

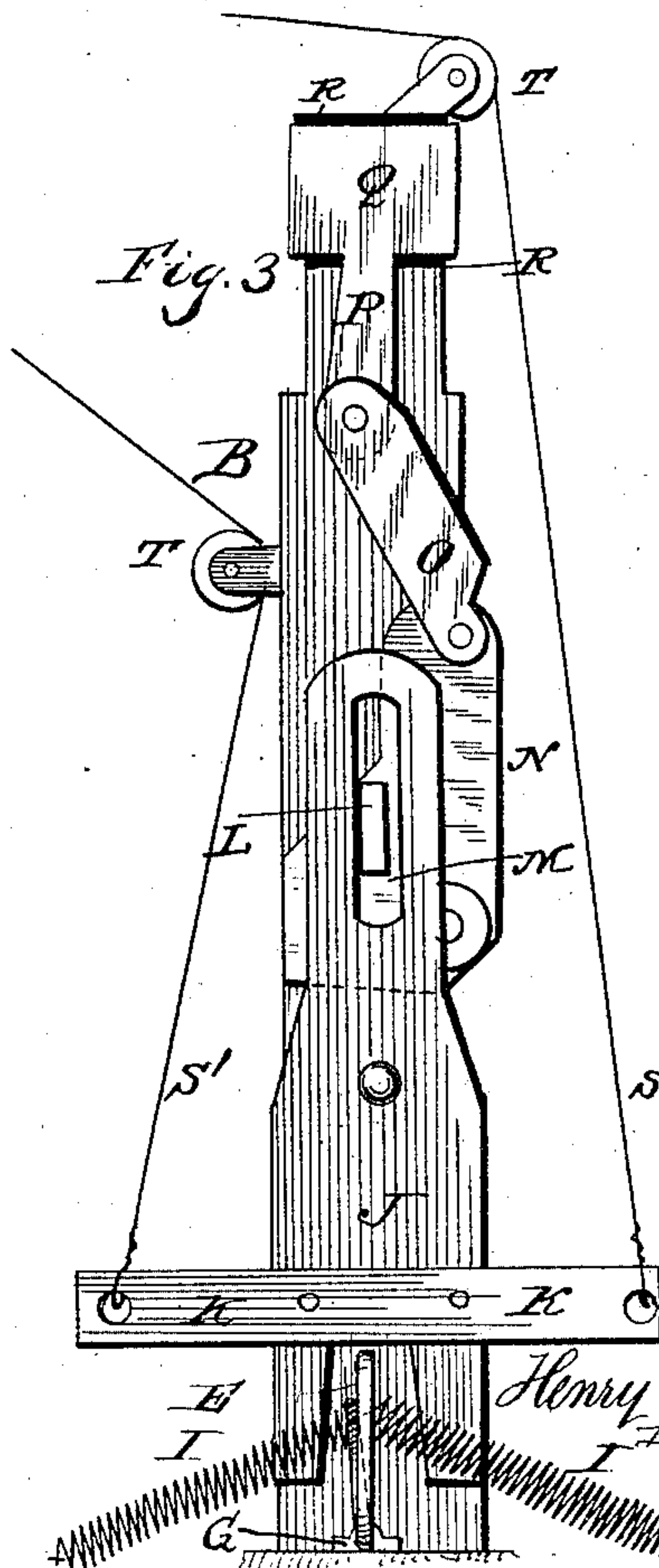
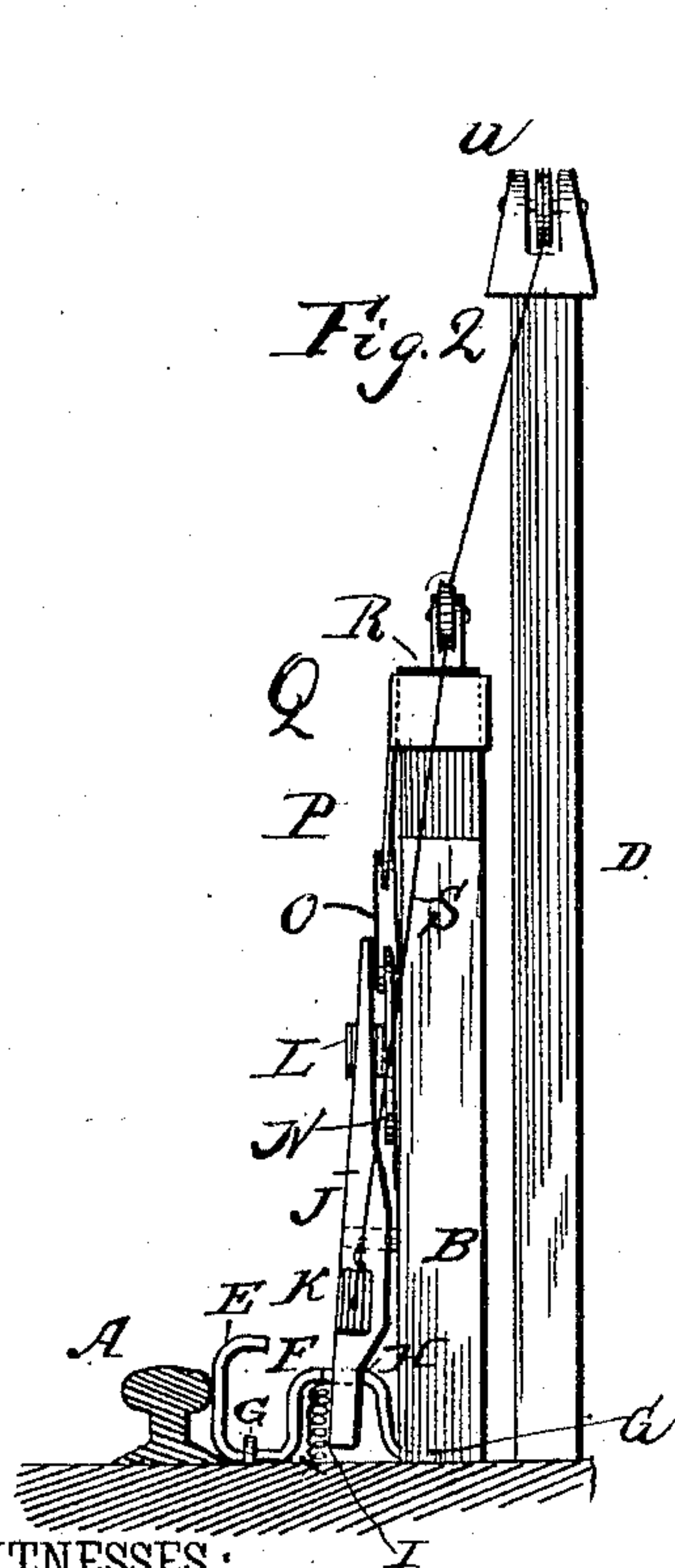
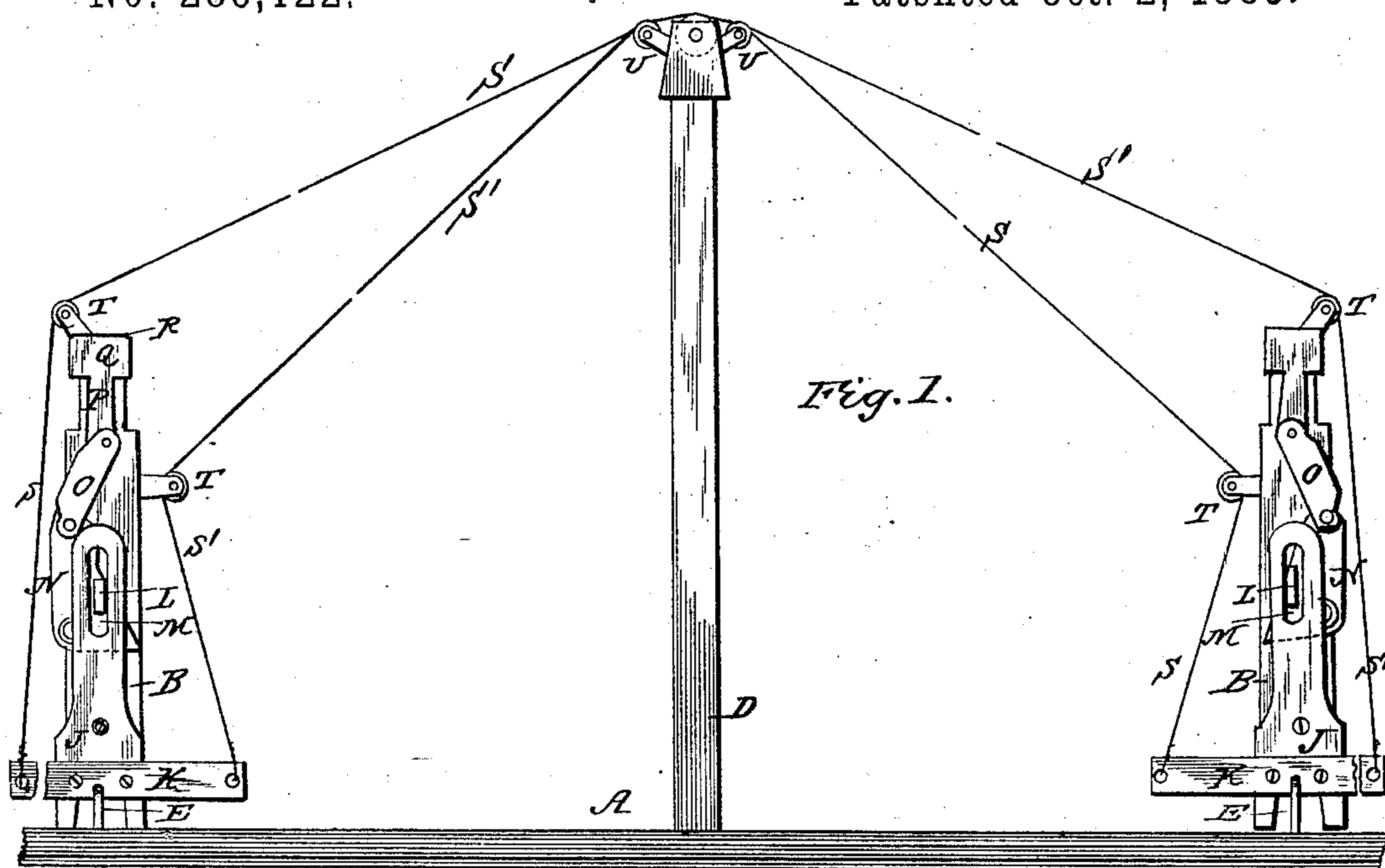
(No Model.)

H. H. EATHERTON.

RAILWAY SIGNAL.

No. 286,122.

Patented Oct. 2, 1883.



WITNESSES:

Fred G. Dieterich  
Arthur L. Morsell

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By Louis Bagger & Co.  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HENRY H. EATHERTON, OF MONTICELLO, ILLINOIS, ASSIGNOR OF ONE-HALF  
TO ASA C. THOMPSON, OF SAME PLACE.

## RAILWAY-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 286,122, dated October 2, 1883.

Application filed May 12, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY H. EATHERTON, of Monticello, in the county of Piatt and State of Illinois, have invented certain new and useful Improvements in Railway-Signals; and I 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, which form a part of this specification, and in which—

Figure 1 is a front view of my improved railway-signal. Fig. 2 is an end view of the same, and Fig. 3 is a front view of one of the signal-posts on an enlarged scale.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of railway-signals in which the wheels of the passing locomotive strike a lever which sets a signal, which is not changed until the train has passed another similar signal-post at the end of the portion of the track it is desired to protect; and it consists in the improved construction and combination of parts of the same, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a portion of a railway-rail. B B indicate two upright posts, placed at the distance desired to protect by the signals, near the track, and D indicates one or more upright posts, over which the wires connecting the signals pass. A lever, E, projects upward from a rock-shaft, F, rocking in bearings G near the track, and in the lower end of the upright post B, and the said rock-shaft forms a double crank, H, at its central portion between the bearings, which projects upward in the same direction as the lever E, which extends from the outer end of the rock-shaft immediately next to the rail. The horizontal portion of the crank has two springs, I, fastened to it and to the ground on both sides of the crank, serving to retract the crank to its vertical position after it has been tilted by the passing car-wheels; and the crank projects up into the lower bifurcated end of a lever, J, which is pivoted on the post B and rocks in a vertical

plane upon the same, and a cross-piece, K, is fastened upon its lower end, above its bifurcated portion, extending to both sides at right angles to the same. The space between the bifurcated ends of the levers J is wide enough to admit of the crank returning to its vertical position after having been tilted by the passing train, so that the signal will remain in the position to which it is set, while the crank returns to its original position. The upper end of the lever J is slotted longitudinally, and a lug, L, projects into the said slot M, sliding in the same, from a toggle-arm, N, pivoted at its lower end upon the upright B, while its upper end is hinged to another toggle-arm, O, the upper end of which is hinged to a downward-projecting arm, P, to the upper end of which a prismatic casing, Q, is fastened, which slides upon the upper end of the upright B, upon which a correspondingly-shaped block, R, is removably placed, which may be exchanged with a lamp in the night. This block may be colored with any desired color, and it will be seen that as the train passes by the upright the lever E, which projects slightly above the rail, will be struck by the wheels of the locomotive and be tilted, which rocks the lever J, and through it the toggle-arms, which slide the casing Q and cover or uncover the signal, as the case may be. Two wires, S and S', are secured to the ends of the cross-pieces K, and pass through pulleys T upon the upright B and through pulleys U upon the posts D, to a similar apparatus at the other end of the portion of track which it is desired to protect, the wire connected to the one end of the cross-piece being attached at its other end to the end of the other cross-piece upon the opposite side of the other upright, so that when the one of the signals has been set by the passing train in one position the other signal will be set in the same position by the wires. In this manner it will be seen that the train in passing one signal-post will set both the signals simultaneously, warning the train following it, or a train meeting it, that it is on that section of the track, and changing it when it arrives at the other signal-post, showing that the track is clear for that section.



Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a railway-signal of the described class, the combination of the rock-shaft F, having the lever E and double crank H, the bifurcated slotted lever J, toggle-arm N, having lug L, toggle-arm O, and prismatic casing Q, having downward-bending arm P, as and for the purpose shown and set forth.

2. The herein-described railway-signal, consisting of the uprights B, the levers E, the rock-shafts F, forming double cranks H, springs I, bifurcated slotted levers J, cross-

pieces K, toggle-arms N, having lugs L, toggle-arms O, prismatic casings Q, having arms P, detachable blocks R, wires S S', pulleys T, and posts D, having pulleys U, all constructed, combined, and arranged to operate as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

HENRY H. EATHERTON.

Witnesses:

C. A. LATMAN,  
W. P. SMITH.