## J. M. PEIRCE.

## RAILWAY-SIGNAL.

No. 184,106.

Patented Nov. 7, 1876.

Fig.1.

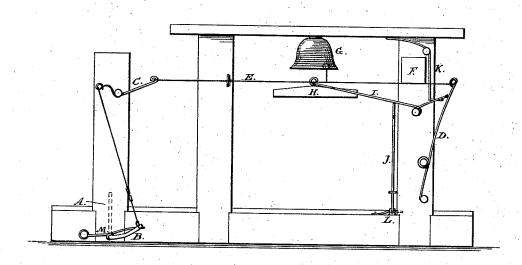
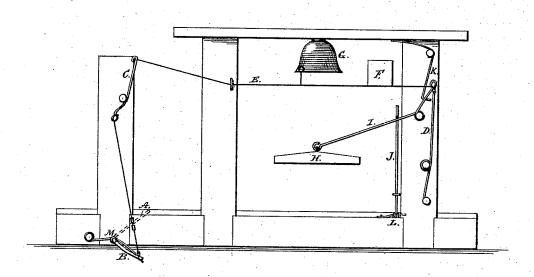


Fig.2.



Witnesses: William K. Zarley Edward & Farley

Inventor: James M. Peirce

## UNITED STATES PATENT OFFICE.

JAMES M. PEIRCE, OF JOLIET, ILLINOIS.

## IMPROVEMENT IN RAILWAY-SIGNALS.

Specification forming part of Letters Patent No. 184,106, dated November 7, 1876; application filed May 20, 1875.

To all whom it may concern:

Be it known that I, JAMES M. PEIRCE, of Joliet, in the county of Will and State of Illinois, have invented a new and useful Improvement for Railway-Signals, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to cause the approaching train at any desired distance from a crossing to ring a bell, display a flag or other signal, drop a gate, and give the speed of the approaching train; also, to raise the gate when the train passes the crossing.

Figure 1 represents the gate raised. Fig. 2 represents the gate down, and flag shown, and the bell rung.

A represents the crank which the wheel presses down. At the opposite end of a shaft is the arm or crank B standing at nearly a right angle to the crank A. This is connected by a wire or chain to the crank C at any desired elevation to extend a wire to the opposite side of a crossing, where it is attached to a spring, D, which allows the wire to move in the direction of the train, and at the same

time to display a flag, F, and strike a bell, G, as each wheel passes the crank A. The spring D instantly draws back the wire, thus giving the speed of the approaching train. The gate H is dropped by the lever I, which is forced down by the spring D at the opposite end of the lever, and is held to place by the latch J until the train reaches the opposite side of the crossing, when the wheel loosens the latch J by pressing the lever L, and the spring K raises the gate H. When the train passes in an opposite direction or is leaving the crossing the alarm does not operate, and the crank A is brought to place by the spring

I claim as my invention— The combination of the double cranks, levers, and springs, connected by wire, substantially as set forth, with the alarm-bell and rising and falling gate, all operating substantially as shown and described.

JAMES M. PEIRCE.

Witnesses:

WILLIAM H. ZARLEY, EDWARD P. FARLEY.