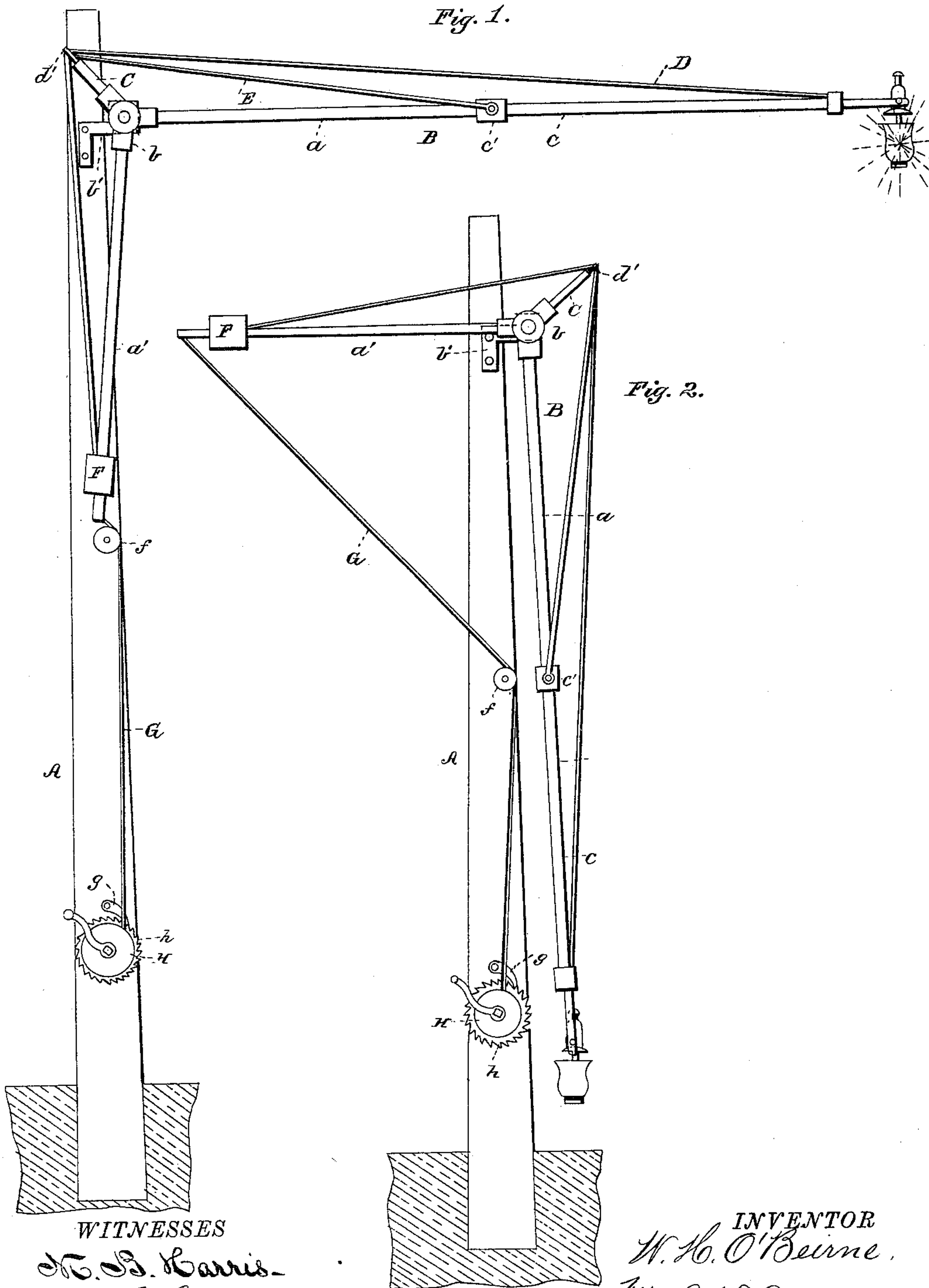


(No Model.)

W. H. O'BEIRNE.
MAST ARM.

No. 410,559.

Patented Sept. 3, 1889.



WITNESSES

H. B. Harris.
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MAST-ARM.

SPECIFICATION forming part of Letters Patent No. 410,559, dated September 3, 1889.

Application filed June 19, 1888. Renewed April 25, 1889. Serial No. 308,642. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. O'BEIRNE, a citizen of the United States, and a resident of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Mast-Arms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of a side elevation of my invention with the arm raised. Fig. 2 is a similar view with the arm lowered.

The invention relates to improvements in mast-arm for electric lamps; and it consists in the construction and novel combination of parts, as hereinafter set forth.

The object is to provide a mast-arm easily attached to the top or at any point on the side of a vertical pole, and so constructed that should the operating-ropes break the lamp will not fall with great force.

Referring by letter to the drawings, A designates a vertical pole having one end seated firmly in the ground, and B is the mast, consisting of arms *a a'* at right angles to each other, and having one end inserted in the sockets *b* of the triple-socket iron, which is pivoted to the bracket or arm *b'*, extending from the pole. The extension-section *c* has one end inserted in the socket *c'*, which is secured to the end of the arm *a*, and its opposite end is provided with a yoke, to which the electric lamp is attached.

C is a short brace-arm, having one end seated in the socket *d* of the pivoted triple-socket iron, and is provided at its outer end with an eye *d'*, through which the brace-rod D passes. The brace-rod D is attached at one end near the end of the arm *a'* and at its other end to the end of the extension-section *c*. A shorter brace-rod E extends from the eye of the brace-arm to the socket *c'*. These

brace-rods are of small round iron, and are adapted to hold the mast-arms rigidly.

F is a weight attached to the outer end of the arm *a'*, as shown, having a bearing-power somewhat less than the lamp, so that the lamp is eased in its descent should the operating-rope G become broken. The wire operating-rope G engages the outer end of the arm *a'* and passes over a pulley *f*, pivoted on the vertical pole at a convenient point to the drum or windlass H.

The drum H is provided with a journal which has an angular end, to which a crank may be applied to turn said drum and raise or lower the lamp. A pawl *g* on the vertical pole engages a ratchet-wheel *h* on the drum and prevents said drum from turning to lower the lamp when not desired.

I prefer to make the mast-arms and extension of iron tubing, as it is very light and serviceable.

Having described my invention, what I claim is—

1. The combination of the mast-arms at right angles to each other, and each having one end inserted in a socket of the triple-socket iron pivoted to the vertical pole, the extension-section, the socket *c'*, and the operating-rope, substantially as specified.

2. The combination of the mast-arms at right angles to each other, the triple-socket iron pivoted to the pole, the weight F, and the operating rope or wire, substantially as specified.

3. The combination, with the vertical post, of the mast consisting of the arms *a a'* and the extension-section, the socket *c'*, the pivoted triple-socket iron, the brace-arm, the brace-rods, the weight attached to the arm *a'*, the pulley *f*, pivoted on the pole, the drum having the ratchet-wheel, the pawl, and the wire rope, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. O'BEIRNE.

Witnesses:

ANDREW HERO, Jr.,
AND. I. WARD.