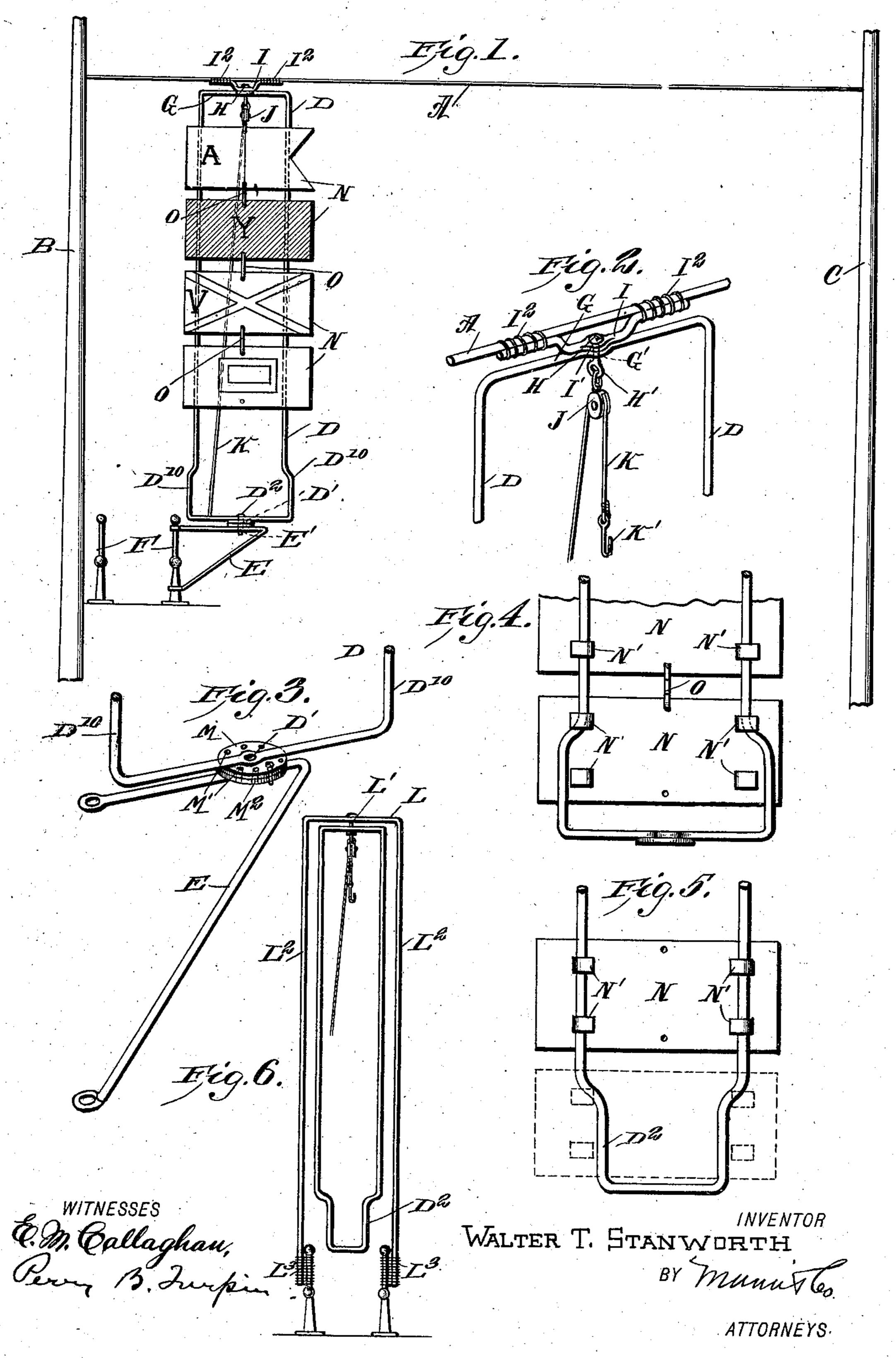
W. T. STANWORTH.
SIGNALING APPARATUS.
APPLICATION FILED AUG. 3, 1907.



## UNITED STATES PATENT OFFICE.

WALTER THOMAS STANWORTH, OF NORFOLK, VIRGINIA.

## SIGNALING APPARATUS.

No. 881,734.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Walter Thomas Stanworth, a citizen of the United States, and a resident of Norfolk, in the county of 5 Norfolk and State of Virginia, have invented certain new and useful Improvements in Signaling Apparatus, of which the following is a specification.

My invention is an improvement in sig-10 naling apparatus intended especially for marine use; and the invention consists in certain novel constructions and combinations of parts as will be hereinafter described

and claimed.

In the drawing Figure 1 is a side elevation of the apparatus as in use the upright frame being supported between a bridge stanchion and a spring stay between masts above the bridge. Fig. 2 is a detail perspective view 20 illustrating the upper pivot for the upright frame. Fig. 3 is a detail perspective view illustrating the lower pivot for the said frame. Fig. 4 is a detail view showing the lower portion of the upright frame in con-25 nection with one of the signaling devices and illustrating the manner of applying and removing the signaling devices. Fig. 5 illustrates a slight modification in the laterally deflected portion of the upright frame and a 30 corresponding variation in the signaling devices, and Fig. 6 illustrates a somewhat different construction for supporting the upright frame.

In carrying out my invention, in the con-35 struction shown in Fig. 1, I employ a spring stay A extending between the masts B and C over the bridge of the vessel; it being usual to display signals from the bridge. The upright frame D is pivoted at its upper end in 40 connection with the spring stay by means of suitable devices more fully described hereinafter and is also pivoted at its lower end upon a base E preferably carried by one of the bridge stanchions F, as best shown in 45 Fig. 1 of the drawing. The base E is pro- | use of letters will facilitate signaling by code vided with an opening E' and the frame D has a central opening D' and a bolt D2 passes through the openings D' and E' and forms a pivot for the lower end of the upright 50 frame. In pivoting the upper end of the upright frame, I provide the upper cross-bar G of the upright frame with an opening G' midway between its ends and a bolt H is passed upwardly through said opening G'

55 and also through an opening I' formed in a

central depressed portion of the plate I,

lashed at I<sup>2</sup> to the spring stay, the latter forming an overhead support, and the bolt H forming a pivot for the upper end of the upright frame, the upper and lower pivots 60 being in alinement so the frame can be rotated in order to present the signaling devices carried thereby at a right angle to the line of vision of the distant observer.

The bolt H may preferably be provided at 65 its lower end with an eye H' and a pulley block J may be suspended from said eye and form an upper guide for the halvard K, which is provided at its opposite ends with hooks K' so it may be operated to raise the 70 signaling devices in the operation of the in-

vention.

Instead of supporting the upright frame in the manner before described I may mount it as shown in Fig. 6 in a bearing frame L hav- 75 ing a top cross-bar to which the upright frame is pivoted at L' and also having side bars L<sup>2</sup> lashed at their lower ends at L<sup>3</sup> to the bridge stanchions. The spring stay, however, can usually be adjusted without 80 any difficulty on board ship, and affords a convenient means for providing an overhead support for the upright frame. As suggested the upright frame can be turned on its upper and lower pivots to any desired 85 angle and in order to secure it in desired position I provide it at its lower end with a circular perforated plate M whose perforations M' can be turned into register with a suitable perforation M<sup>2</sup> in the base E, and a 90 bolt be dropped through to secure the parts in desired position.

The signaling devices N are preferably metallic plates which may be of any suitable configuration to conform to any code of flag 95 signals, may bear letters or symbols of any desired code, are durable, can be made much simpler than the bunting flags, are not subject to the same deterioration as the bunting flags, and the opportunity afforded for the 100 as will be understood by those skilled in the art. These signals N may be perforated near their upper and lower edges so they may be connected by hook links O and the 105 upper signal can be engaged by the hook K' on the halyard K, the latter being thus utilized to raise a series of flags, as will be understood from Fig. 1 of the drawing, the lower end of the halyard being secured, when 110 the signals are displayed, in any suitable

manner.

The signals N are provided on their rear sides with lugs N' preferably L shape and adapted to engage with the side bars of the upright frame. To facilitate the applica-. 5 tion and removal of the signals at the lower end of the upright frame, I deflect the side bars of said frame laterally outward, as shown at D<sup>10</sup>, in Fig. 1, or inward as shown at D<sup>2</sup> in Fig. 6, and project the lugs N' of the 10 signals outwardly in the construction shown in Fig. 1, or inwardly in the construction shown in Fig. 2 so the signals may be applied and removed at the lower ends of the upright frames. This construction is simple and facilitates the application and removal of the signals, especially in rapid signaling.

1 claim—

1. A signaling apparatus substantially as herein described, comprising an overhead support, a bearing rod secured thereto and provided with a bearing opening, an upright frame having its upper cross-bar provided with an opening registering with that in the bearing rod, an eye bolt passed upwardly 25 through said openings and forming a pivot for the upper end of the upright frame, a pulley block suspended from said eye bolt and forming a guide for a halyard, a base for the upright frame, pivot devices between the base and the upright frame, and signal devices slidable along the side bars of the upright frame, all substantially as and for the purpose set forth.

2. The combination of an upper bearing rod having a central depressed portion, an 35 upright frame, a bolt pivoting the upper end of the upright frame to the depressed portion of the bearing rod, a base underlying the lower end of the upright frame, a pivotal connection between the base and the up- 40 right frame, a detent for securing the upright frame to the base in any suitable adjustment, and signaling devices carried by the upright frame, substantially as set forth.

3. The combination in a signal apparatus, of an overhead support, a bearing rod secured at its ends to said support and provided between its ends with a depressed portion having a bearing opening, a frame 50 having its upper cross-bar provided with an opening registering with that in the bearing rod, an eye-bolt passed through said openings and forming a pivot for the upper end of the upright frame and having below the 55 cross-bar of the said frame an eye, a pulley block suspended from said eye, and signal devices guided by the upright frame and adapted to be lifted by the halyard guided by the said pulley block, all substantially as 60 set forth.

WALTER THOMAS STANWORTH.

Witnesses:

CALVERT T. CHAMBERLAINE, A. S. FITZGERALD.