

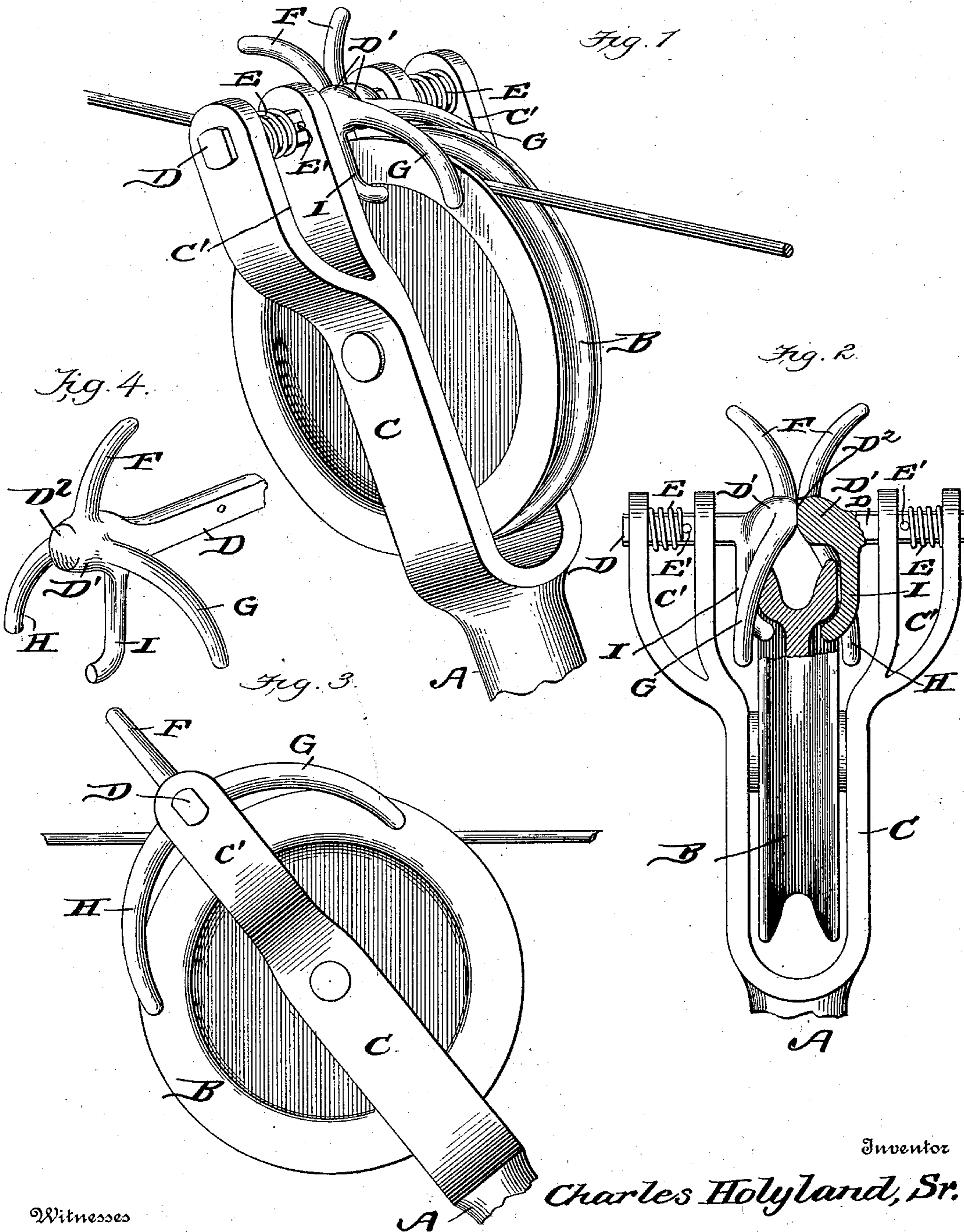
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PATENTED JAN. 26, 1904.

C. HOLYLAND, SR.
OVERHEAD TROLLEY ATTACHMENT.

APPLICATION FILED JUNE 6, 1903.

NO MODEL.



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OVERHEAD-TROLLEY ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 750,458, dated January 26, 1904.

Application filed June 6, 1903. Serial No. 160,368. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HOLYLAND, Sr., a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Overhead-Trolley Attachment, of which the following is a specification.

This invention relates generally to overhead trolleys, and is in the nature of an attachment to the trolley-harp for the purpose of keeping the trolley-wheel upon the conductor-wire at all times and to prevent the trolley-wheel jumping the wire when passing connections, cross-wires, switches, and the like.

The invention consists, essentially, in arranging a pair of spring-actuated rods above the trolley-wheel, said rods being carried by the harp and adapted to contact at their inner ends, thereby preventing the trolley-wheel becoming disengaged from the wire; and the invention consists also in providing the inner ends of the said rods with guiding-fingers which are adapted to contact with cross-wires, switch-plates, and the like and guide the trolley-wheel past them without interruption, said guiding-fingers also serving to guide the wire to the trolley-wheel when placing the said trolley-wheel in contact with the wire.

The invention consists also in certain details of construction and novelties of combination, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view showing the practical application of my invention. Fig. 2 is a front elevation, a portion of the trolley-wheel being shown in section. Fig. 3 is a side view. Fig. 4 is a detail perspective view showing one of the rods and the fingers connected thereto.

In carrying out my invention I employ an ordinary trolley-pole A and wheel B. The harp C, which carries the wheel, has its sides extended a short distance above the upper edge of the wheel, and said extended portions are curved outwardly and bifurcated, as shown at C', and mounted in said bifurcated members are the rods D, the inner ends of which are formed with heads D', the faces D², which contact with each other, as most clearly shown

in Fig. 2, said heads being held in contact with each other by means of springs E, which surround the rods and bear at one end upon the outer member of the harp and at their inner ends upon pins E', passed transversely through the rods. Each head is provided with an outwardly and upwardly curved finger F, a forwardly and downwardly curved finger G, a rearwardly and downwardly curved finger H, and a downwardly and inwardly curved finger I, the lower curved end of the finger I extending under the flange of the trolley-wheel, as most clearly shown in Fig. 2. The upwardly-extending fingers F form guides for guiding the trolley to the wire, and the front and rear fingers G and H serve to guide the trolley past cross-wires, connecting-wires, and switch-plates and the like without interruption. Whenever the guide-fingers come in contact with such parts, the springs permit them to yield a limited amount; but the moment the obstruction is passed the springs return the rods to their normal or closed position. All of the fingers are rounded and curved, so that whenever they come in contact with any fixed object they will yield and move past the object and will not bind against the same, as might occur if the fingers had any straight or flat portions. When the trolley-wheel is being placed against the wire, the curved fingers will serve to guide the wire between the heads and the rods will readily yield to permit the trolley-wire to pass between the heads and when the trolley-wheel is being withdrawn from the wire the rods will readily part, permitting the wheel to be drawn down away from the wire.

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

1. The combination with a trolley-wheel harp, of the oppositely-disposed spring-actuated rods and the guiding-fingers attached to the inner ends of said rods, said fingers extending in divers directions, as set forth.

2. A trolley-wheel harp having spring-actuated rods, said rods having heads at their inner ends, each head being provided with a plurality of guide-fingers, substantially as described.

3. A trolley-harp having the spring-actuated rods arranged therein, said rods having the curved guiding-fingers, substantially as described.

5 4. A trolley-wheel harp having bifurcated upper ends, the rods arranged in said bifurcated ends, the spring surrounding said rods and holding their inner faces together, the

inner end of each rod being provided with an upwardly, forwardly, a rearwardly, and a downwardly curved finger, all arranged and adapted to operate substantially as described.

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