(No Model.) 2 Sheets—Sheet 1.

J. S. BERRY.

RAILWAY SIGNAL AND CROSSING GATE.

No. 502,394. Patented Aug. 1, 1893.

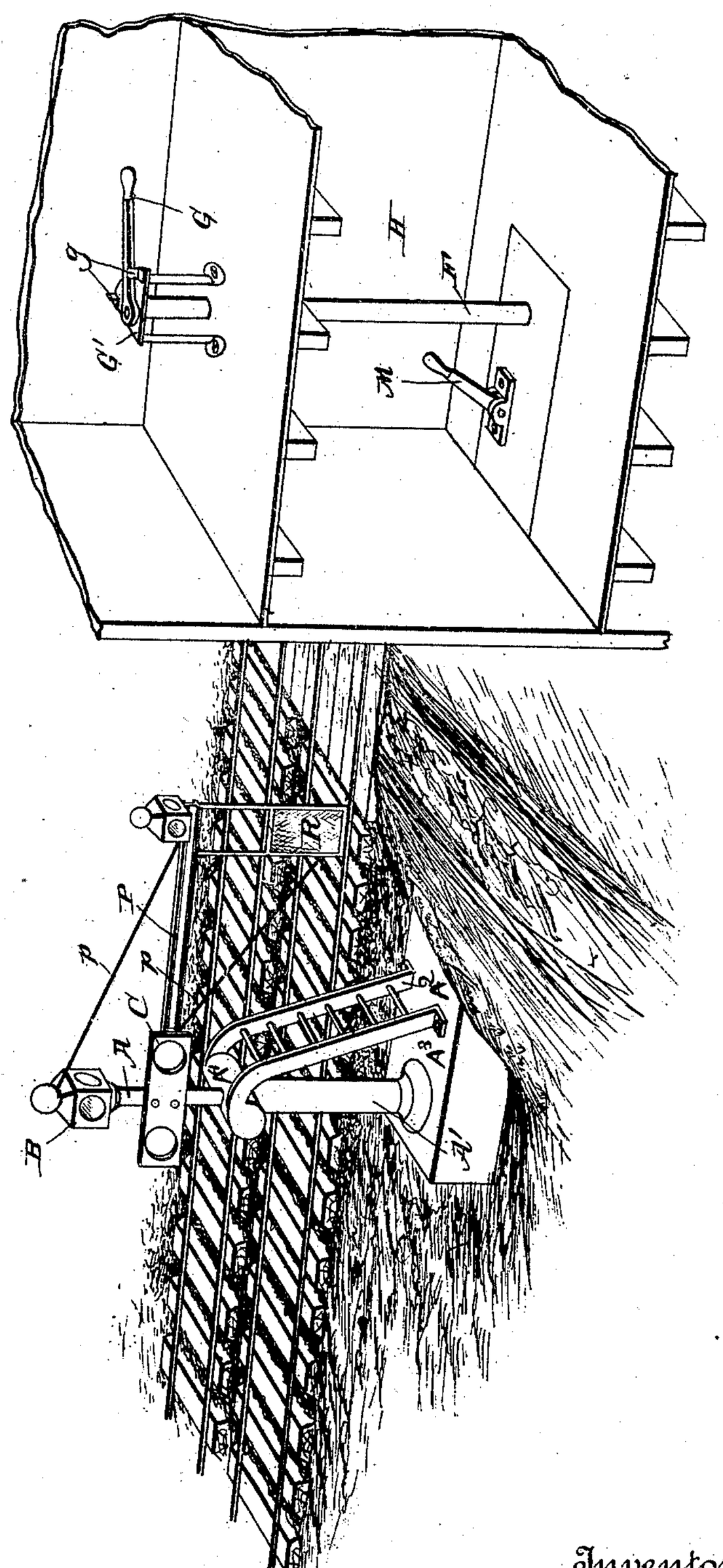

Fig. 1.

Witnesses
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(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

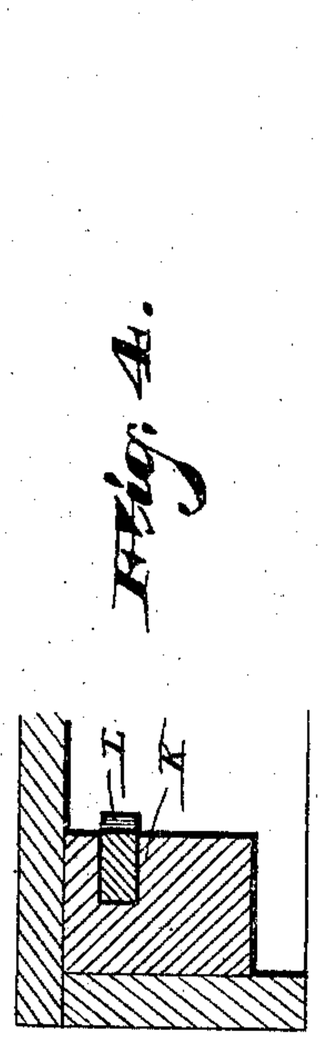

Fig. 4.

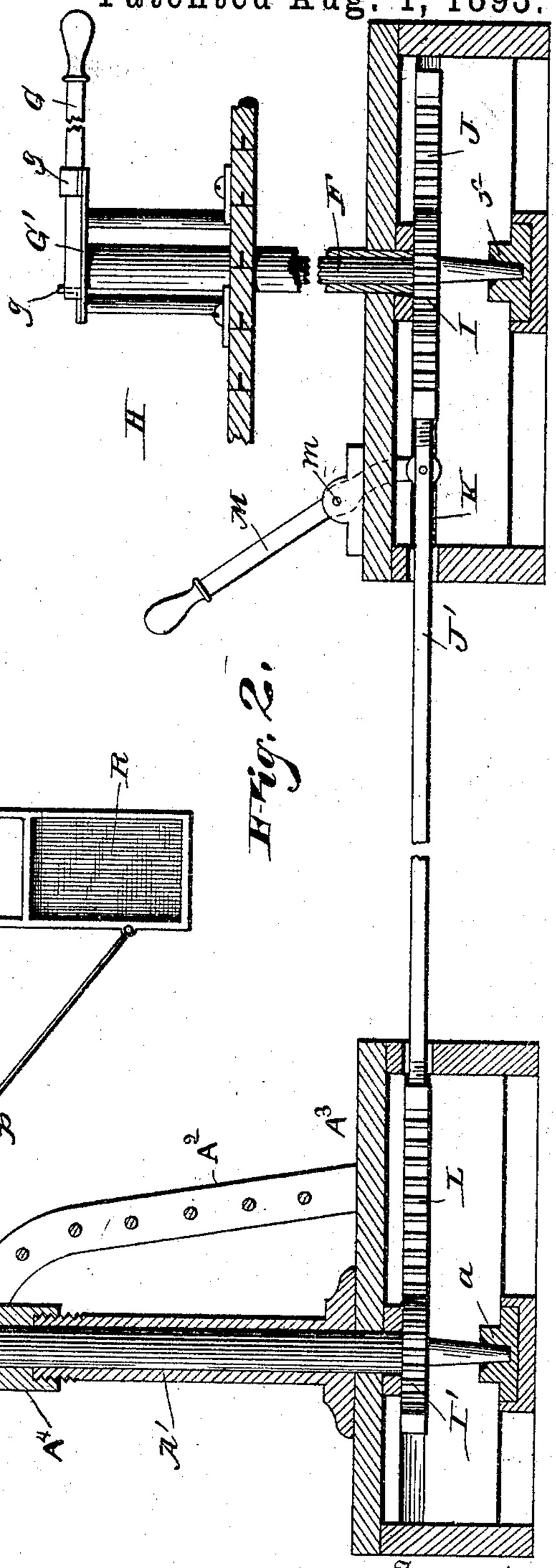

Fig. 2.

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UNITED STATES PATENT OFFICE.

JOHN S. BERRY, OF TYLER, TEXAS.

RAILWAY SIGNAL AND CROSSING-GATE.

SPECIFICATION forming part of Letters Patent No. 502,394, dated August 1, 1893.

Application filed June 20, 1891. Serial No. 396,958. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. BERRY, a citizen of the United States, and a resident of Tyler, in the county of Smith and State of Texas, have invented certain new and useful Improvements in Railway Signals and Crossing-Gates; and I do declare the following to be a full, clear, and exact description of the invention, such as 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 letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of the invention in perspective. Fig. 2 is a vertical transverse section. Fig. 3 is a detail view, and Fig. 4 is a sectional detail view.

This invention relates to certain improvements in railway signals and especially to signals designed for use at crossings.

In the accompanying drawings illustrating the invention the letter A designates a signal post mounted and adapted to turn in bearings *a* at its lower end, and in a guide or sleeve A′.

B is the lamp or lantern box at the upper portion of the post, and C is the signal board.

H is the operating station which may be located at any point convenient for operation.

F is the lever post mounted in bearings *f* at its lower end, and at its upper portion carrying the operating lever G. Near the lower end of the lever post is a pinion I rigidly secured thereto, and engaging the teeth of a rack J carried on the end of a bar J′ sliding in a way or guide K. This bar is extended beneath the signal post, at which point it carries a rack L, engaging a pinion I′ rigidly secured on the signal post shaft A. The bearing *a* for the lower end of the post A is inclosed in a suitable box, upon the cap plate A^3 of which is supported the sleeve A′, which forms an extended bearing for said post, and holds it against the weight of the crossing signal and gate. The post is further braced, as will be seen, by a ladder A^2 the foot of which is secured to the cap plate A^3, and the upper end secured to a block A^4, which surrounds the post and is secured to the upper end of the sleeve A′. This arrangement affords a secure support for the post. The lever G is adapted to be moved through a quarter of a circle turning on a quadrant plate G′, near each end of which may be a stop *g*. This plate may also be divided into sections having colors marked thereon corresponding to the color of the signal displayed when the operating lever is upon the respective sections.

It will be seen that by means of the racks and pinions, that when the operating lever and lever post are turned, a corresponding movement will be given the signal post to display the proper signal. The lever post may be extended into the second story of the station if desired.

M is an upright lever which may be used at the first floor of the station to operate the signal. This lever is connected to the bar J′ and is pivoted at *m*, so that when moved through a vertical plane it will reciprocate said bar. This construction may also be employed instead of the lever G and the post F, also dispensing with the rack and pinion.

P represents an extension bar for a crossing flag or signal gate R. This bar may be carried either by the signal board C (as shown) or by the signal post, being supported by suitable braces *p*.

The pinions, connecting bar and racks may be arranged entirely below the ground and may be inclosed in suitable boxes Y. It is obvious that the crossing flag or signal may be dispensed with if desired.

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

The combination with the rotary signal post, and its operating mechanism, of the lamp B on said post, the signal board C below said lamp, the arm extension P, its braces *p*, *p*, the signal carried by said arm and depending therefrom, said signal with said arm forming a crossing gate, the bearing *a* for the lower end of said rotary post, the box in which said bearing is fixed, the elongated sleeve supported upon the cap plate of said box, and forming an extended bearing for said post, and the ladder fixed at its foot to said cap plate, and at its upper end to an extension of said sleeve, and forming a brace for said post against the weight of said signal and crossing gate, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN S. BERRY.

Witnesses:
WM. QUINN,
JEFF D. BURNS.