

No. 795,616.

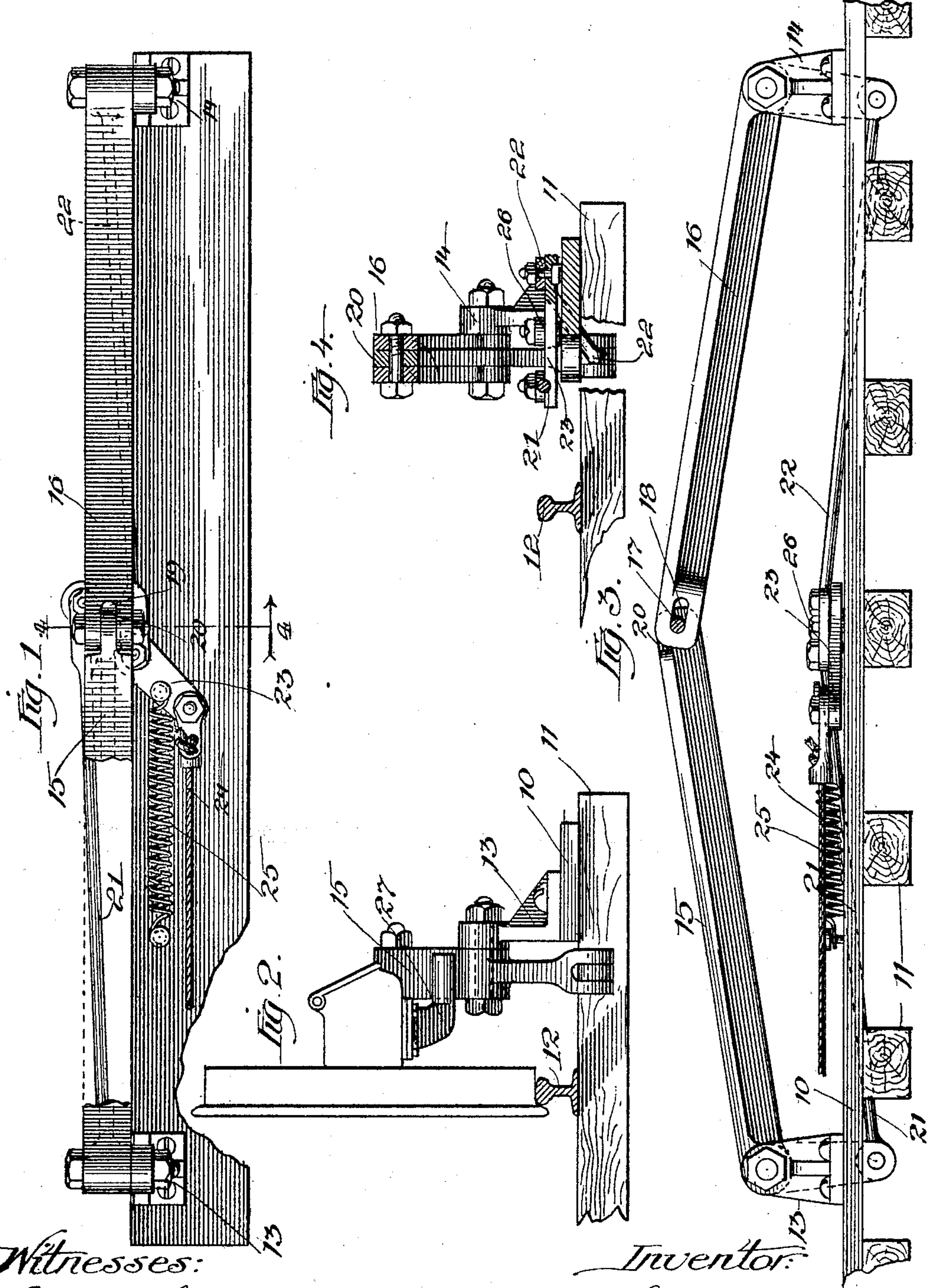
PATENTED JULY 25, 1905.

C. M. HURST.

SWITCH AND SIGNAL TRACK TRIP.

APPLICATION FILED NOV. 25, 1904.

2 SHEETS—SHEET 1.



Witnesses:

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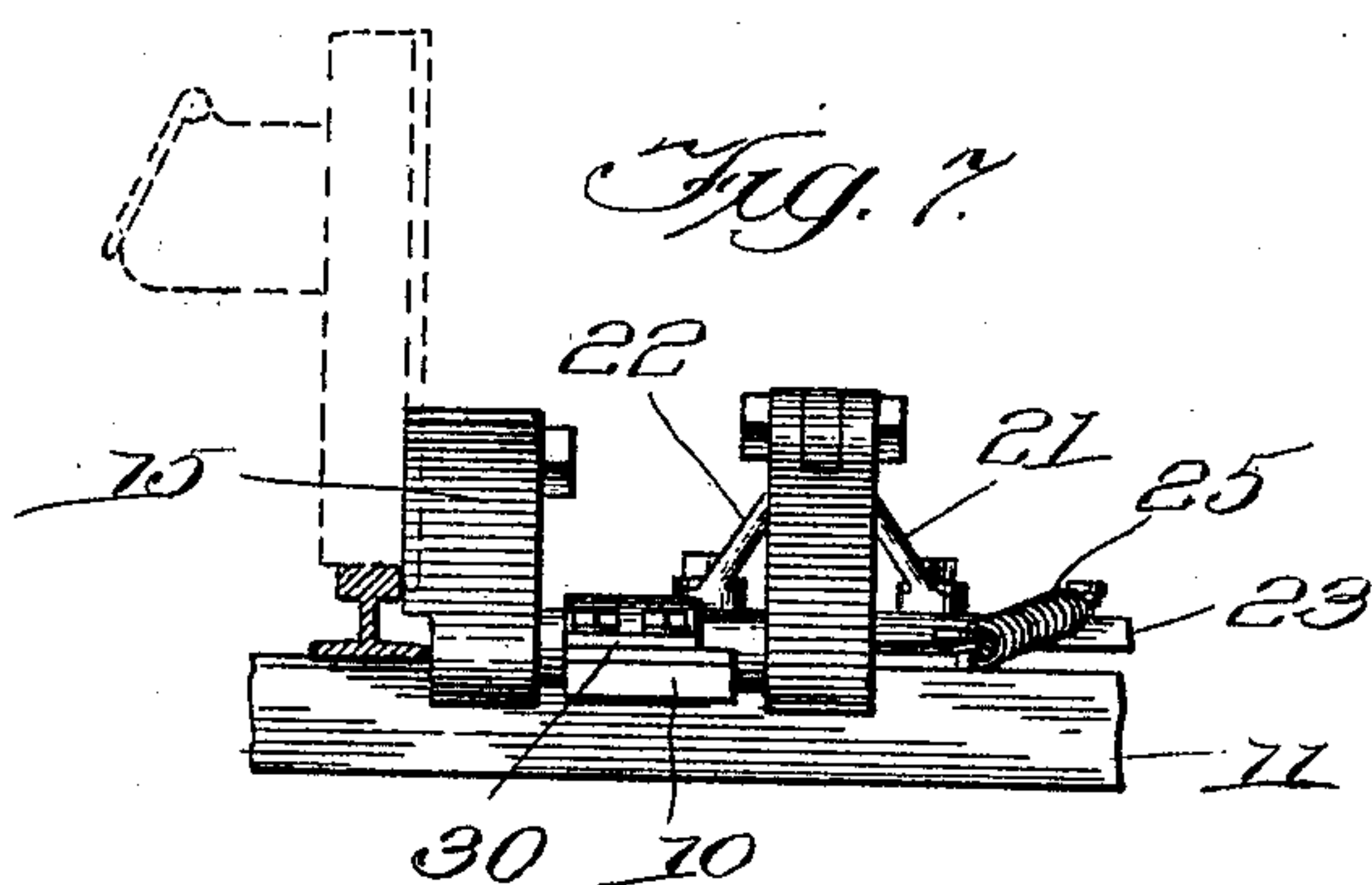
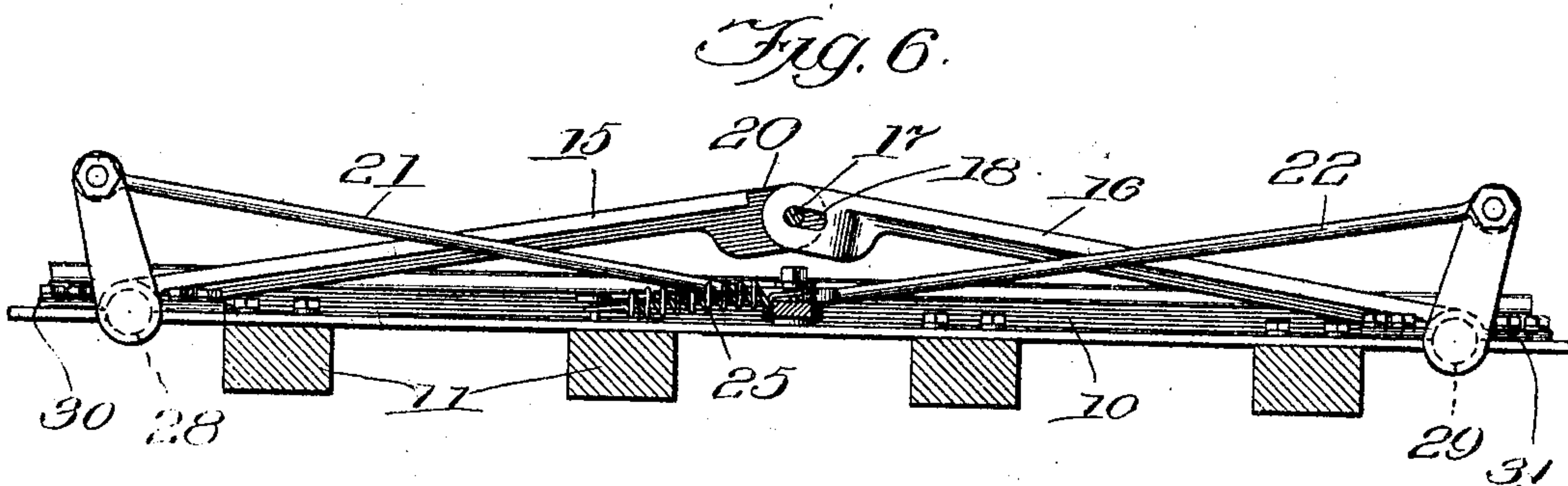
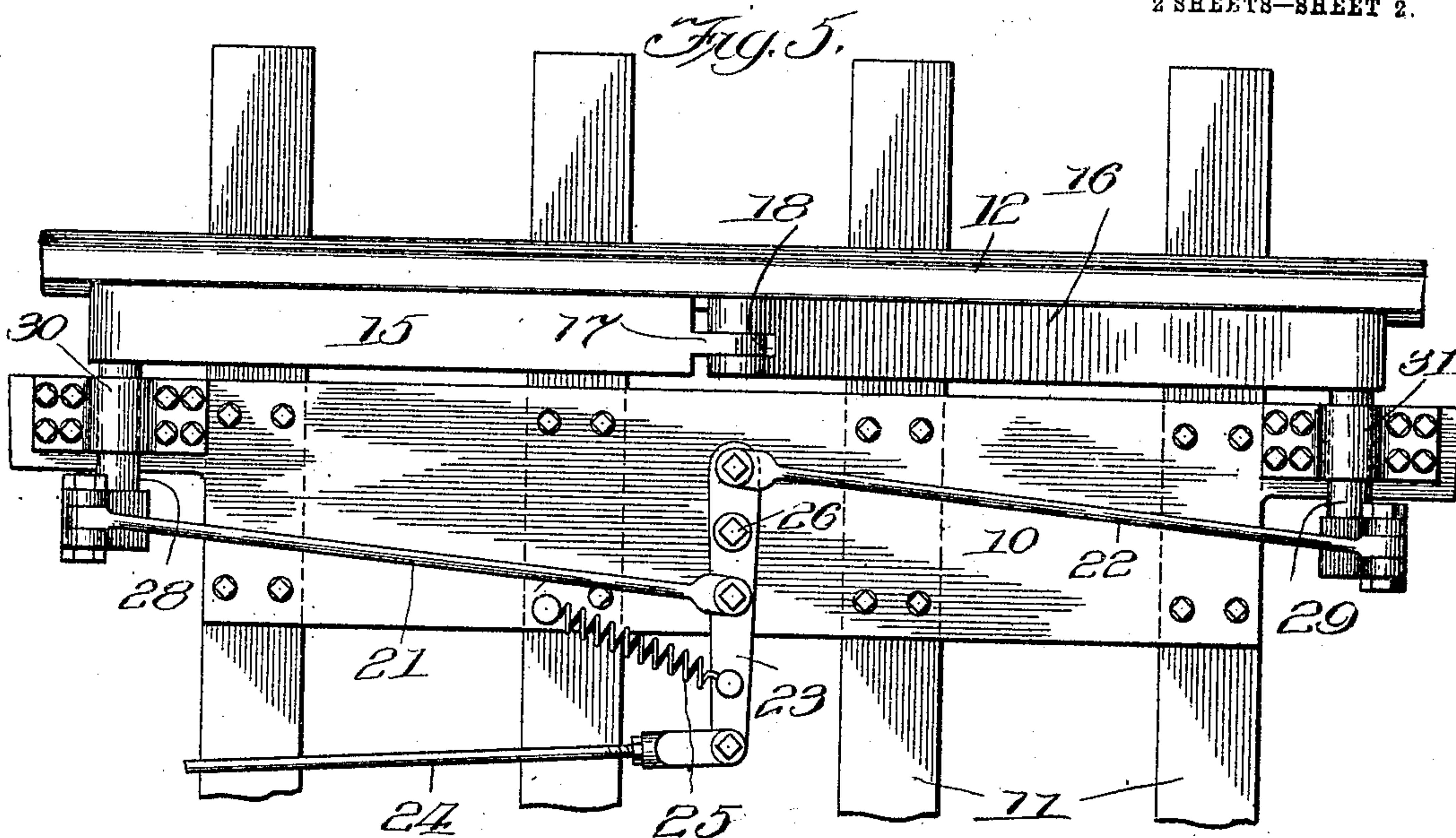
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2 SHEETS—SHEET 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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SWITCH AND SIGNAL TRACK-TRIP.

No. 795,616.

Specification of Letters Patent.

Patented July 25, 1905.

Application filed November 25, 1904. Serial No. 234,290.

To all whom it may concern:

Be it known that I, CHARLES M. HURST, a citizen of the United States, and a resident of Rawlins, county of Carbon, and State of Wyoming, have invented certain new and useful Improvements in Switch and Signal Track-Trips, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

This invention relates to that type of switch and signal track-trips which comprise an oscillating apron located at the side of a railway-track and adapted to be engaged by an appurtenance of a passing train, so as to swing it on its pivot and actuate a switch or signal.

The object of this invention is to secure simplicity and positiveness of action in devices of this kind; and it consists in the structure hereinafter described and which is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the device. Fig. 2 is an end view of the same, a detail of the railway-track being shown in cross-section. Fig. 3 is a side elevation of the device. Fig. 4 is a section on the line 4 4 of Fig. 1. Fig. 5 is a plan view showing a modified form of construction. Fig. 6 is a side elevation of the same; and Fig. 7 is an end elevation of the same, showing a detail of the track in cross-section..

The trip comprises one or a pair of bell-crank levers so arranged at the side of a railway-track that one arm of the lever is inclined upwardly and may be frictionally engaged by an appurtenance of a passing train, so as to swing it on its pivot. In the drawings a pair of such bell-crank levers are shown at 15 16 so arranged as to constitute a trip engageable by trains moving in either direction, the depression of one lever causing that of the other. It is obvious that one of the levers might be dispensed with if all of the trains having use for the device moved in the same direction.

A base-plate 10 rests upon the railway-ties 11, preferably outside of the rail 12. Each of the members of the trip-apron is pivotally secured to a bracket 13 14, rising from this base-plate. The members 15 16 of the

trip-apron are in the form of bell-crank levers having the ends of their longer arms connected by means of a pivot-pin 17, set within one of them and playing in a longitudinal slot 18 in the other. One of these arms, as 16, is slotted at its end, as shown at 19, and the other has at its end a tenon 20, entering this slot.

Links 21 22 connect the short arms of these bell-cranks with a lever 23, pivoted at 26 to the base-plate 10. A rod or cable 24 leads from the lever 23 to the switch or signal mechanism to be actuated.

A spring 25, disposed in any suitable manner, as shown, reacting between the lever 23 and a pin secured in the plate 10, normally holds the long arms of the bell-cranks 15 16 in an upwardly-inclined position, so that a shoe, as 27, or other appurtenance of a railway-train may move along either one of these inclines and swing the bell-cranks on their pivots. The links 21 and 22 are attached to the lever 23 upon opposite sides of its pivot, so that the depression of the apron acts through both of these links upon the lever.

While I have shown the apron as mounted in a vertical position, it is obvious that this is not essential to its action.

In Figs. 5, 6, and 7 is shown a modified form of construction in which the shorter arms of the bell-cranks 15 and 16 are offset from the plane of movement of the longer arms and project upwardly, the two parts being joined by shanks 28 and 29. These shanks rest in suitable chairs 30 and 31, secured to the base-plate 10, and form the pivots about which the bell-cranks swing. Furthermore, in this form of construction the device is shown as being placed between the rails of a railway-track, the longer arms of the bell-cranks 15 16 lying close to one of such rails, so as to be engaged by the flanges of the wheels of a passing train, as indicated by dotted lines in Fig. 7.

I claim as my invention—

1. In a switch and signal track-trip, in combination, a standard adapted to be mounted adjacent a railway-track, a bell-crank pivotally mounted on the standard and adapted to have one of its arms normally oblique to the track, a swinging lever

adapted to be connected with the switch or signal mechanism to be actuated, and a link connecting the bell-crank and lever.

2. In a switch and signal track-trip, in combination, a plate for attachment adjacent a railway-track, a pair of bell-cranks pivotally supported on the plate and having their longer arms pivotally united, a swing-

ing lever, links connecting the shorter arms of the bell-cranks with opposite ends of the lever, and a rod or cable for connecting the lever with the switch or signal to be actuated.

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