

(No Model.)

B. H. GEDGE.
RAILWAY SIGNAL.

No. 364,009.

Patented May 31, 1887.

FIG. 1.

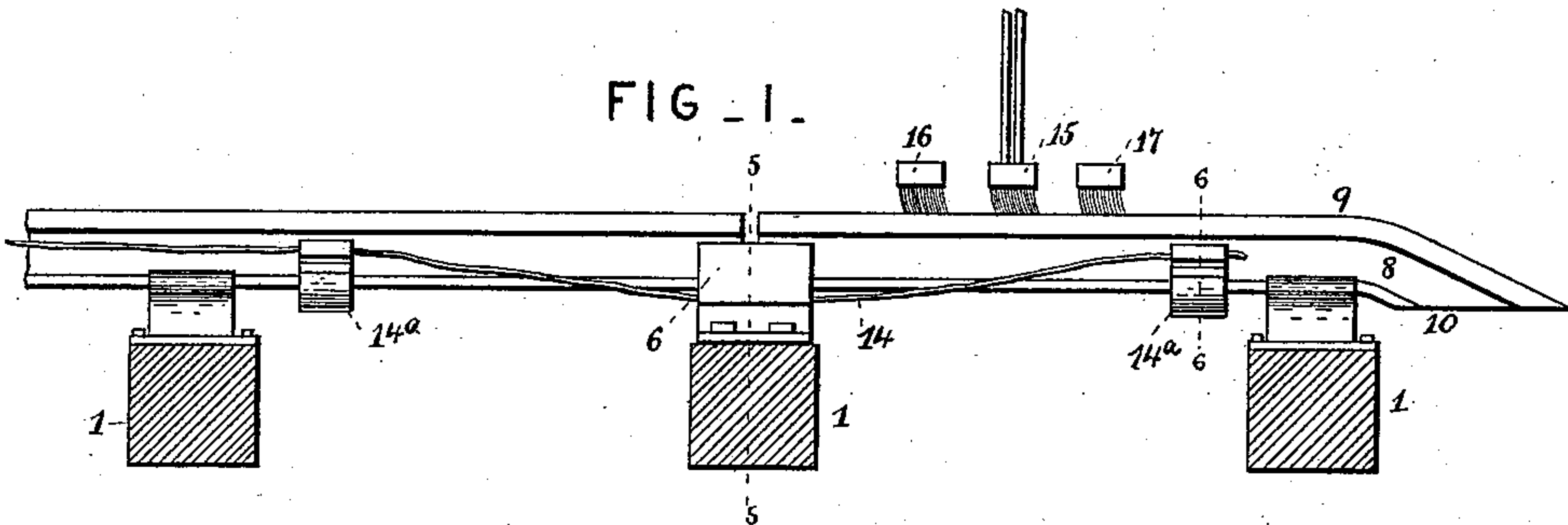


FIG. 3.

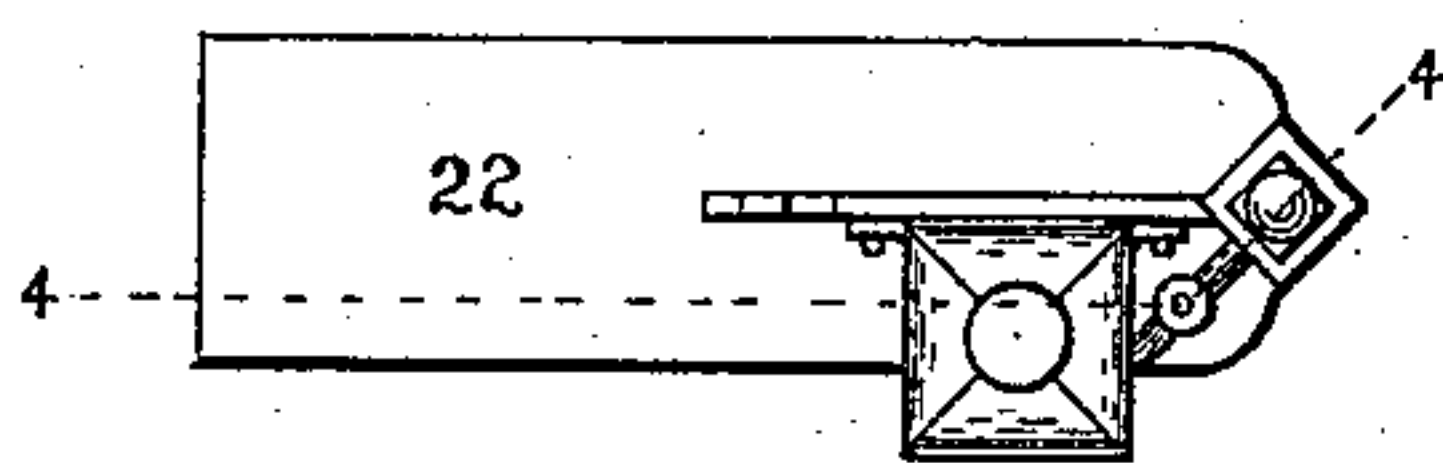


FIG. 2.

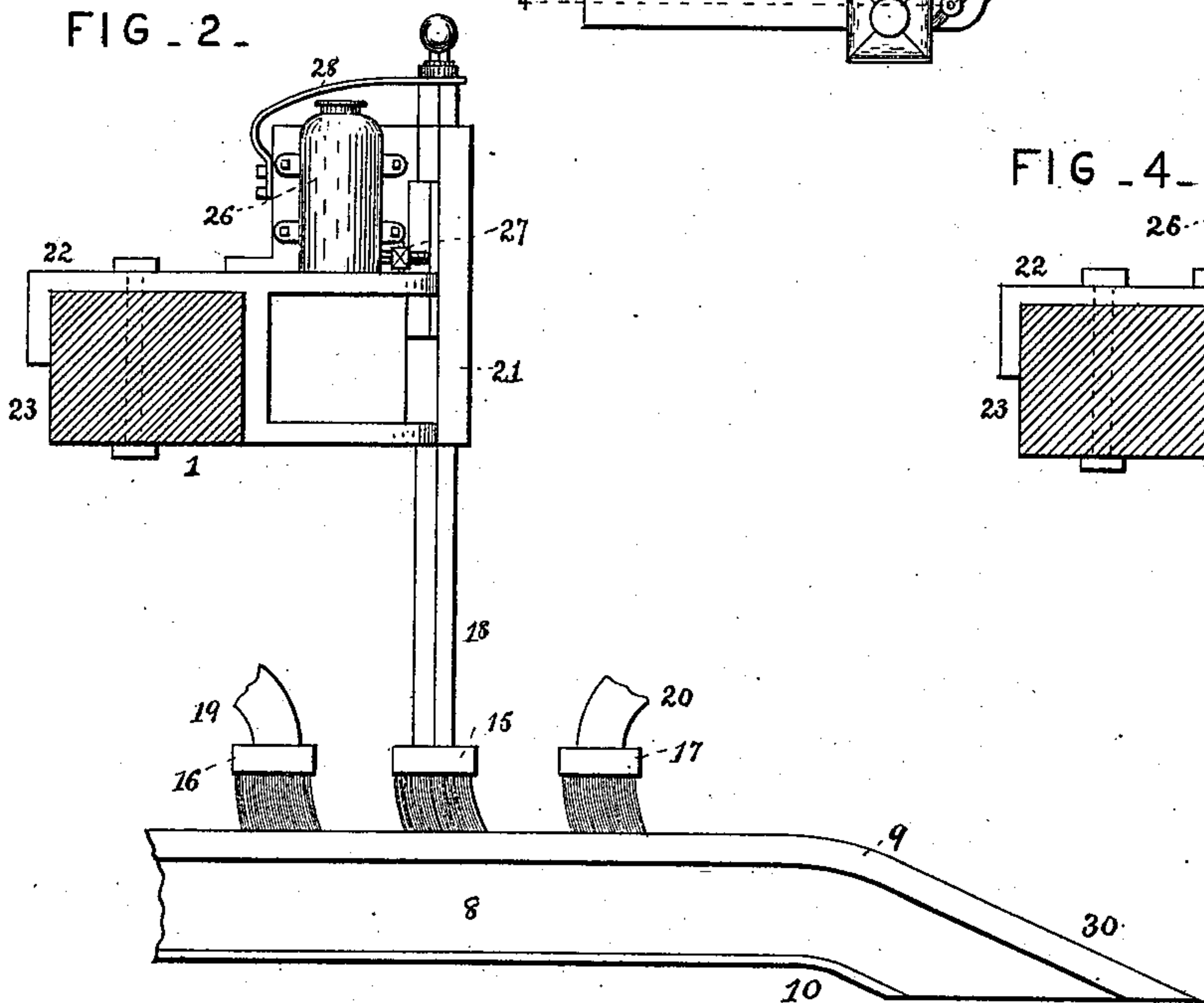


FIG. 4.

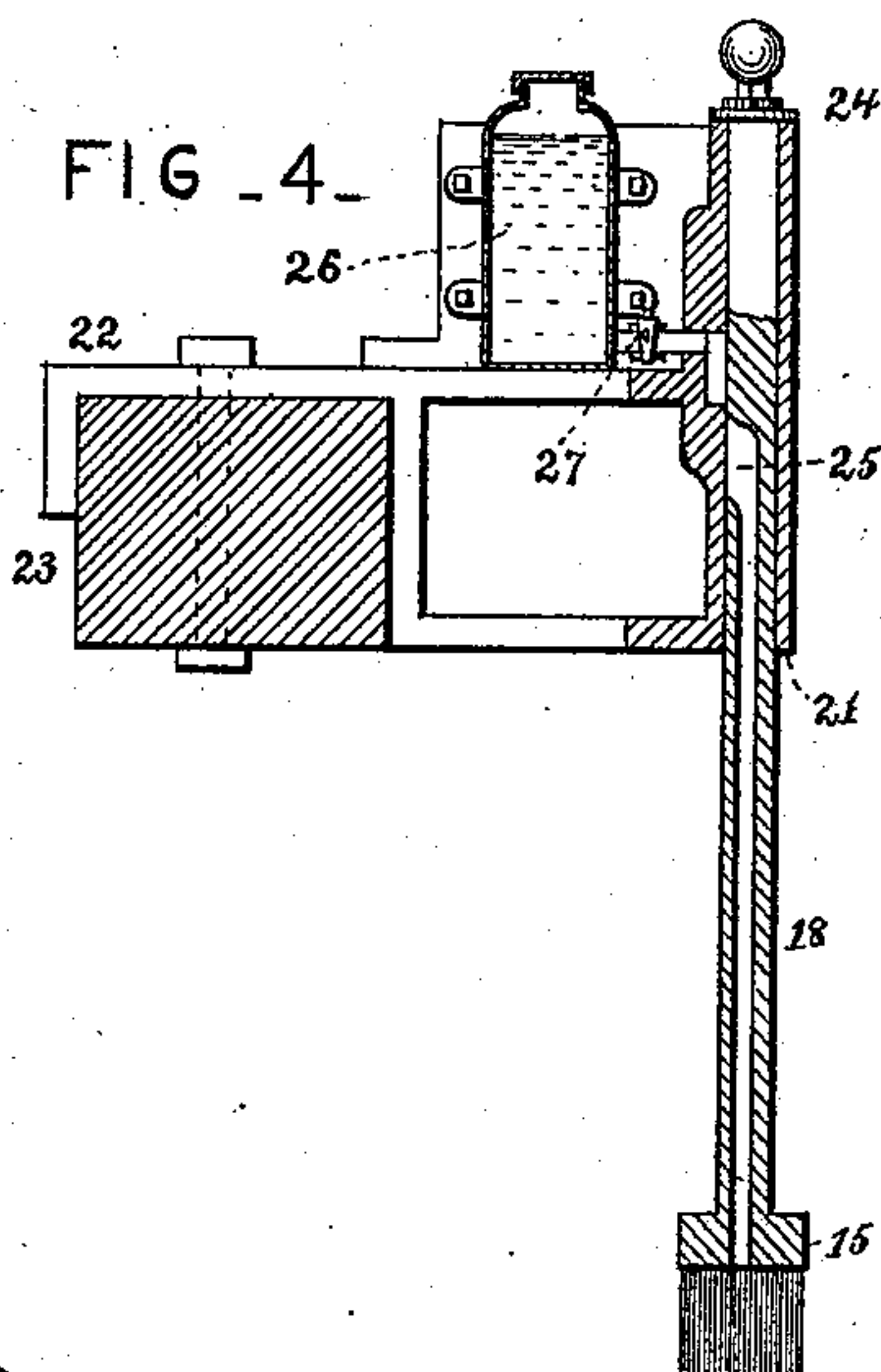


FIG. 6.

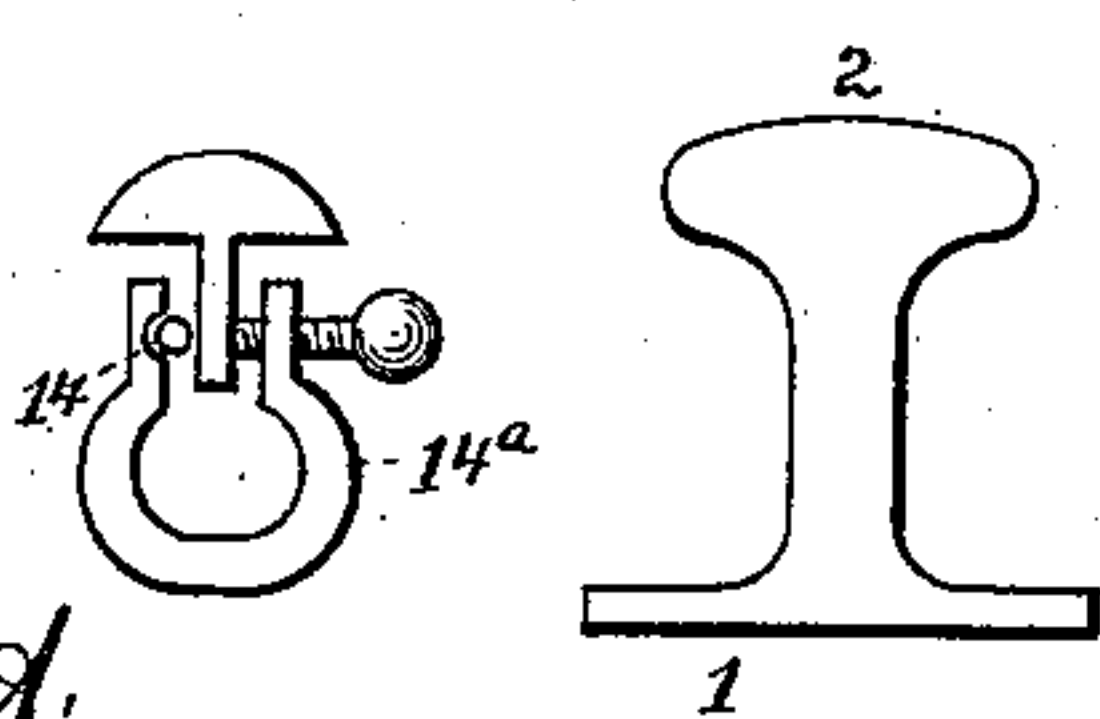
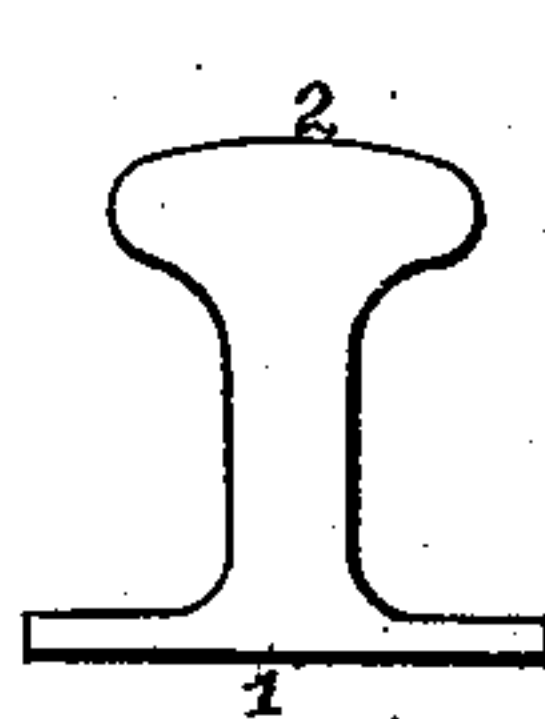
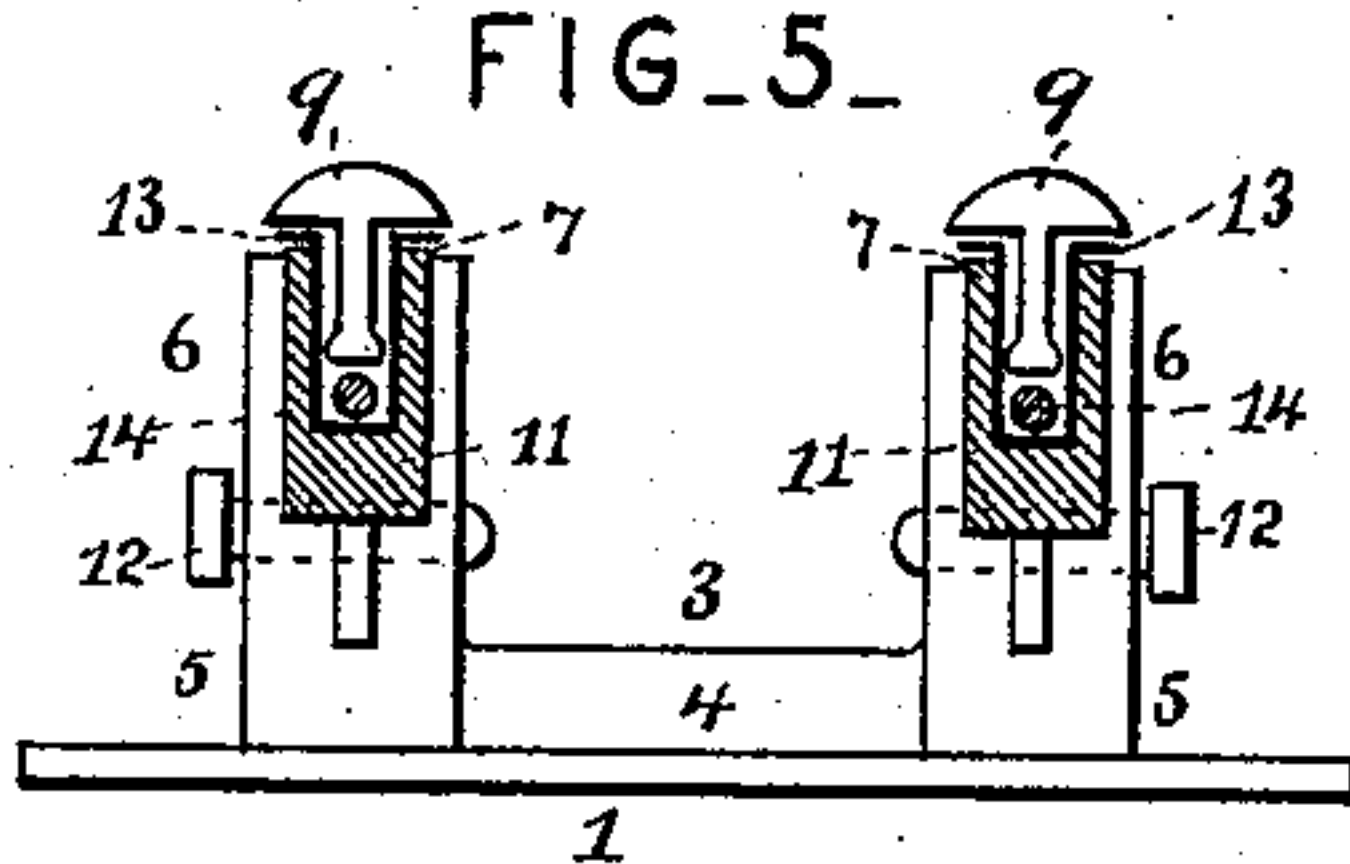


FIG. 5.



Attest:

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attys.

UNITED STATES PATENT OFFICE.

BURTON H. GEDGE, OF COVINGTON, KENTUCKY.

RAILWAY-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 364,009, dated May 31, 1887.

Application filed January 17, 1887. Serial No. 224,569. (No model.)

To all whom it may concern:

Be it known that I, BURTON H. GEDGE, of Covington, Kenton county, Kentucky, have invented a new and useful Improvement in Conductors for Electric Railway-Signals, of which the following is a specification.

My invention relates to improvements in the class of railway-signal devices such as illustrated in the Patent No. 344,099, granted to me on the 25th day of June, 1886, to which reference may be made for description of details not here shown.

Like my patent aforesaid, my present improvement has both an outgoing and a returning line of conducting-rails, but located inside the space between the track-rails, and with their upper surfaces arranged to receive the brush-contacts, and at an elevation but little above that of the bearing-surfaces of the track-rails.

In the accompanying drawings, Figure 1 is a side elevation showing my brush-contacts and a portion of a conducting-rail. Fig. 2 is a side view of the brush and its lubricator. Fig. 3 is a top view of the same. Figs. 4, 5, and 6 are sections on the lines 4 4, 5 5, and 6 6, respectively.

1 and 2 may respectively represent a customary cross-tie and pair of track-rails. Spiked to the cross-ties at any convenient point between the track-rails is my duplex chair or pedestal 3, from whose base 4 there rise two standards or uprights, 5, whose two upturned cheeks, 6, inclose a space, 7, which receives and holds the web 8 of a T-formed conducting-rail, 8 9 10, there being, as before intimated, two lines of such rails—to wit, an outgoing line and a return or home-going line—as explained in my patent aforesaid. The head 9 of the conducting-rails is preferably crowning, as represented, in order to shed the rain and to facilitate the removal of snow and ice by the conducting-brushes. A swell or foot, 10, at the bottom of the shank or web enables secure retention of the rail within the space 7 by means of a non-conducting forked chock, 11, compressed by one or more screws, 12.

Each line of conducting-rails is bent downward at the ends, as at 30, to enable ready impact of the approaching brushes.

One of the described pedestals 3 is located

at every joint in the line, and also at a sufficient number of intermediate points.

Electrical continuity at the joints is secured by introduction within the chock 11 of a strip, 13, of some flexible metal.

For additional certainty of conduction, a continuous wire, 14, is caused, by means of clamps 14^a, to press closely against each consecutive rail-section.

In the preferred form of my invention the conducting-brush for each line comprises three brush-sections, 15 16 17, so arranged as to ride along the top of the conducting-rail, as shown in Figs. 1 and 2.

The stems 19 20 of the brushes 16 17 may be respectively secured to the front and the rear truck. These supplementary brushes may, in addition to serving to clear snow and other obstructions from the path of the brush proper, 15, also be utilized as additional collectors of current.

The stem 18 of the brush proper, 15, occupies a vertical socket, 21, in a bracket, 22, which is bolted to one of the truck-timbers 23. A collar, 24, on said stem 18, aided by a spring, 28, so limits the descent of the brush as to hold it aloof from the ground and to facilitate impact with the conductor-rail.

A duct, 25, within the stem 18 conducts oil or other selected lubricant from a reservoir, 26, through the brush 15 onto the conductor-rail, to prevent adhesion of snow and ice in the winter season and to diminish friction.

A valve or faucet, 27, may enable the engine-man to regulate or suspend the flow of lubricant at his discretion.

I claim as new and of my invention—

1. The insulating and connecting support for a conducting-rail of an electric railway-signal, consisting of the combination of the following elements, to wit: the bifurcated standard 5 of the duplex chair or pedestal 3, the non-conducting chock 11, the clamping-screw 12, and the flexible metallic strip 13, substantially as set forth.

2. In combination with the conducting-line of an electric railway-signal, the supplementary connection consisting of the continuous wire 14 and the U-shaped clamps 14^a, having means whereby the conductor and the said wire may be bound together, as set forth.

3. The combination, with the chair 5 and the supplementary conducting-wire 14, of an insulating-block, 11, secured to said chair and having a slot, a sheet-metal lining, 13, in said slot, 5 and a T-formed conductor-rail, whose web and the said wire 14 are contained in said lining, substantially as described.

4. The combination, with the conducting-line of an electric railway-signal, of the collecting-brush 15, having the duct 25, which connects with an oil-reservoir, 26, substantially as and for the purposes designated.

5. The combination, with the insulating-

block 11, having a slot, of the T-formed rail, having its head or track surface rounded for 15 the purpose of shedding snow and sleet, and a foot or expansion, 10, on the web of said rail, for the purpose of retaining the same in said slot, substantially as set forth.

In testimony of which invention I hereunto 20 set my hand.

BURTON H. GEDGE.

Witnesses:

GEO. H. KNIGHT,
N. ROCKHOLD.