

H. C. CROSBY.
Railway Signals.

No. 155,426.

Patented Sept. 29, 1874.

Fig 1

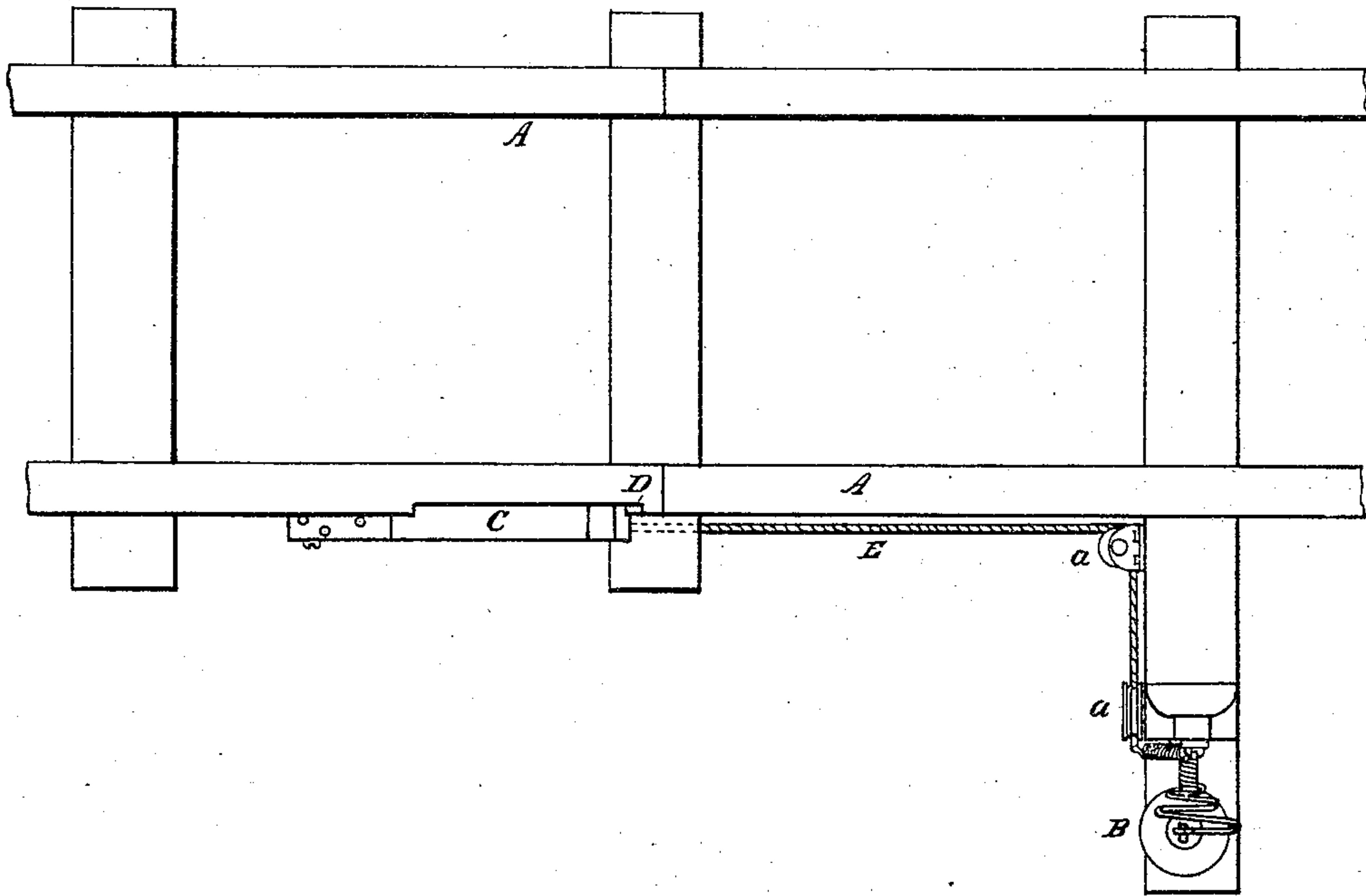
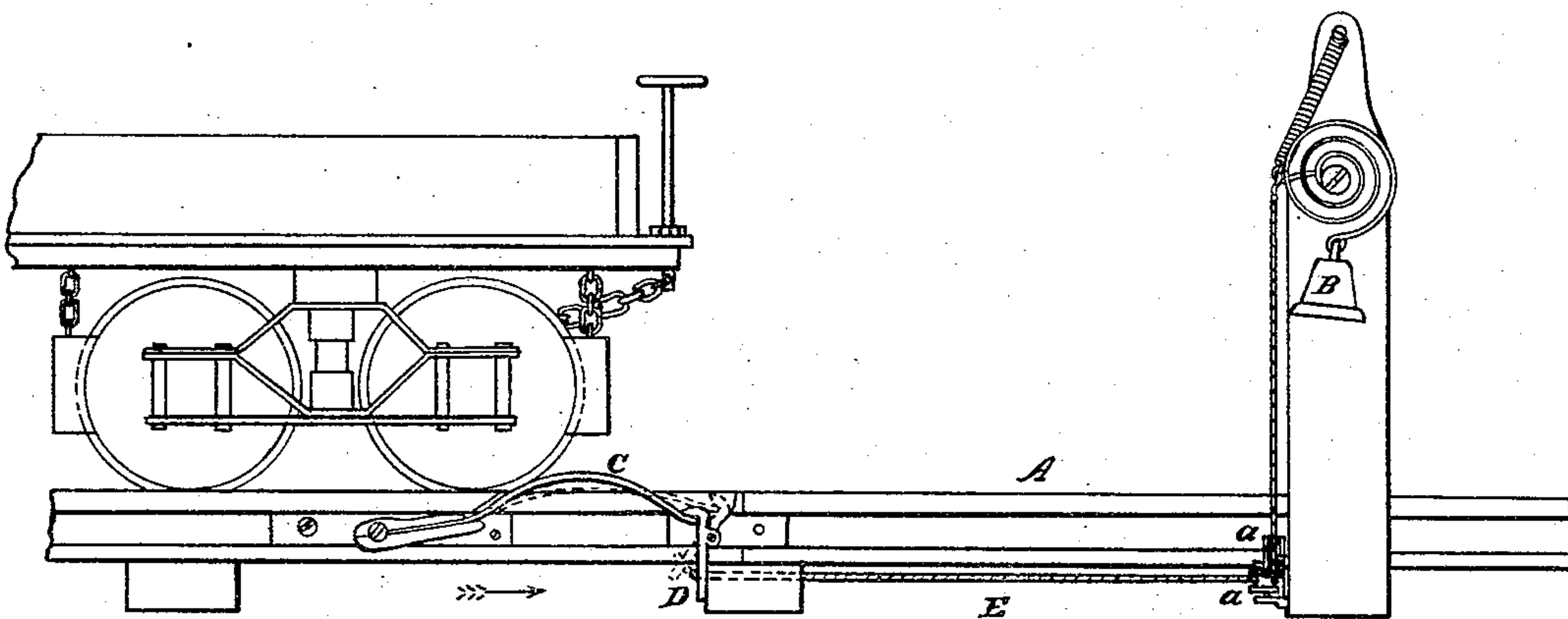


Fig. 2



WITNESSES.

INVENTOR.

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HENRY C. CROSBY, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN RAILWAY-SIGNALS.

Specification forming part of Letters Patent No. **155,426**, dated September 29, 1874; application filed April 29, 1874.

To all whom it may concern:

Be it known that I, HENRY C. CROSBY, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Railway-Signals, of which improvements the following is a full, clear, and exact description, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing forming a part hereof, and in which—

Figure 1 represents a top or plan view of my improved signal apparatus applied to the track, and Fig. 2 a side elevation of the same.

Like letters of reference indicate like parts.

The object of my invention is to provide improved means whereby the approach of cars may be indicated by means of a signal apparatus operated upon by the train, and to that end my invention consists in certain novel features relating to the means employed for that purpose, and hereinafter fully described and particularly set forth.

In the drawing, A represents a railway-track. B is an alarm-signal attached to a post or other suitable support arranged near the track. The signal, however, may be either a visual signal or an alarm-signal. C is a flexible arch, arranged longitudinally along the track, and so placed as to be struck by the wheels of a passing train. One end of this arch is rigidly held, but the other is free, and yields to the pressure exerted by the wheels. D is a pivoted arm or lever arranged for engagement with the free end of the arch C, when the latter is not first depressed at the end in contact with the lever. This lever is preferably hooked to engage the upper face of the free end of the arch, as shown. E is a cord, chain, or cable connected to one end of the lever, and to the signal. The direction of motion may be changed, when necessary, by

means of pulleys, as shown at *a a*, or by bell-cranks employed for that purpose. When the cars approach the signal in the direction indicated by the arrow, the free end of the arch will be crowded against one end of the lever, and actuate it, as represented by the dotted lines in Fig. 2, thus setting the signal in action through the instrumentality of the connecting-cord. But when the cars move in the opposite direction, the free end of the arch will descend without actuating the lever, and the signal will therefore remain inactive.

It will be perceived from the foregoing description that the signal will be operated by trains passing in the same direction. This result is desirable on many accounts, but, if occasion should require it, the signal may be operated by cars moving in either direction, either by properly arranging an arch, lever, and connecting apparatus on both sides of the same signal, or by duplicating all the parts of the signal for that purpose.

I am aware that signals have heretofore been actuated by trains during their passage in one direction only.

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

The combination, substantially as specified, of the flexible arch C, arranged longitudinally along the track, and rigidly held at one end and free at the other, with the pivoted arm or lever D arranged for contact, at one end, with the free end of the said arch, and connected to the signal, for the purpose of thereby rendering the signal operative automatically during the passage of the train in one direction only.

HENRY C. CROSBY.

Witnesses:

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