

No. 780,335.

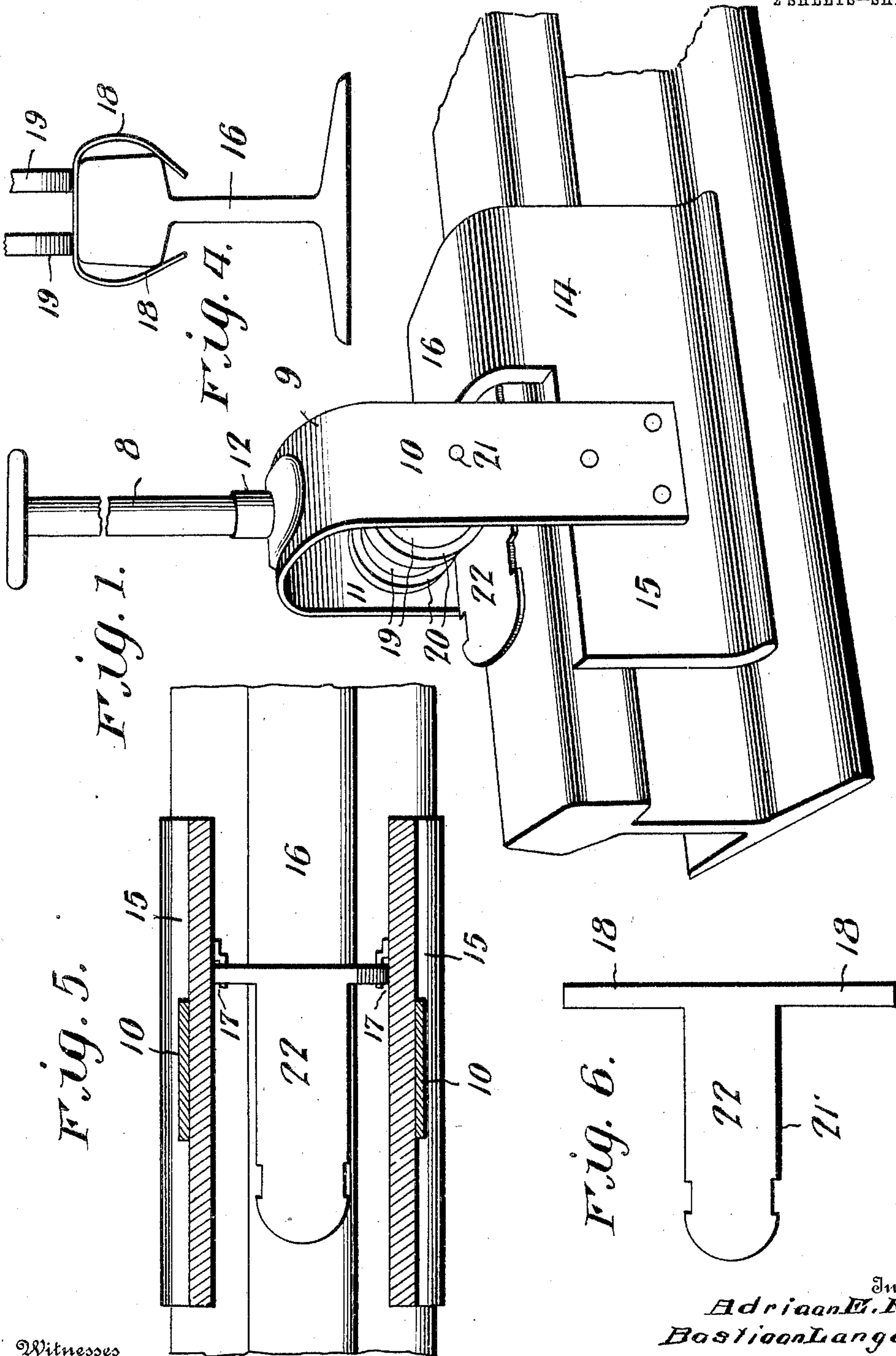
PATENTED JAN. 17, 1905.

A. E. FRENİ & B. LANGEVELD.

TRACK SIGNAL DEVICE.

APPLICATION FILED JUNE 18, 1904.

2 SHEETS—SHEET 1.



Witnesses

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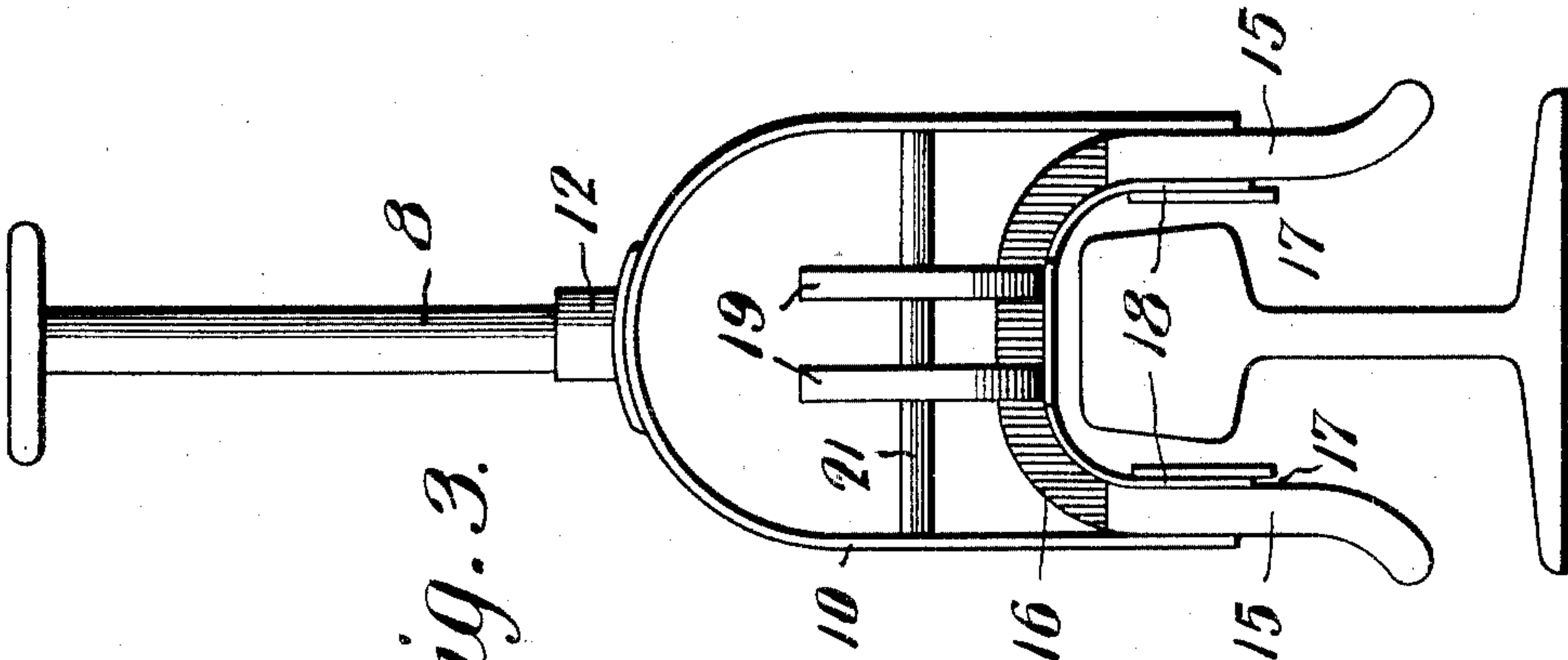


Fig. 3.

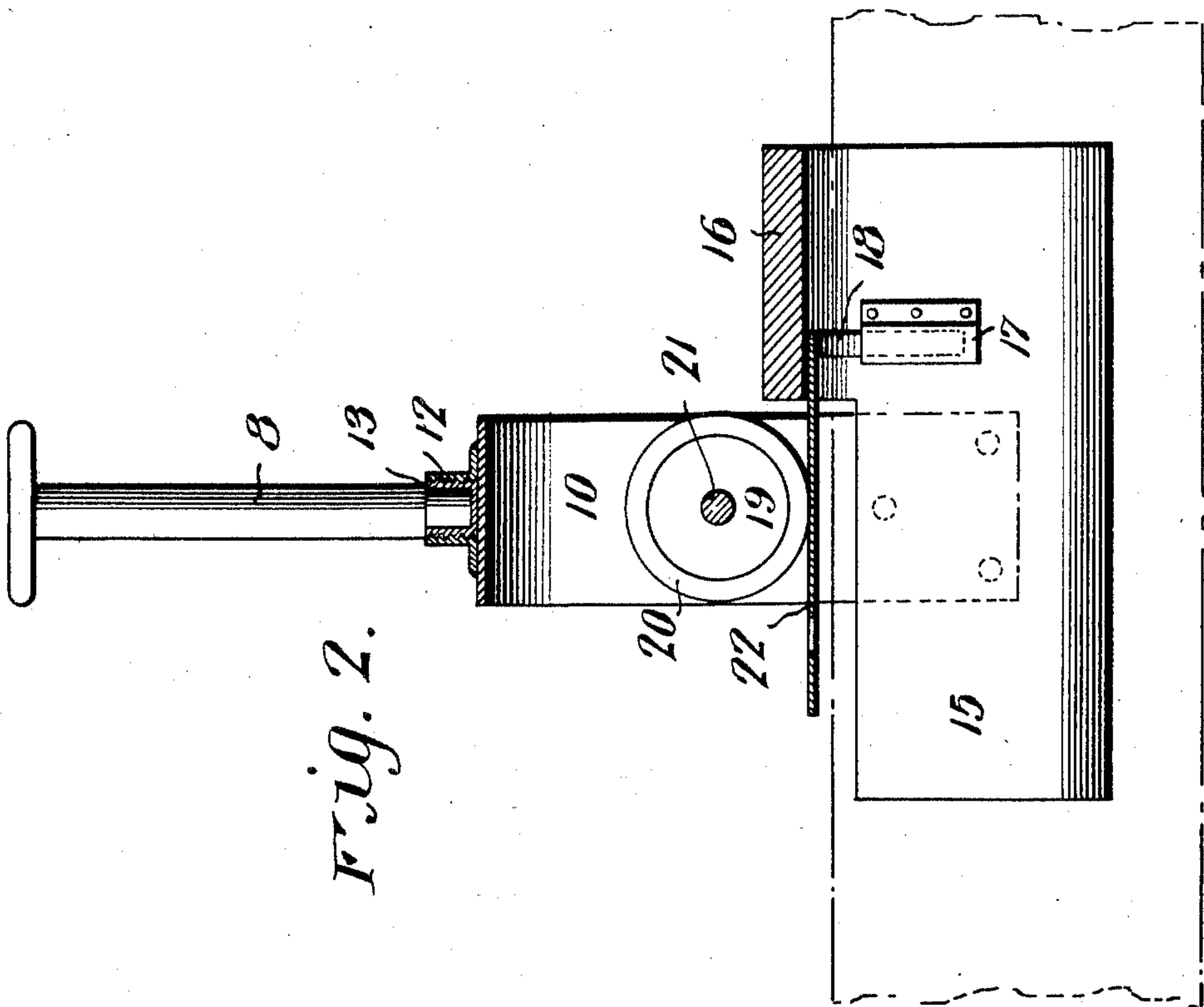


Fig. 2.

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UNITED STATES PATENT OFFICE.

ADRIAAN E. FRENI AND BASTIAAN LANGEVELD, OF EDGEWOOD PARK,
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TRACK-SIGNAL DEVICE.

SPECIFICATION forming part of Letters Patent No. 780,335, dated January 17, 1905.

Application filed June 18, 1904. Serial No. 213,195.

To all whom it may concern:

Be it known that we, ADRIAAN E. FRENI and BASTIAAN LANGEVELD, subjects of the Queen of the Netherlands, residing at Edgewood Park, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Track-Signal Devices, of which the following is a specification.

This invention relates to track-signals for use on railroads; and the primary object of the same is to provide simple and effective means for placing a torpedo or other danger-signal upon a track-rail and for removing the support for the torpedo or signal after it has served its purpose.

The invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter set forth.

In the drawings, Figure 1 is a perspective view of a portion of a rail, showing the improved device disposed thereover in operative position. Fig. 2 is a longitudinal vertical section of the improved device and illustrating a portion of a rail in dotted lines. Fig. 3 is an end elevation of a rail and the improved device. Fig. 4 is an end elevation of a rail, showing the signal-holder and part of the device for removing the latter. Fig. 5 is a horizontal section through the improved device, taken in a plane just above the upper surface of the rail-head. Fig. 6 is a detail plan view of the signal-holder blank.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 8 designates a staff or handle of sufficient length to enable an operator to stand on a car-platform and conveniently reach and apply the device embodying the essential features of the invention to a track-rail. This staff terminates in a yoke-shaped carrier-frame 9, the forked members 10 and 11 of which extend downwardly in spaced relation, as shown.

For convenience in packing and transporting the staff may be removably attached to said frame 9 by means of the interiorly-screw-threaded thimble 12, which is attached to said frame and forms a screw-threaded socket en-

gaged by the lower screw-threaded end 13 of said staff. Connected to the respective lower ends of the carrier-frame 9 is a supplemental torpedo or signal holding and guiding frame 14, which comprises longitudinally-extending side bars 15, arranged in spaced parallelism and integrally connected at their forward end portions by a top bridge-plate 16. The bridge-plate is shaped to provide a hood or jaw having a channel or space adapted to inclose the top and side faces of the rail 16' and which is adapted to removably hold the torpedo and bring it into operative contact for deposition on said rail without causing an embracement of the sides of the rail or striking the fish-plates that connect the rail-sections. Arranged at opposite points on the inner faces of the side bars of the guiding and holding frame are suitable sockets or recesses 17, each of which is adapted to receive one end of respective torpedo spring-arms 18. These sockets are each open at the top and one end, as shown, and so shaped as to confine the spring-arm ends of the torpedo or other signal support. The arms 18 are drawn outwardly when engaged by the sockets 17, but will be permitted to readily slip out of the latter to assume their natural position or structural adjustment when the torpedo or other signal support is brought into contact with the top of the rail and embraces the rail with sufficient pressure to reliably hold the said support on the rail.

We will now describe the devices for exerting the downward pressure which aids in the release and deposit of the torpedo or other signal support. These devices consist, preferably, of a pair of actuating-wheels or roller members 19, having elastic tires 20 and revolvably mounted in spaced parallelism on a shaft 21, journaled, as shown, in the respective side members 10 and 11 of the frame 9. The roller members 19 are so relatively positioned as to bear directly on the upper face of the torpedo or other signal support when the latter is placed in position in the holding and guiding frame, and said rollers are adapted to travel on the support throughout the lineal extent of the latter to exert a yielding

pressure downwardly upon the same as it is being applied to the rail to aid in the withdrawal thereof from its confinement within the sockets 17. The elastic tires 20 act as friction-creating means with respect to the support to obtain a better hold on the latter to render the operation of applying the support more effective. 21' represents the torpedo or other signal support, which may be of any suitable shape and consists of a single blank having a body portion 22 and laterally-extending spring-arms 18, which latter are bent, as shown, to enable its removable attachment to the holding and guiding frame 14, but which when released from the sockets in said frame are adapted to spring inwardly, as shown in Fig. 4, whereby the support may be firmly applied to the rail upon which it is deposited.

The operation of the several parts is apparent from the foregoing description, and the deposit of the torpedo or other signal means on the rail is accomplished by lowering the frame to a point to bring the support flatwise into contact with the rail, whereupon its frictional engagement facilitates withdrawal of the spring-arms 18 from their respective sockets.

Having thus fully described the invention, what is claimed as new is—

1. In a track-signal device of the class set forth, the combination of a signal-holding

means or support having spring-arms, a placing device having a hood provided with interiorly-located sockets to receive and removably hold the spring-arms, and rolling means carried by the placing device to engage the said support.

2. In a track-signal of the class set forth, the combination of a signal-holding device, a placing device having means to removably engage portions of the signal-holding device, and rollers carried by the placing device to engage the signal-holding device.

3. In a track-signal device of the class set forth, the combination of a signal-holding means having spring-arms at opposite sides, a placing-hood having sockets to removably receive the spring-arms, and rollers having flexible tires to engage the signal-holding means.

4. In a track-signal of the class set forth, the combination of a signal-placing device provided with a hood to embrace a rail, the hood having interiorly-located oppositely-disposed sockets, a shaft connected to the hood, rollers held by the said shaft, and a signal-holding device with which the said rollers engage.

In testimony whereof we affix our signatures in presence of two witnesses.

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Witnesses:

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