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S. S. McGRATH & J. J. LAWLOR.

REVOLVING TRUCK FOR FLAG POLES.

(Application filed July 21, 1900.)

(No Model.)

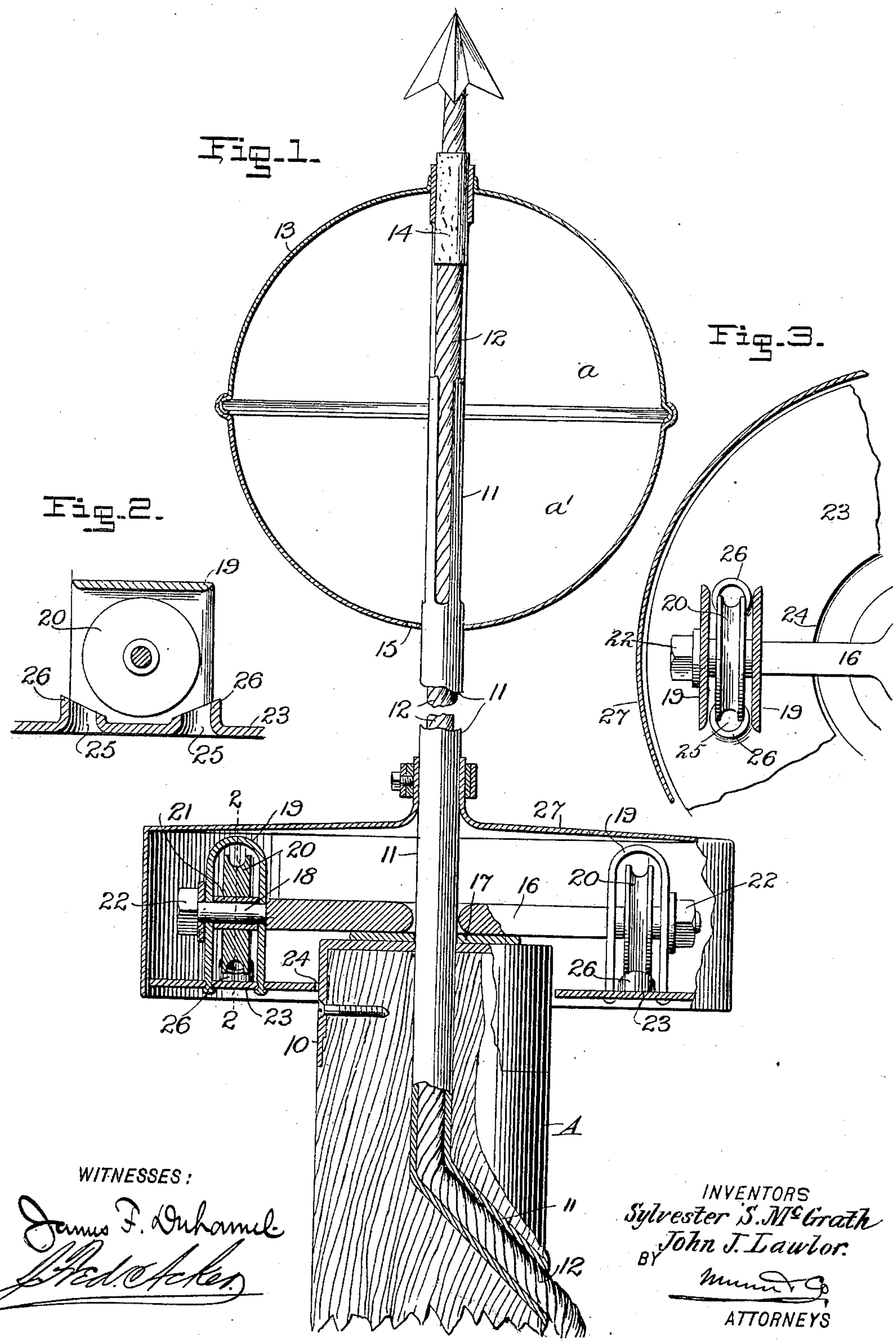

Fig. 1. Fig. 2. Fig. 3.

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REVOLVING TRUCK FOR FLAG-POLES.

SPECIFICATION forming part of Letters Patent No. 674,792, dated May 21, 1901.

Application filed July 21, 1900. Serial No. 24,413. (No model.)

To all whom it may concern:

Be it known that we, SYLVESTER S. McGRATH and JOHN J. LAWLOR, citizens of the United States, and residents of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Revolving Truck for Flag-Poles, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide a truck capable of revolving upon a flag-pole upon which a lightning-rod is used, the revolving truck serving to keep the halyards from becoming entangled, and it also serves to protect the halyards where they pass over bearings in the truck.

Another object of the invention is to provide a means whereby a lightning-rod may pass out from the central upper section of the pole and extend as far as required beyond the top of said pole.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a section through the upper portion of a flag-pole and through the improved truck and the ornament located near the upper end of the lightning-rod. Fig. 2 is a section through the truck, taken practically on the line 2 2 of Fig. 1; and Fig. 3 is a horizontal section through a portion of the truck, illustrating in plan view one of the bearings for a halyard.

A represents a flag-pole the top whereof is preferably provided with a metal cap or ferrule 10, secured thereto in any approved manner. A tube 11 is passed into the flag-pole from one side near the top, and the said tube 11 is then carried out through the central top portion of the flag-pole and above the pole as far as may be desired. The lightning-rod 12 is passed from the ground up at the outside of the flag-pole until the mouth 11 of the tube is reached, whereupon the lightning-rod is passed through the tube and extends beyond the upper end thereof.

Any desired ornament may be supported by the upper portion of the tube 11. In the drawings we have illustrated the ornament in the shape of a hollow sphere 13, made in two sections *a* and *a'*, said sections being connected by a lap-joint. In order that moisture shall not not enter this hollow sphere, we usually place a cork collar 14 around the lightning-rod within the upper portion of the tube 11; but as more or less moisture does collect within a hollow body at such a height, principally from condensation, we provide for the exit of such liquid by producing an opening 15 in the bottom portion of the ornament. In the drawings we have illustrated that portion of the tube 11 which is within the hollow sphere 13 as being slotted, and these slots are usually produced in this portion of the tube in the interest of lightness, since the sphere 13 is a sufficient brace for this portion of the tube.

A cross-bar 16 is mounted to revolve around the tube 11 just above the cap or ferrule 10 and preferably in engagement with a washer 17, which intervenes the cross-bar and the said cap or ferrule, as shown in Fig. 1. The ends 18 of the cross-bar 16 are usually reduced and are passed through inverted-U-shaped frames 19, which frames constitute casings for peripherally-grooved pulleys 20. These pulleys are mounted to turn usually upon collars 21, loosely mounted on the reduced portions 18 of the cross-bar within the casing 19, and suitable nuts and washers 22 are located at the extremities of the cross-bar, the washers having bearing against the outer side faces of the pulley-casings 19.

A disk 23 is secured in any desired manner to the bottom portion of the pulley-casings 19, and this disk is provided with a central opening 24, so that it may turn freely around the cap or ferrule 10 of the flag-pole. Openings 25 are made in the disk 23 near opposite faces of the peripherally-grooved surfaces of the pulleys 20, as is shown particularly in Figs. 2 and 3, and these openings 25 are surrounded by upwardly-extending collars 26, which are usually and preferably inclined downward in direction of each other at the top, so that the pulleys will not interfere with the collars, and after a pulley 20 has been selected over which to carry a halyard the halyard is passed up through one of the openings 25 adjacent to

said selected pulley, thence over the pulley, and then down through the opening at the opposite side of the pulley. It will be observed that under this construction a lightning-rod can be centered in the flag-pole and that it does not interfere in the slightest degree with the revolving movement of the truck—in fact, the support for the lightning-rod constitutes a pivot around which the truck revolves.

In order that the halyards shall be protected from the weather and from dust to a greater or less extent where said halyards are carried by the truck, a housing 27 is provided, which is attached to the tube 11, through which the lightning-rod passes, the attachment being made at a point above the cross-bar, and the housing is carried down around the margin of the disk 23 and to a point below the said disk, as is illustrated in Fig. 1.

When a revolving truck is employed, the most convenient bearing in the truck may be utilized for a halyard, and should the halyard become twisted or entangled at a point below the truck said halyard may be readily straightened, since the truck may be carried around on its pivot until the entanglement has been removed, thereby avoiding the necessity of climbing the pole to free the halyards at or near the truck, which is frequently rendered necessary when a stationary truck is employed.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A revolving truck for flag-poles, comprising a cross-head adapted to revolve upon the pole, inverted-U-shaped casings or frames carried by the cross-head at the ends thereof, pulleys for halyards mounted to turn in said casings, and a disk secured to the bottom portions of the pulley-casings and having a central opening through which the upper end of the flag-pole extends, the said disk being provided with openings adjacent to the pulleys, for the purpose set forth.

2. The combination, with a flag-pole and a casing for a lightning-rod extending beyond the top of said pole, of a truck consisting of a cross-head mounted to revolve on the pole around the said casing, pulleys mounted to revolve upon said cross-head, casings for the pulleys, a disk mounted to turn around the pole, being secured to the bottom portion of said pulley-casings, and a hood secured to the casing adapted to carry the lightning-rod, which hood extends around and below the said disk, for the purpose set forth.

3. A revolving truck for flag-poles, provided with pulleys for the halyards, casings for the said pulleys, and a disk secured to the bottom portions of the casings and provided with a central opening for the pole, the said disk being also provided with openings adjacent to the pulleys, the latter openings being surrounded by upwardly-extending collars, the top of said collars inclining downward in direction of each other, substantially as described.

4. A truck for flag-poles capable of revolving on the pole and provided with bearings for the halyards, the said truck having a disk at its bottom provided with a central opening through which the upper end of the pole loosely extends and openings adjacent to the bearings for the halyards, and a housing for said truck fixed to a support extending above the top of the pole, the said housing extending down around the margin of the disk, and below the same, as set forth.

5. The combination with a flag-pole, and a tube having an entrance at one side of the flag-pole, which tube extends up through and above the top portion of the pole, the said tube being adapted for the passage of a lightning-rod, of a truck provided with bearings for a halyard, the said tube also forming the pivot around which the truck is adapted to turn, for the purpose described.

6. A truck for flag-poles, comprising a cross-head constructed to revolve on the top of the flag-pole, casings through which the ends of the cross-head extend, pulleys mounted to turn on the cross-head within the casings, and a member connected with the lower ends of the pulley-casings and having an opening through which the upper end of the flag-pole is adapted to loosely extend, as set forth.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

SYLVESTER S. McGRATH.
JOHN J. LAWLOR.

Witnesses:
JOHN J. HANLY,
JAMES LAWLOR, Jr.