

No. 674,707.

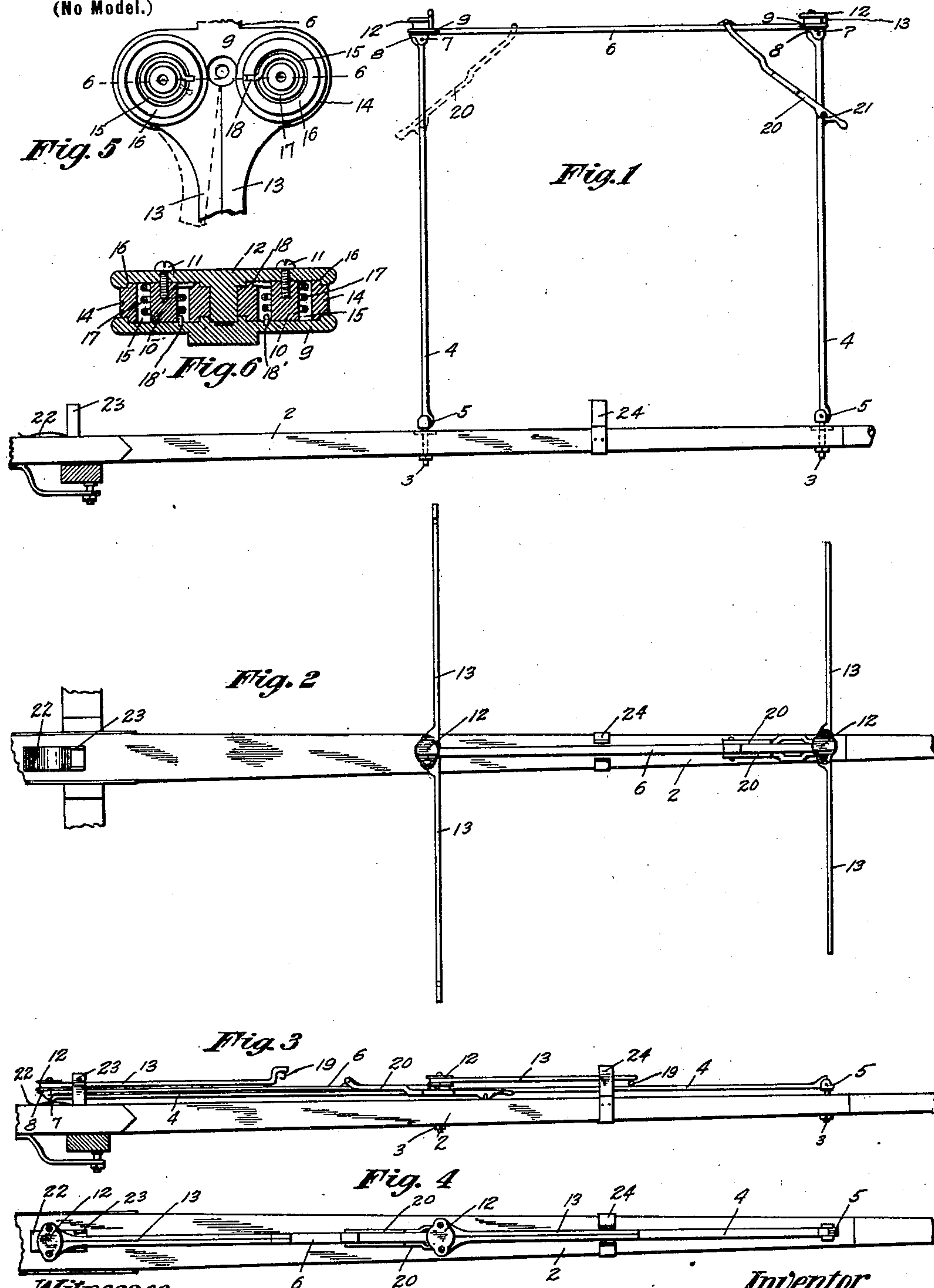
Patented May 21, 1901.

E. F. McCAFFERTY.

HARNESS SUPPORT.

(Application filed Aug. 28, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

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ONE-HALF TO M. G. LESLIE, OF SAME PLACE.

HARNESS-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 674,707, dated May 21, 1901.

Application filed August 28, 1900. Serial No. 28,297. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. McCAFFERTY, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented new and useful Improvements in Harness-Supports, of which the following is a specification.

This invention relates to an improved harness-support for fire-department apparatus, police-patrol wagons, ambulances, and other emergency vehicles, and has for its primary object to provide an effective device of this character adapted to be mounted on and carried by the vehicle and ready for use whenever the latter may be.

Harness-hangers now generally used are suspended from the ceiling of the engine-house or other quarters of emergency apparatus and are of course only available at such places for supporting the harness in readiness for quick adjustment when answering a call. These hanging devices are more or less complicated, many of them including complicated arrangements of sustaining and pull ropes, pulley-supports and counterweights, and not only require accurate arrangement with relation to the normal position of the vehicle, but also great care must be exercised to accurately position the latter thereunder. A portable harness-support, such as herein proposed, not only does away with this complicated and unsightly type of hanger, but also, having permanent position on the vehicle, is always in readiness for use. At fires it is frequently desirable to unharness the horses in addition to unhitching them from the apparatus, and with my improved device this may be quickly and conveniently accomplished, leaving the harness in position for quick readjustment when necessary. Heretofore when harness has been removed from the horses under these circumstances it has been thrown upon the street in a disarranged mass. This is not only injurious to the harness, as it is liable to become wet and trampled under foot, but also considerable time is required for its rearrangement upon the horses. With my improvement these difficulties and inconveniences are avoided, for, as before stated, the support is

always in readiness for sustaining the harness in position for quick readjustment.

The invention consists in the novel features of construction and combination and arrangement of parts hereinafter fully described and claimed, and illustrated by the accompanying drawings, wherein—

Figure 1 is a side view of my improved device in operative position on the vehicle-pole. Fig. 2 is a plan view of Fig. 1. Fig. 3 is a side view, similar to Fig. 1, with the device folded down upon the pole. Fig. 4 is a plan view of Fig. 3. Fig. 5 is a plan view of the inner or hinged ends of the supporting-arms with the top plate of the casing removed to illustrate the spring-hinge. Fig. 6 is a cross-sectional view on line 6 6 of Fig. 5.

Referring to the drawings, 2 represents the vehicle-pole, and 3 represents hinge-bolts secured to the pole and projecting from the top surface thereof, and hinged at their lower ends to these bolts are the backwardly-swinging uprights or standards 4. Stops 5 on the standards and bolts prevent the former from swinging forward past a vertical position. The upper ends of the standards are hinged to opposite ends of the horizontal bar 6, as shown at 7, stops 8 on the bar and standard cooperating with stops 5 in holding the frame thus formed from swinging forward past the vertical position.

At each end of bar 6 is a head or enlargement 9, carrying two vertically-projecting posts 10, arranged on opposite sides of the center line of bar 6, and removably secured to the upper ends of these posts by screws 11 is cap-plate 12.

13 represents the laterally-swinging harness-supporting arms, there being four of these arms, two on each side of bar 6, and the inner curved end 14 of each arm is apertured vertically at 15, with post 10 extending there-through, the aperture being considerably larger than the diameter of the post. On the upper and lower sides of the arm and encircling aperture 15 are the annular lips 16, which snugly fit corresponding depressions in head 9 and cap-plate 12, thus forming a stout hinge for the arm when the parts are assembled.

Coiled around post 10 within arm-aperture

15 is spring 17, having its upper extremity turned laterally and confined in notch 18 of the arm and its lower extremity 18' secured in a notch or depression in head 9, all as clearly illustrated in Fig. 6. These springs resist outward turning of arms 13 and serve to hold the same normally in inwardly turned or folded position over bar 6, as in Figs. 3 and 4. The outer extremities of the rearward arms 13 may be bent or elevated above the plane of the main portions thereof, as shown in the drawings, for the purpose of affording increased elevation for the rear portions of the harness suspended thereon. The weight of the harness holds the arms extended, preventing them from responding to the pressure of the spring-hinges until after the harness is removed.

When in operative position, the support is elevated with arms 13 outstretched, as in Figs. 1 and 2, and at their outer ends supporting the harness on opposite sides of pole 2, ready for quick adjustment on the horses. Rings 19 or other suitable devices may be provided at the arms' ends for removably attaching the harness. The frame is held in upright position by latches 20, hinged at their upper ends to bar 6, near the forward end of the latter, and at their lower ends notched to removably engage the pins 21 on forward standard 4. If desired, these latches may be arranged at the rear end of the frame within reach of the driver, as shown in dotted lines in Fig. 1. With the harness supported, as described, by the outstretched arms 13 it may be quickly removed therefrom and adjusted on the horses. When the harness is removed, the arms are turned to inward or folded position by springs 17 and out of the way. Latches 20 are then released, permitting the frame to fold backward and downward on pole 2, where it remains, entirely out of the way, but ready for use whenever required. An upwardly-bowed spring-plate 22 is secured to the pole and serves as a buffer which the folded frame strikes as it drops to the pole. The elongated sides of this plate are upwardly turned at 23 and form stops for preventing accidental outward turning of the rear arms 13, while a similarly-formed clip 24 is secured to the pole for thus confining the forward arms.

I do not confine myself to the means here shown for securing the device to the vehicle-pole, as this may be accomplished in a variety of ways. Many other details of construction may in like manner be varied without departing from the spirit of my invention.

The entire hanger mechanism is comparatively light and may be applied to the pole of any vehicle without in any manner interfering therewith, being entirely out of the way.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. Harness-sustaining means for fire and other emergency apparatus, comprising a sup-

port adapted to be carried by the apparatus, and harness-sustaining arms projecting from the support, the arms at their outer ends being adapted to hold the harness suspended and in position to be quickly placed upon the horses, substantially as shown and described. 70

2. Harness-sustaining means for fire and other emergency apparatus, comprising a support adapted to be carried by the apparatus, and harness-sustaining arms mounted to turn horizontally on the support, the arms when in unfolded or extended adjustment being adapted to hold the harness suspended and in position to be quickly placed upon the horses, substantially as shown and described. 75 80

3. The combination with a vehicle-pole, of a folding support adapted when in raised position to sustain the harness and when not in use adapted to fold compactly on the pole, substantially as shown and described. 85

4. The combination with a vehicle and a vertical support, of hinged arms on the support adapted to be turned outward for sustaining harness, the arms when not in use adapted to fold inward on the support, substantially as shown and described. 90

5. The combination with a vehicle-pole, of a vertically-folding support carried thereby and adapted to fold downward thereon, arms on the support adapted to turn laterally for sustaining harness, the arms when not in use adapted to fold inward on the vertical support, substantially as shown and described. 95 100

6. In a harness-hanger, the combination with a support, of laterally-turning harness-sustaining arms on the support, and springs for holding the arms normally turned inward on the support, substantially as shown and described. 105

7. In a harness-hanger the combination of a support, a removable cap-plate, means for spacing the plate from the support, and the laterally-turning arms between and rotatably secured to the support and plate, substantially as shown and described. 110

8. In a harness-hanger, the combination of a support, a removable cap-plate, means for spacing the plate from the support, the laterally-turning arms apertured at their inner ends and rotatably secured to the support and plate, and a coiled spring within the arm-aperture, one extremity of the spring being secured to the arm and the other extremity to the support, substantially as shown and described. 115 120

9. In a harness-hanger, the combination of a support, a removable cap-plate, posts projecting from the support and to which the cap-plate is secured, the laterally-turning arms apertured to fit around the posts and rotatably mounted between the head and plate, and coiled springs on the posts having one end secured to the arms and their opposite ends secured to the support, substantially as shown and described. 125 130

10. In a harness-support, the combination of a vehicle-pole, vertically-swinging stand-

ards hinged at their lower ends thereto, a bar
connecting the upper ends of the standards
and to which the latter are hinged, and lat-
erally-swinging harness-supporting arms car-
ried by the bar, substantially as shown and
described.

11. In a harness-hanger, the combination
with swinging uprights 4, and bar 6, of latches
20 for rigidly uniting the bar and uprights,
substantially as shown and described.

12. The combination of a vehicle-pole, a
harness-support adapted to fold thereon hav-

ing laterally - turning harness - sustaining
arms held normally in inwardly turned or
folded position, and stops on the pole for pre-
venting said arms from moving laterally when
folded, substantially as shown and described.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

EDWARD F. McCAFFERTY.

Witnesses:

J. W. NESBIT,

ALEX. S. MABON.