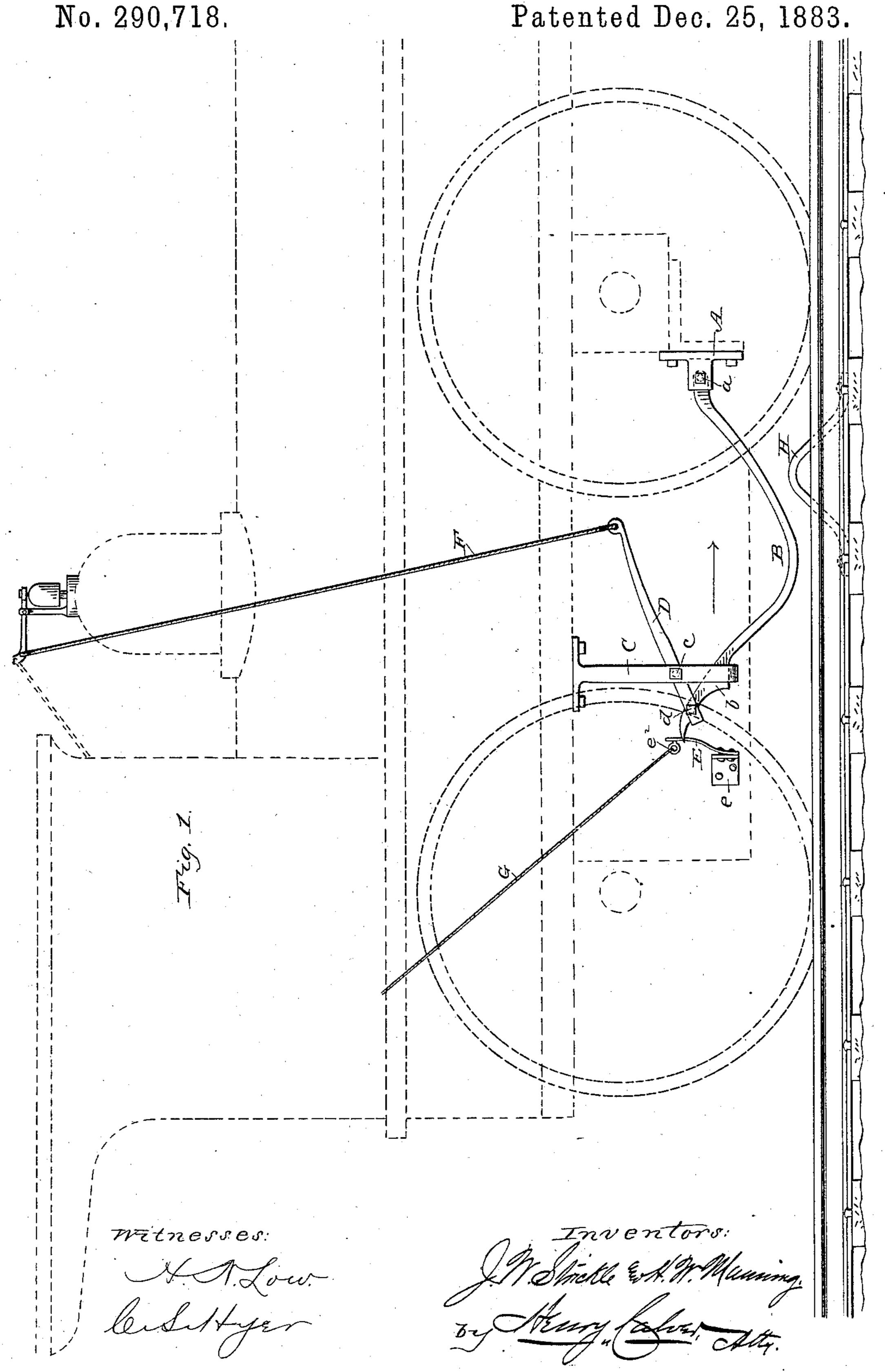
J. W. STRICKLE & H. W. MANNING. AUTOMATIC LOCOMOTIVE WHISTLE ATTACHMENT.

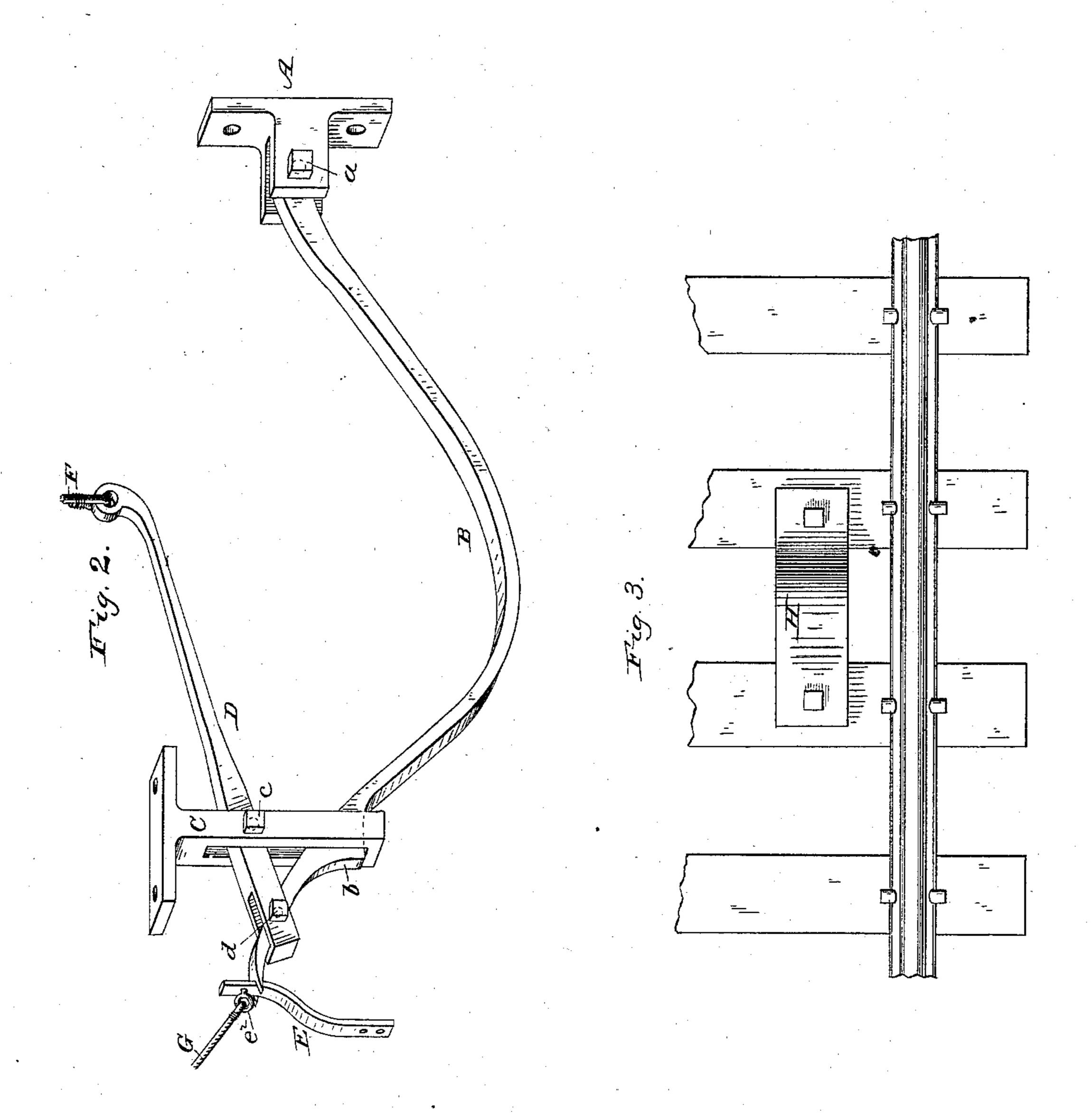


## J. W. STRICKLE & H. W. MANNING.

AUTOMATIC LOCOMOTIVE WHISTLE ATTACHMENT.

No. 290,718.

Patented Dec. 25, 1883.



Witnesses:

A. N. Low. Cishtyen Mobile WHA Maning

## United States Patent Office.

JACOB W. STRICKLE AND HARRY W. MANNING, OF HUNTSVILLE, ALA.

## AUTOMATIC LOCOMOTIVE-WHISTLE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 290,718, dated December 25, 1883.

Application filed September 8, 1883. (No model.)

To all whom it may concern:

Be it known that we, JACOB W. STRICKLE and HARRY W. MANNING, citizens of the United States, residing at Huntsville, in the 5 county of Madison and State of Alabama, have invented certain new and useful Improvements in Automatic Locomotive-Whistle Attachments, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of our invention is to produce a simple and effective device by which the steamwhistle of a locomotive-engine can be automatically sounded when the locomotive is approaching a crossing or any other part of the road where it is desired to give warning of its

approach.

In the accompanying drawings, in which like letters refer to similar parts in the several figures, Figure 1 is a side view, representing our invention in operative relation to a locomotive-engine and railroad, the engine being indicated in outline by dotted lines. Fig. 2 is a perspective view of our invention detached from the engine; and Fig. 3 is a partial plan view, showing the position of the stationary cam or tripping device relative to the road-bed and rail.

In carrying our invention into effect, we pro-30 vide a forked bracket, A, which may be securely attached to any suitable part of the locomotive. To the bracket A is pivoted at a a curved drag-bar, B, provided near its free end with an enlarged portion, b, which rests 35 in a slotted supporting and guiding bracket, C, conveniently attached to the frame-work or other stationary part of the locomotive, the slot in said bracket serving to prevent the lateral displacement of the drag-bar. To the 40 bracket C is pivoted at c a lever, D, having a loose pivotal connection at d with the dragbar B. A spring-catch E is secured to the fire-box or other suitable part of the locomotive by a supporting-bracket, as e, adjacent 45 to the free end of the drag-bar B, said free end of said drag-bar being preferably recessed, thus forming a small fork embracing and steadying the spring-catch E. To the long arm of the lever D is secured a cord or wire, 50 F, connected in any suitable manner with the

lever, which operates the steam-whistle of the locomotive, and to the spring-catch E is connected, by means of an eye,  $e^2$ , or otherwise, another cord or wire, G, running to the cab, where it will be arranged so as to be con- 55 veniently reached by the engineer. A cam or tripping device, H, is bolted to the ties of the road-bed within the rails, and at such a distance therefrom as to engage the drag-bar B at the passage of the engine. This cam or 60 tripping device consists, preferably, of a heavy metallic bar or plate bent so as to form a rounded projection at its top; but said cam or tripping device may, if desired, consist of a solid block of wood or metal, or of wood with a 65 metallic plating on its wearing-surface. It will be understood that these cams or tripping devices are to be placed near each crossing and at the side thereof from which the engine is to approach.

The operation of our invention is as follows: The parts being in the positions indicated by Fig. 1, with the engine moving in the direction indicated by the arrow, the drag-bar B will strike against the stationary cam or trip- 75 ping device H, raising the free end of said drag-bar to the top of the spring-catch E, which will instantly spring forward under the end of the drag-bar, and thus sustain the same in an elevated position. The upward move- 80 ment of the free end of the drag-bar will cause the long arm of the lever D to descend, by reason of the hereinbefore-described loose connection of said lever and drag-bar, thus pulling downward on the cord or wire F, which, by 85 its connections with the steam-whistle, will cause the same to be sounded until the engineer causes the disengagement of the drag-bar from the spring-catch by pulling on the cord or wire G, when the drag-bar will fall by grav- 90 ity to its first position, and thus be in readiness for the next crossing.

Owing to the curved construction of the drag-bar B and the cam or tripping device H, it will be obvious that said drag-bar will be 95 raised by said tripping device when the engine is moving either forward or backward; but, if it is desired to have the whistle sounded when the engine is approaching a crossing, when moving backward as well as forward, it 100

will of course be necessary to place tripping devices on both sides of the crossings, and also near both rails, our invention being applied to the side of the engine.

Having thus described our invention and the manner of its operation, we claim as new and desire to secure by Letters Patent—

1. The combination, with a locomotive-engine, of a bracket secured thereto, a curved drag-bar pivoted to said bracket, a supporting and guiding bracket for sustaining the free end of said drag-bar, a lever pivoted to said supporting and guiding bracket, and directly but loosely connected with the drag-bar, means for holding said drag-bar in elevated position when raised, and means for connecting said lever with the steam-whistle, substantially as described.

2. The combination, with the bracket A, of

the curved drag-bar B, pivoted thereto, the 20 bracket C, adapted to support and guide the free end of said drag-bar, the lever D, pivoted to said bracket C, and directly but loosely connected with the free end of said drag-bar, and the spring-catch E, substantially as described. 25

3. The combination, with a locomotive-engine and its steam-whistle, of the brackets A and C, drag-bar B, lever D, bracket e, spring-catch E, having eye e², cords or wires F and G, and cam or tripping device H, substantially 30 as described.

In testimony whereof we affix our signatures in presence of two witnesses.

JACOB W. STRICKLE. HARRY W. MANNING.

Witnesses:

THOMAS C. BARCLAY, A. B. SHEEBY.