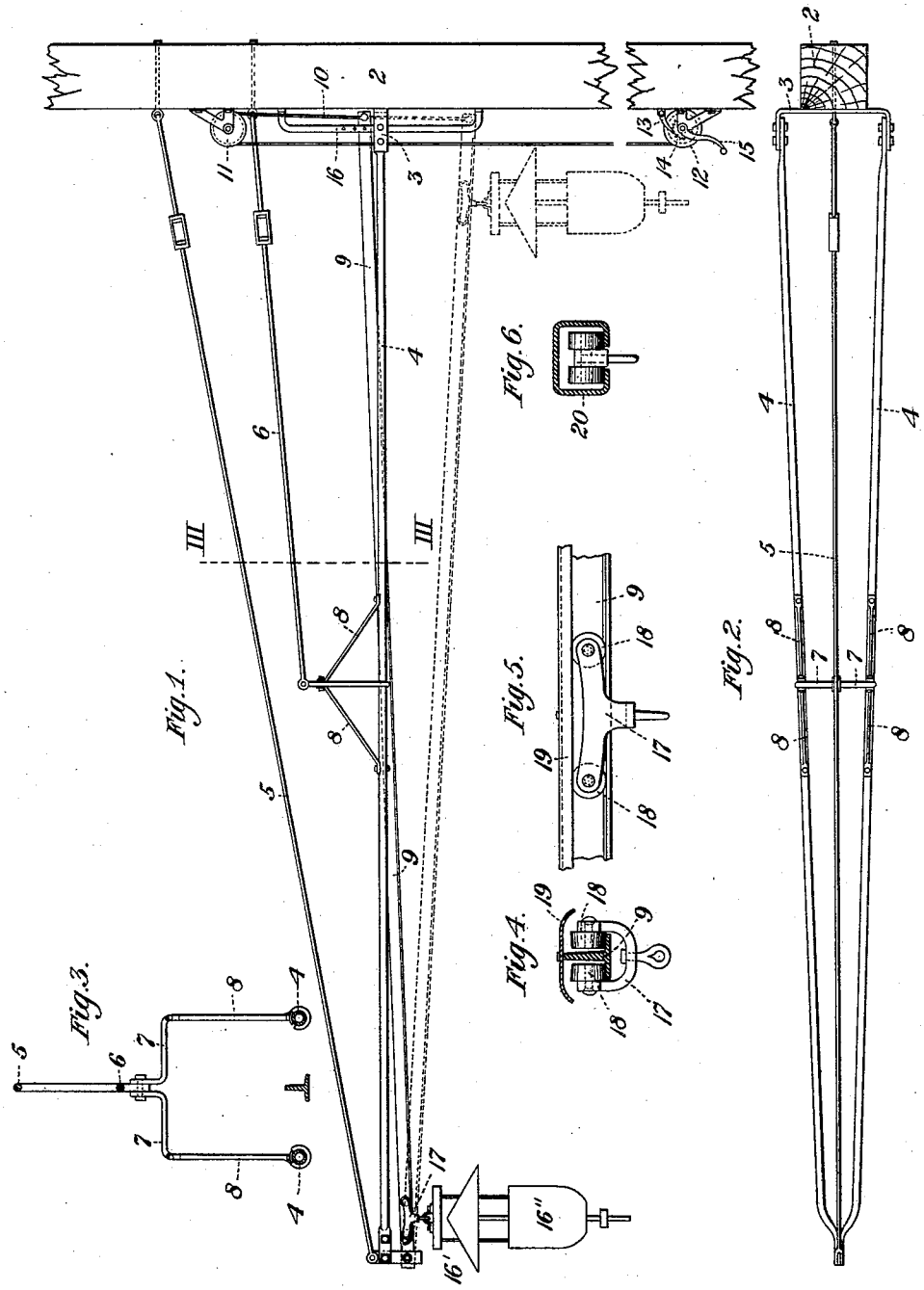
(No Model.)

A. B. ALLISON & G. B. SCOTT.

MAST ARM FOR ELECTRIC LIGHT POLES.

No. 484,565. Patented Oct. 18, 1892.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALONZO B. ALLISON AND GABRIEL B. SCOTT, OF PITTSBURG, PENNSYLVANIA.

MAST-ARM FOR ELECTRIC-LIGHT POLES.

SPECIFICATION forming part of Letters Patent No. 484,565, dated October 18, 1892.

Application filed March 21, 1892. Serial No. 425,802. (No model.)

To all whom it may concern:

Be it known that we, ALONZO B. ALLISON and GABRIEL B. SCOTT, both of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Mast-Arms for Electric-Light Poles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of our improved mast-arm for electric-light poles with the shield removed. Fig. 2 is a top plan view of the tie-rod connections. Fig. 3 is a vertical sectional view on the line III III of Fig. 1; and Figs. 4, 5, and 6 are detail views, Fig. 6 illustrating a modification.

Our invention relates to the mast-arms employed for suspending electric lights from a pole.

In the drawings, in which like symbols indicate like parts, the pole 2 is provided with the U-shaped horizontal bar 3, to which are bolted the arms 4 4, extending outwardly and bolted together at their outer ends, from which connection extends the inclined tie-rod 5, secured to the pole. A second tie-rod 6 extends from a lower point on the pole to and encircles a bolt passing through two laterally-extending bars 7 7, which at their ends are bent downwardly and secured to the arms 4 4, braces 8 8 being bolted to each arm 7 and to the arms 4 4, as shown. This system of tie-rods and braces provides an extremely rigid and durable construction. Pivoted to a hanger at the outer ends of the arms 4 4 is a T-iron 9, to which at its inner end is connected a cord 10, which passes therefrom over the pulley 11 and thence to the winding-drum 12 beneath. Upon the drum-shaft is provided the usual pawl-and-ratchet mechanism 13 and 14 and the lever-handle 15. The flanges are cut away from the inner end of the T-iron and the same moves between two guides 16, which are secured in a vertical position to the side of the pole. Upon the T-iron is hung the carriage 16′, supporting the lamp 16″ and consisting of the yoke 17, to the upper ends of whose arms are pivoted the wheels or casters 18. These casters roll upon the side flanges of the T-iron, as shown in Fig. 4, and to the vertical flange is secured the shield 19, which extends over the entire path of the carriage and prevents sticking of the same consequent upon an accumulation of snow or ice thereon.

In Fig. 6 we show a modification wherein the T-iron and shield are replaced by a slotted tube 20, the carriage rolling upon the interior of the tube and the carriage-stem passing through the slot.

The operation of the device is as follows: The operator by unwinding the cord lowers the inner end of the T-iron and the lamp rolls by gravity down the incline to the pole and into the position shown in dotted lines in Fig. 1. When the lamp is again ready for use, the cord is wound up, raising the inner end of the oscillating beam and causing the lamp to roll to the outer end, where it rests against a suitable stop.

The advantages of our construction are obvious. The parts are simple, few in number, and not liable to get out of order, while sticking of the carriage is effectually prevented.

What we claim is—

1. A mast-arm for electric lights, said arm being pivoted at its outer end, guides at its inner end extending above and below the level of the pivot, and a flexible connection for moving said inner end within said guides, substantially as described.

2. A mast-arm for electric lights, said arm being pivoted at its outer end, guides at its inner end extending above and below the level of the pivot, a flexible connection for the inner end, and a shield extending over said arm, substantially as described.

3. A mast-arm comprising two laterally-extending stationary arms, an oscillating arm pivoted at its outer end between the same, guides inclosing the inner end of the oscillating arm, and a flexible connection for moving the arm therein, substantially as described.

4. In an electric-light apparatus, the combination of a mast-arm having a T-iron piv-

oted at its outer end, guides at its inner end extending above and below the level of the pivot, and a carriage having wheels arranged to move upon the projecting flanges of the T-iron, substantially as described.

5. The combination of a mast-arm having a T-iron pivoted at its outer end, a carriage having wheels arranged to roll upon the projecting lateral flanges, and a shield secured to the vertical web of the iron, substantially as described.

In testimony whereof we have hereunto set our hands this 15th day of March, A. D. 1892.

ALONZO B. ALLISON.
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Witnesses:
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