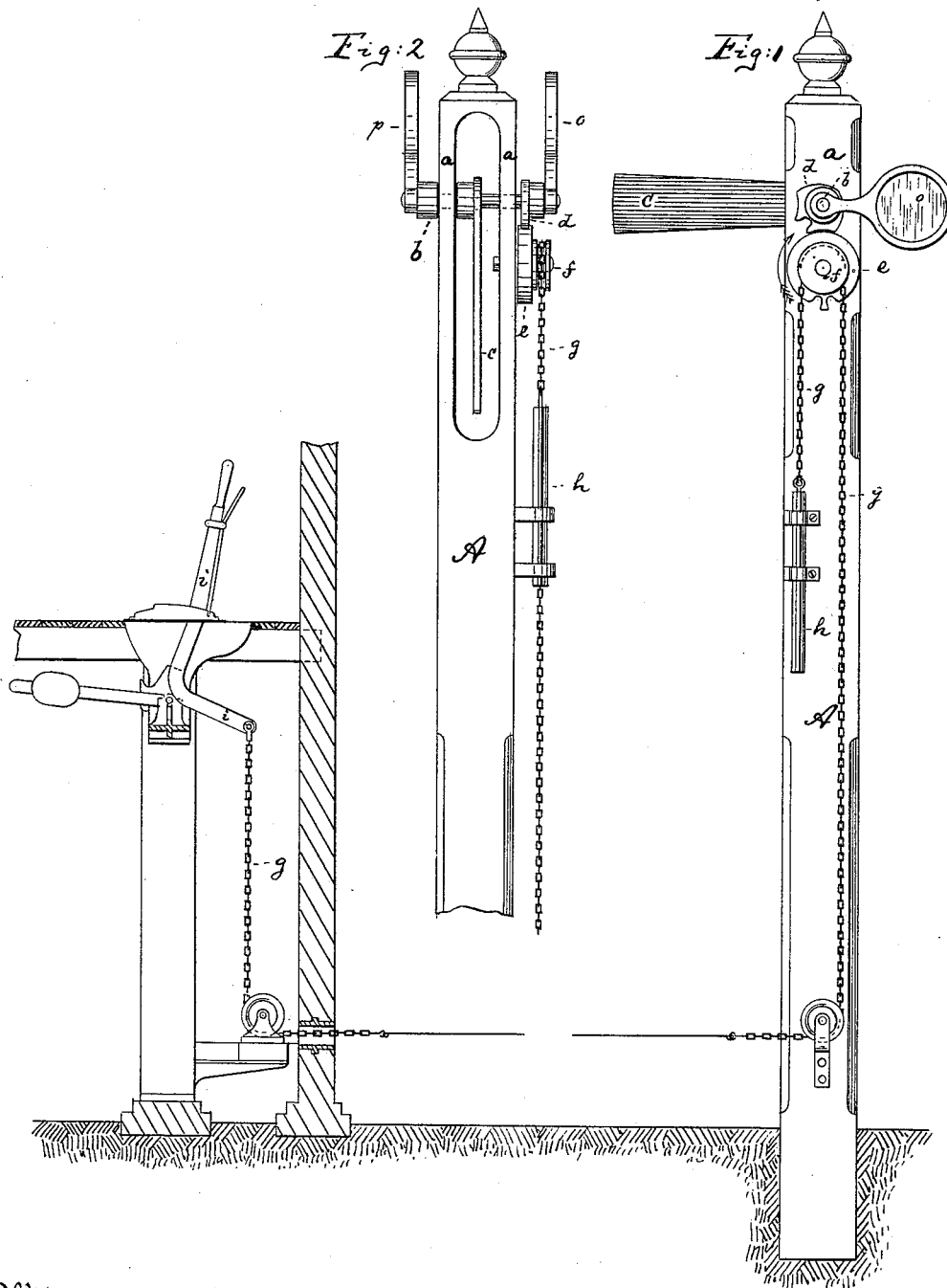


(No Model.)

F. I. MYERS.
SEMAPHORE SIGNAL.

No. 344,494.

Patented June 29, 1886.



Witnesses
Wm. A. Lowe
Robert Roy.

By

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UNITED STATES PATENT OFFICE.

FRANK I. MYERS, OF NEW YORK, N. Y.

SEMAPHORE-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 344,494, dated June 29, 1886.

Application filed January 12, 1886. Serial No. 188,373. (No model.)

To all whom it may concern:

Be it known that I, FRANK I. MYERS, of the city of New York, county and State of New York, have invented a new and Improved
5 Semaphore-Signal, of which the following specification is a full, clear, and exact description.

This invention relates to a semaphore-signal for railroads, and is so constructed that
10 even should the chain or wire which connects the fan-signal with the hand-lever expand or contract the fan will always be placed at its proper position—that is to say, the fan will either be placed in its “danger” position or
15 in its “clear” position, independent of ordinary variations in length of the operating mechanism.

The invention consists in the various elements of improvement hereinafter more fully
20 pointed out.

In the accompanying drawings, Figure 1 is a side elevation of my improved signal, showing the fan raised. Fig. 2 is a front view thereof, showing the fan lowered.

25 The letter A represents a post slotted near the top to form two cheeks, *a*, which form the bearings for a pivot, *b*, to which the usual fan-signal, *c*, is rigidly secured. The pivot *b* extends bodily through the cheeks *a*, as shown.
30 At one end the pivot *b* carries a notched disk, *d*, which is engaged by the tooth of a second disk, *e*, pivoted to the post A. The disk *d* should be cut away at its circumference to the right and left of the notch, so as to form two
35 concavities and afford space for the disk *e*. The disk *e* is provided with a grooved flange, *f*, that is embraced by a chain, *g*. One end of this chain carries a weight, *h*, while its other end passes under a loose pulley and is connected to a hand-lever, *i*, adapted to be vibrated backward and forward.
40

o p are the usual spectacle and back lights attached to pivot *b*. When the fan-signal is to be lowered, the hand-lever *i* is drawn backward to revolve disk *e* in the direction of the
45

arrow, Fig. 1. The tooth on this disk will now enter the notch on disk *d*, revolving said disk with it and pulling the fan *c* down. After the tooth has left the notch the disk *e* may be still further revolved without affecting the
50 position of the fan. When the hand-lever is locked in its backward position, the fan *c* will be likewise locked in its down or clear position. On the release of the hand-lever the weight *h* will revolve disk *e* forward to engage
55 notched disk *d* and revolve the same to raise the fan. After the fan has been raised the disk *e* may revolve still further without affecting its position. In its upright position the fan *c* is properly supported by means of the
60 disk *e* engaging one of the concavities of disk *d*, and thereby preventing said disk from turning, as shown in Fig. 1. It will be seen that even should the operating chain or wire expand or contract to a certain extent the fan *c*
65 will always be positively operated, inasmuch as it is the temporary engagement of the toothed disk with the notched disk, and not the amount of maximum motion of the chain, which determines the position of the fan.
70

I claim as my invention—

1. The combination of post A with pivot *b*, carrying fan *c* and notched disk *d*, and with the toothed disk *e*, that engages notched disk *d*, and is operated by chain *g*, substantially as
75 specified.

2. The combination of post A with pivot *b*, fan *c*, and notched disk *d*, which is cut away at the sides of the notch, and with the toothed disk *e*, chain *g*, and lever *i*, substantially as
80 and for the purpose specified.

3. The combination of post A with pivot *b*, fan *c*, notched disk *d*, toothed disk *e*, having grooved flange *f*, and with the chain *g*, weight *h*, and hand-lever *i*, substantially as
85 specified.

FRANK I. MYERS.

Witnesses:

F. v. BRIESEN,
ROBT. H. ROY.