

J. J. BUCKLEY.

FLAGSTAFF.

APPLICATION FILED FEB. 14, 1910. RENEWED MAY 8, 1912.

1,048,291.

Patented Dec. 24, 1912.

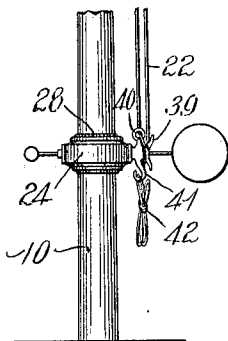
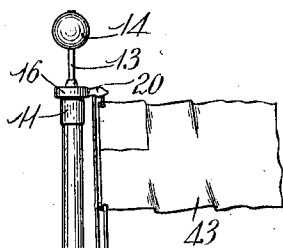


Fig. 6.

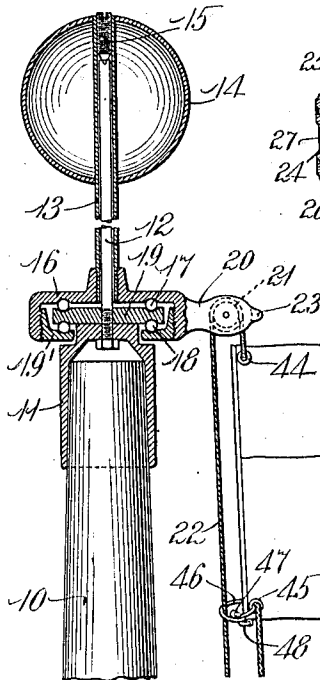


Fig. 2.

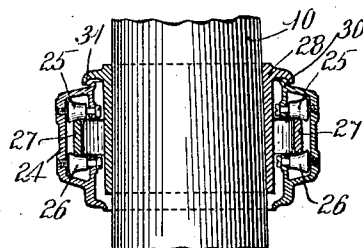


Fig. 5.

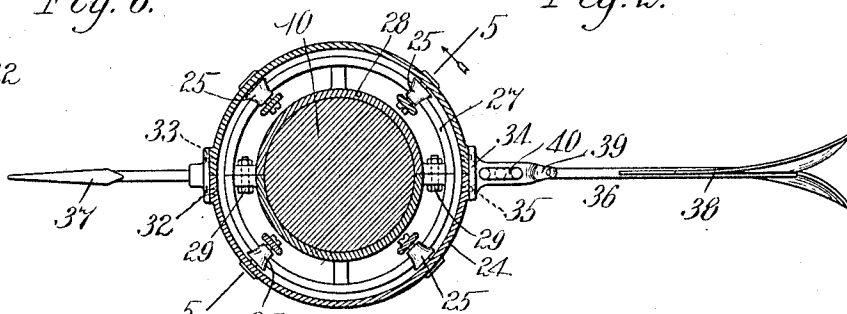


Fig. 4.

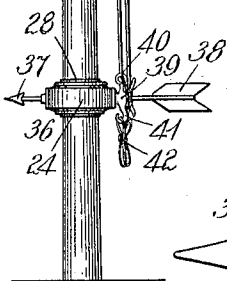


Fig. 1.

Witnesses.

Franklin E. Low
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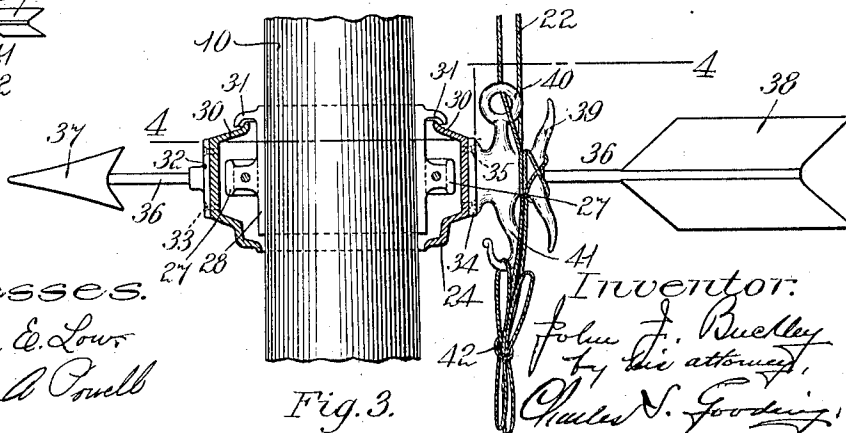


Fig. 3.

Inventor.

J. J. Buckley
By his attorney,
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UNITED STATES PATENT OFFICE.

JOHN J. BUCKLEY, OF DORCHESTER, MASSACHUSETTS, ASSIGNOR TO BUCKLEY AUTOMATIC FLAG-POLE COMPANY, A CORPORATION OF MASSACHUSETTS.

FLAGSTAFF.

1,048,291.

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To all whom it may concern:

Be it known that I, JOHN J. BUCKLEY, a citizen of the United States, residing at Dorchester, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Flagstuffs, of which the following is a specification.

This invention relates to improvements in flag staffs and fixtures therefor, and the object is to provide means whereby the halyard and flag carried thereby shall revolve about the flag staff with changes in the direction of the wind, thus preventing the halyard and flag from becoming wrapped or entangled about the staff and to maintain the flag, the halyard and the lowermost connection of the halyard substantially in the same plane.

The object is further to provide improved bearings so that the turning action of the fixtures upon the flag staff shall be extremely sensitive.

I do not claim herein the particular construction of upper and lower revoluble carriers and the particular construction of their bearings, but reserve these features as the subject matter of separate applications to be hereafter filed by me.

Still other objects and advantages will appear hereinafter.

The invention consists in the novel features of construction and in the combination and arrangement of parts set forth in the following specification and particularly pointed out in the claims.

Referring to the drawings: Figure 1 is an elevation of a flag staff and fixtures embodying my invention, showing the same as it appears when the flag is flying. Fig. 2 is an enlarged detail elevation, partly in vertical section, showing the upper fixture, the flag and a portion of a halyard. Fig. 3 is an enlarged detail elevation, partly in vertical section of the lower fixture upon the staff showing the halyard connected to the fixture. Fig. 4 is a plan section taken on line 4—4 of Fig. 3. Fig. 5 is a sectional view taken on line 5—5 of Fig. 4. Fig. 6 is an elevation showing a modified form of lower fixture.

Like numerals refer to like parts throughout the several views of the drawing.

In the drawing, 10 is a flag staff surmounted by a cap 11 which serves as a support for the truck and also serves to protect

the tip of the staff from the weather. Secured to and extending upwardly from the cap 11 is a spindle 12 upon which is mounted a suitable revoluble carrier comprising a sleeve 13 having secured thereto adjacent to its upper end an ornament 14 of any desired character, said sleeve having secured therein adjacent to its upper end a pivot 15 provided with a conical point resting in a corresponding conical depression in the upper end of said spindle, said pivot being very sensitive in its turning action upon said spindle. Secured to the lower end of the sleeve 13 is a casing 16 inclosing a suitable annular bearing and I preferably employ for this purpose a ball bearing consisting of two series of balls 17 and 18 located, respectively, above and below a plate 19 constituting ball races, said casing constituting another ball race resting upon the upper series of balls 17 and said casing having screw-threaded engagement with a ring 19' constituting a ball race bearing against the lower series of balls 18.

The plate 19 is held stationary by reason of its having screw-threaded engagement with the rod 12, it being screwed firmly against the upper face of the cap 11. The casing 16 which constitutes a truck is provided with an arm 20 in which is journaled a sheave 21 around which passes a halyard 22, said arm being provided with a guard 23 extending across the periphery of the sheave so that the halyard cannot become displaced from its proper position on the sheave and become entangled about said arm.

At any suitable height on the staff 10 is located a revoluble carrier consisting of a ring 24, formed in two parts as shown, on which is journaled an upper series of anti-friction rollers 25 and a lower series of anti-friction rollers 26, said rollers bearing against upper and lower sides of a circumferential track 27 forming a part of a split ring 28 clamped on the flag staff 10 by any suitable means such, for example, as bolts 29. The ring 24 is provided with an inwardly and upwardly extending flange 30 and the ring 28 is provided with an outwardly and downwardly extending flange 31, the lower edge of which is below the upper edge of the flange 30, thus preventing rain and snow from entering the annular space between the two rings 24 and 28. The two halves of the

ring 24 are secured to each other at one side by a plate 32 held in place by screws 33 and on the opposite side by a plate 34 held in place by screws 35.

5 Mounted on the ring 24 is a vane 36 of any suitable construction and which in the present instance consists of a head 37 and tail 38 like an arrow, the upper and lower portions, respectively, of the tail being preferably bent in opposite directions, as shown in Fig. 4, this formation being found to aid the vane in pointing directly to the wind.

10 Formed on or secured to the plate 34 is a cleat 39 to which the halyard 22 is secured, one of the leads of said halyard passing through a ring 40 formed on or secured to said plate and said plate being also provided with a hook 41 supporting the surplus of the halyard in the form of a coil 42. The weight of the cleat 39, eye 40, hook 41, coil 42 and the tail 38 of the vane 36 tend to counteract the upward pull of halyard, thus relieving the friction on the bearings of the ring 24. Owing to this feature, as well as to the special construction of the bearing of the ring 24, the turning action of said ring is extremely sensitive and said ring will turn with the slightest wind pressure.

30 Supported on the halyard 22 is a flag or pennant 43 of any desired character secured to said halyard in any usual or desired manner, as by providing the corners of the flag with metallic gromets or eyelets 44 and 45 in which the ends of the halyard are tied. Extending through the lower gromet 45 is a ring 46 through which the other portion of the halyard 22 extends, said ring being of any suitable construction. In the present instance, this ring is provided with two interengaging hooks 47 and 48 having ball-shaped ends and said hooks being constructed to snap one into the other after one has been passed through the gromet 45. This ring 46 serves to keep the two parts of the halyard close to each other and thus prevents the sawing action at the truck sheave which ordinarily takes place owing to the flag blowing the outer part of the halyard way out from the pole and drawing the inner part of the halyard tight. This ring also serves to maintain a substantial uniform tension of the halyard on the upper and lower fixtures, thus contributing toward the sensitive working action of the parts.

55 By providing the vane 36, the turning of the lower ring 24 in unison with the flag 43 and halyard 22 is assured, since the wind, of course, constantly tends to maintain the flag, halyard and vane in substantially the same plane. In this way, the halyard and flag are prevented from becoming wrapped

or entangled about the flag staff, since the lower connection of the halyard travels at all times with the flag.

In Fig. 6, I have illustrated a modified form of vane which differs from that hereinbefore described in outline, the head and tail being in the form of two disks 48 and 49, as shown.

Having thus described my invention, what I claim and desire by Letters Patent to secure is:

1. The combination with a suitable support, of two carriers journaled one above another on said support to swing about an axis, a vane mounted on one of said carriers, flexible means connecting said carriers to each other, and a body carried by said means.

2. The combination with a suitable support, of two carriers journaled one above the other on said support to swing about an axis, the upper of said carriers having an annular bearing and a pivot bearing located thereabove, a vane mounted on the lower of said carriers, flexible means connecting said carriers to each other, and a body carried by said means.

3. The combination with a flag-staff of a truck journaled at the upper end thereof, a ring secured to said flag-staff at a point below said truck and having thereon a circumferential track, a casing surrounding said ring, two series of rollers journaled upon and within said casing and bearing, respectively, against upper and lower sides of said track, a halyard connecting said truck to said casing, and a flag carried by said halyard.

4. The combination with a flag-staff of a truck journaled at the upper end thereof, a ring surrounding and journaled on said flag-staff at a point below said truck, a cleat mounted on said ring, an eye mounted on said ring, a halyard connected to said truck and to said eye and cleat, and a flag carried by said halyard.

5. The combination with a suitable support, of two carriers journaled one above the other on said support to swing about an axis, a vane mounted on one of said carriers and having upper and lower edges laterally offset, respectively, in opposite directions, flexible means connecting said carriers to each other, and a body carried by said means.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN J. BUCKLEY.

Witnesses:

LOUIS A. JONES,
SADIE V. MCCARTHY.