

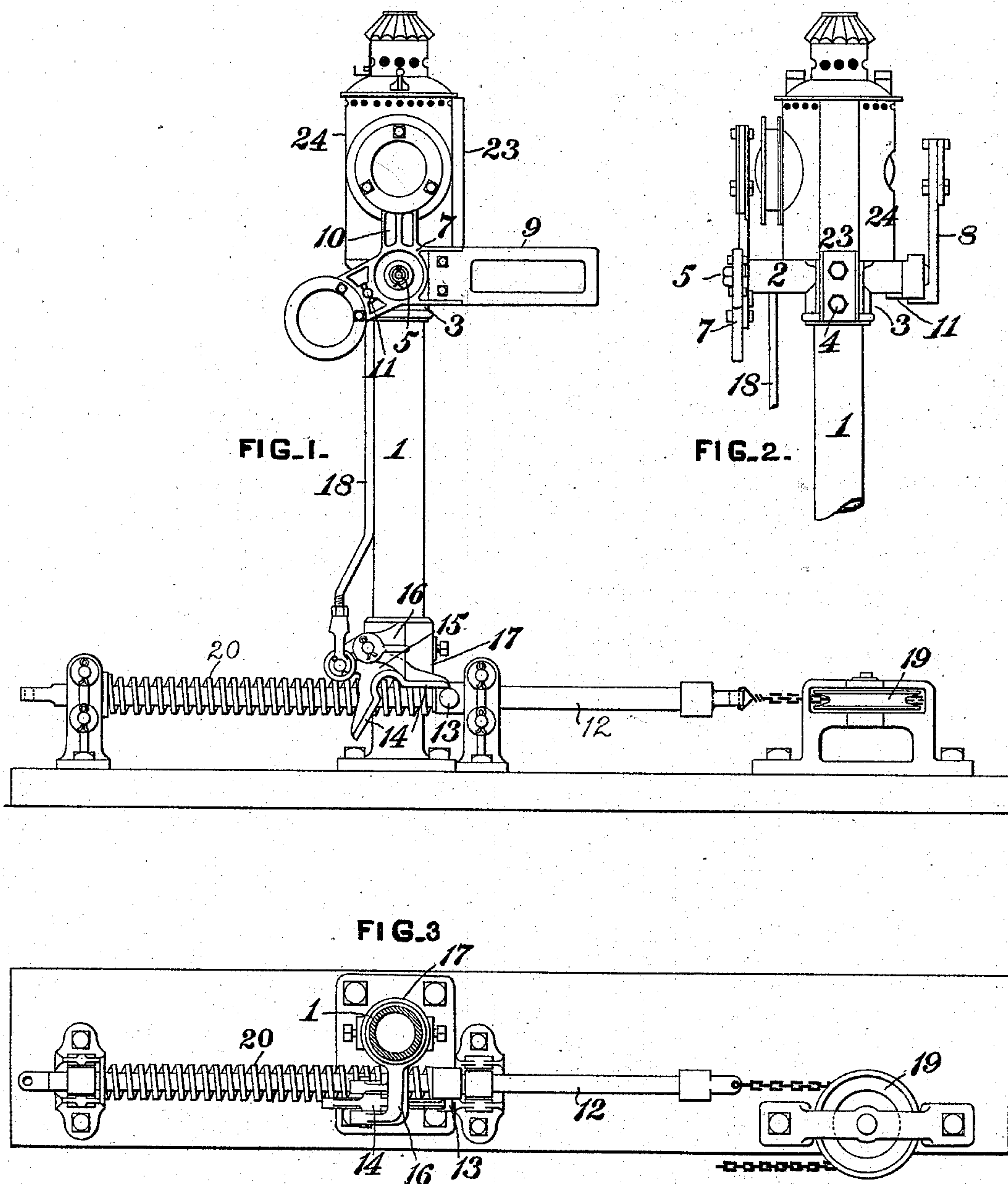
(No Model.)

2 Sheets—Sheet 1.

E. H. GOODMAN.
SIGNAL.

No. 527,967.

Patented Oct. 23, 1894.



WITNESSES:

Danvers S. Wolcott
J. E. Gaither

INVENTOR,

Edward H. Goodman
by George H. Christy
Att'y.

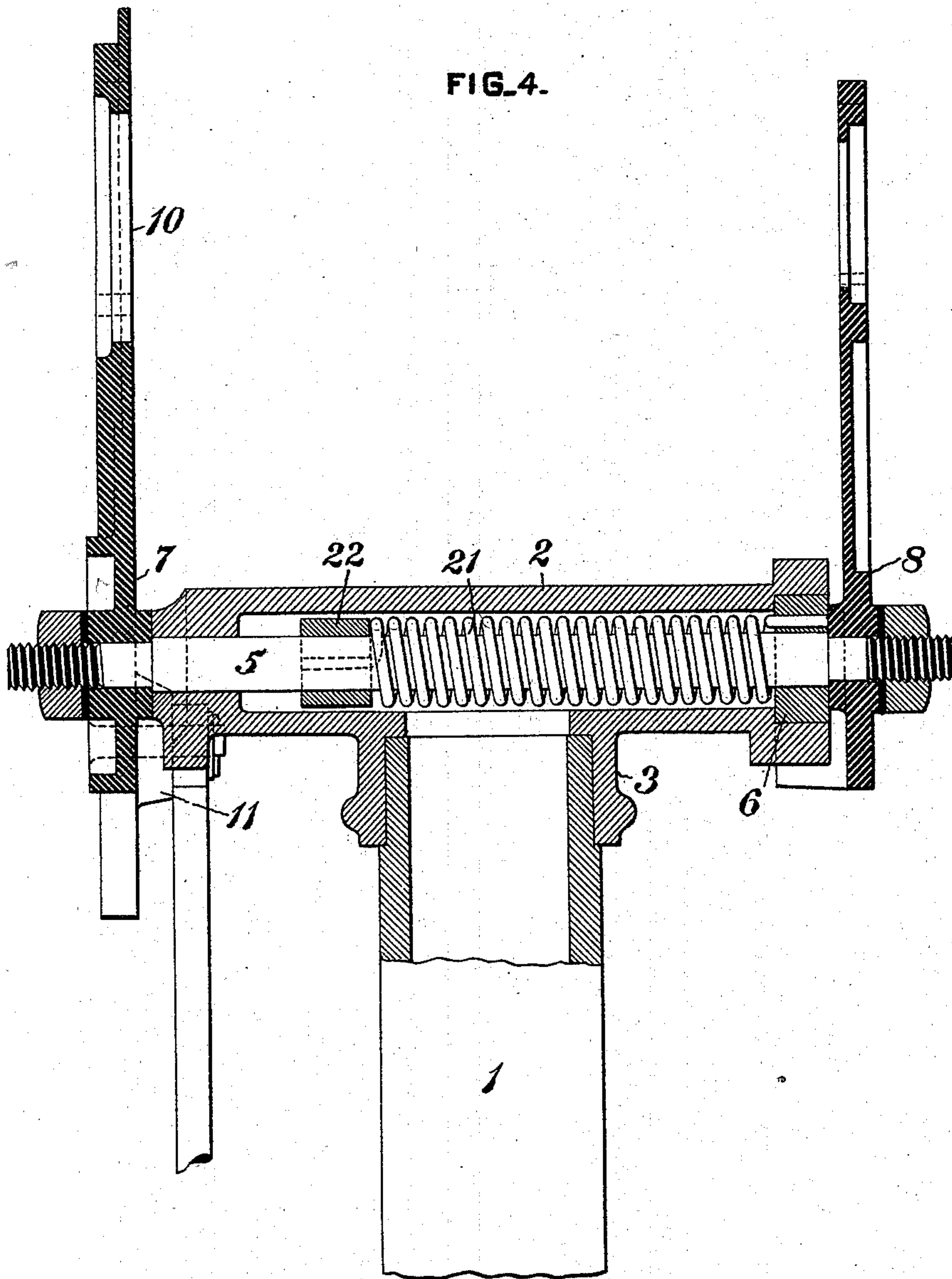
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Samuel S. Wolcott
J. E. Gaither.

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UNITED STATES PATENT OFFICE.

EDWARD H. GOODMAN, OF PITTSBURG, ASSIGNOR TO THE UNION SWITCH AND SIGNAL COMPANY, OF SWISSVALE, PENNSYLVANIA.

SIGNAL.

SPECIFICATION forming part of Letters Patent No. 527,967, dated October 23, 1894.

Application filed April 26, 1893. Serial No. 471,889. (No model.)

To all whom it may concern:

Be it known that I, EDWARD H. GOODMAN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Signals, of which improvements the following is a specification.

The invention described herein relates to certain improvements in signals for railways, and relates, more particularly, to that class or kind known as dwarf or pot signals, which are principally used in yards where the tracks are so close together that a post for supporting the signal at the usual height cannot be employed. It is desirable for the sake of uniformity, that these signals should be of the semaphore type, and in order that they may be seen the movable blades must be arranged at right angles to the tracks. Although these semaphore blades are lower than the bodies of the cars, it frequently happens that the car steps or other portions of the car become displaced and strike against the blade, destroying the same; and it also frequently happens that a brakeman or other operator is struck by one of these blades and severely injured.

The object of this invention is to provide a flexible resilient semaphore blade, which will readily yield, when struck, and will resume its normal position, when free to move; and it is a further object of this invention to so construct and arrange the several parts of the signal support, that they may readily be adjusted to any required position.

In the accompanying drawings forming a part of this specification, Figure 1 is a view in front elevation of a dwarf signal embodying my invention, and its operating mechanism. Fig. 2 is a view in side elevation, of the same. Fig. 3 is a plan view partly in section and Fig. 4 is a sectional elevation of the upper portion of the signal on an enlarged scale.

In the practice of my invention, the post or standard 1 is bolted or otherwise secured to a suitable foundation, and on the upper end of the post is placed the head-piece 2, provided with a socket 3, adapted to fit over the end of the post and to be held in proper position by set screws 4. A shaft 5 passes

through the head-piece and is supported in position at one end by a disk 6 fitting within an enlarged opening in the head-piece and held as against rotation therein. On the projecting ends of the shaft are secured the semaphore and back light castings 7 and 8, and to the semaphore casting are secured the blade 9 and the spectacle frames 10, which are formed of rubber or other suitable flexible resilient material, so that when struck they will simply bend aside and then resume normal position. The semaphore, including the blade and spectacle frames may be made entirely of rubber, if desired, as may also the spectacle or frame for the back light. The semaphore and the back light frame are provided with pins 11 for connection with the operating mechanism, thereby rendering it possible to employ the device as a right or left hand signal by turning the head-piece and connecting the operating mechanism to either the semaphore or back-light frame.

The operating mechanism consists of a bar 12, supported in suitable bearings at the base of the post or standard and provided with a pin 13, adapted to engage as the bar is shifted, one or the other of the jaws 14 formed on one arm of the bell crank lever 15. This lever is pivoted on a bracket 16 formed on the collar 17, surrounding the post or standard 1 near the base thereof, and adjustable thereon. The other arm of the bell crank lever 15 is connected by a rod 18 to one or the other of the pins 11 on the semaphore or back-light frame, as before stated. The ends of the bar 12 are provided with eyes for attaching the operating wires or chains thereto, one of the latter being carried around a guide pulley 19 so as to lead back to the operating lever. In order to shift and hold the semaphore at danger in case of the breaking of the wire connections, a spring 20 is placed around the bar and bears at its ends against one of the supports for the bar, and a collar or shoulder thereon. In case of the breaking of the rod 18 or pins 11, the semaphore is shifted or held at danger by a spring 21 surrounding the shaft 5, and having one end attached to a collar 22 on the shaft, while the other end is attached to the disk 6 or other stationary portion of the head-piece. The head-piece is provided

with a bracket 23 for supporting the lantern 24.

I claim herein as my invention—

1. In a signal, the combination of a vertical
5 post, a head piece adjustably mounted on the
post, a shaft mounted in the head piece, a
semaphore attached to the shaft, a spring
having one end attached to the shaft and its
opposite end to a stationary part of the sig-
10 nal, and mechanism for shifting the signal
against the tension of the spring, substan-
tially as set forth.

2. In a signal, the combination of a post or
support, a head-piece adjustably mounted on

the post, a semaphore blade carried by the 15
head piece, a collar movable around the post,
a bell crank lever mounted on said collar, and
connected to the semaphore blade and mech-
anism for operating the bell crank, substan-
tially as set forth. 20

3. A semaphore blade formed of a flexible
resilient material, substantially as set forth.

In testimony whereof I have hereunto set
my hand.

EDWARD H. GOODMAN.

Witnesses:

DARWIN S. WOLCOTT,
MARSHALL A. CHRISTY.