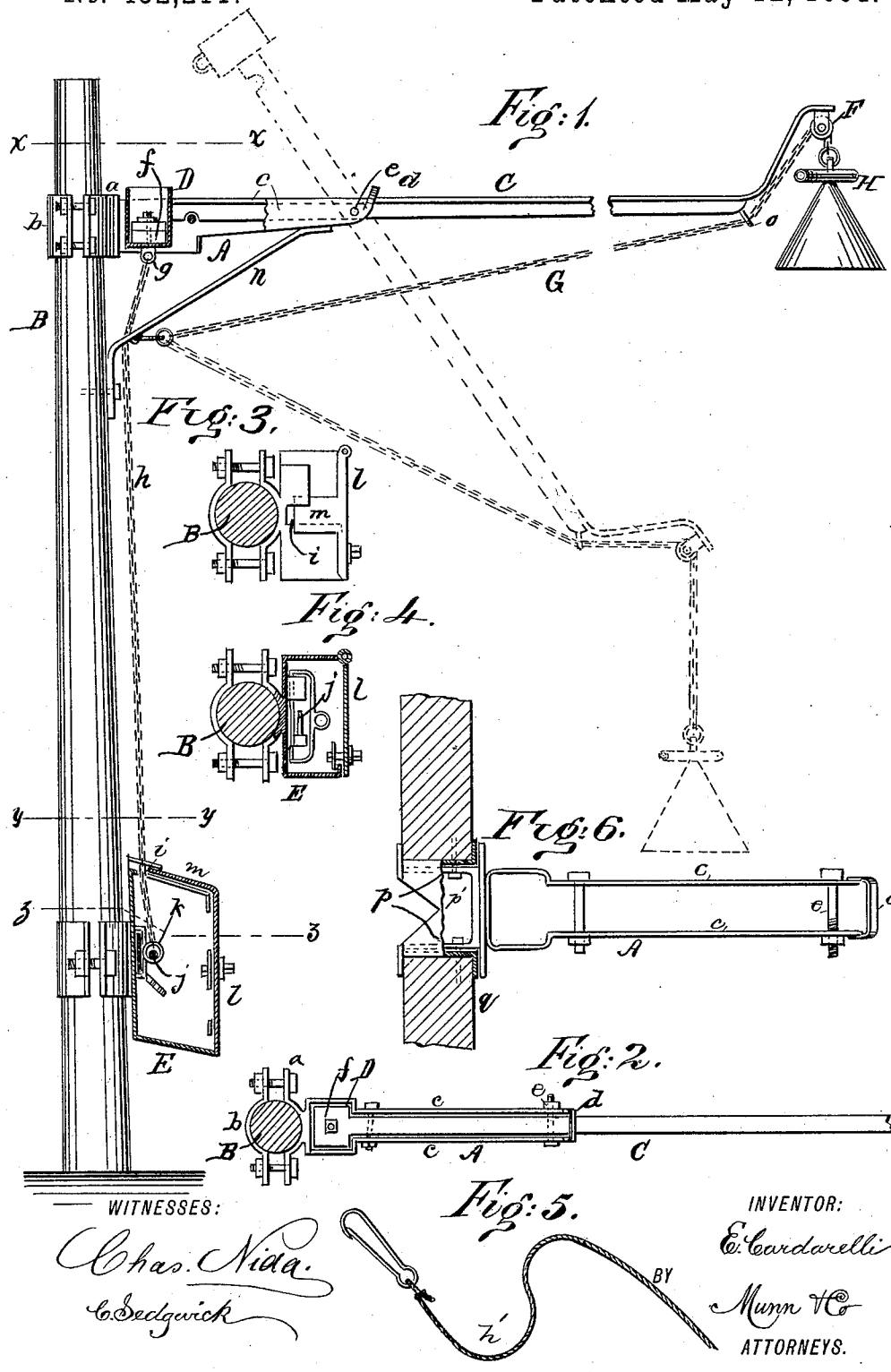
(No Model.)

E. CARDARELLI.

CRANE FOR ELECTRIC LAMPS.

No. 452,211. Patented May 12, 1891.



WITNESSES:

Chas. Nida.

C. Sedgwick

INVENTOR:

E. Cardarelli

BY

Munn & Co

ATTORNEYS.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EMILIO CARDARELLI, OF SUMTER, SOUTH CAROLINA.

CRANE FOR ELECTRIC LAMPS.

SPECIFICATION forming part of Letters Patent No. 452,211, dated May 12, 1891.

Application filed August 22, 1890. Serial No. 362,711. (No model.)

To all whom it may concern:

Be it known that I, EMILIO CARDARELLI, of Sumter, in the county of Sumter and State of South Carolina, have invented a new and Improved Crane for Electric Lamps, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a side elevation, partly in section, of my improved crane. Fig. 2 is a horizontal section taken on line *x x* in Fig. 1. Fig. 3 is a horizontal section taken on line *y y* in Fig. 1. Fig. 4 is a horizontal section taken on line *z z* in Fig. 1. Fig. 5 is a side elevation of the rope and snap-hook, and Fig. 6 is a plan view of the fixed arm of the crane, showing its application to a wall.

Similars letters of reference indicate corresponding parts in all the views.

The object of my invention is to construct a crane especially designed for supporting electric-arc lamps, but capable of other useful applications.

My invention consists in a crane provided with a fixed arm adapted to be clamped to a pole and having a pivoted arm furnished with a pulley and chain, and a chain arranged to let the lamp or lamp-holder down as the pivoted arm is tilted.

My invention also consists in a housing for the fastening of the operating-chain, all as hereinafter more fully described.

The arm A, forming the fixed portion of the crane, is furnished with a semicircular end plate *a* for receiving the pole B, and with a clamping-plate *b*, connected with the end plate *a* by bolts. The arm A is formed of side plates *c*, connected together at their outer ends by the cross-piece *d*. Upon the bolt *e*, extending through the arm A, is pivoted the clamp-holding lever C, the shorter arm of which extends toward the pole B and is furnished with a box D for receiving a counter-weight *f*. The bottom of the box D is provided with an eye *g* for receiving the chain *h*, by which the crane is operated.

To the lower portion of the pole, within easy reach, is clamped a box E, having an inclined top and bottom, the top being provided with a slot *i* for receiving the lower end of the chain *h*. In the box E is arranged a sliding bolt *j*, which may be brought into engagement with the ring *k* on the lower end of the chain *h*. The front of the box is closed by a hinged door *l*, the upper end of which is provided with a tongue *m*, capable of closing the greater portion of the slot *i*, so as to exclude rain, snow, and dust from the box E.

The arm A is stiffened by a brace *n*, attached to the said arm and to the pole B. The free end of the lever C is bent upward or offset and provided with a sheave F. It is also furnished with an eye *o*. A chain G, which is attached to the electric lamp H, extends over the sheave F, passes through the eye *o*, and is connected with the brace *n* near the point of its attachment to the pole B.

When the lamp is to be adjusted or trimmed, the ring *k* of the chain *h* is released from the bolt *j* and the free end of the lever C is allowed to descend. At the same time the chain G is drawn through the sheave F by the weight of the lamp H, the chain G being slackened by the lowering of the lever C, the point of attachment of the chain being arranged below the pivot of the lever to permit of this operation. After the lamp is trimmed or adjusted the lever C is replaced by drawing the chain *h*, and is held in a horizontal position by the engagement of the bolt *j* with the ring *k*. To provide for the extra length required to lower the lever C by the chain *h*, the operator is provided with a rope *h'*, having a snap-hook to engage the ring *k*.

In the arrangement shown in Fig. 6 the arm A is provided with flanges *p*, which enter a frame *p'*, fitted in a mortise in the wall *q*, the said flanges being secured by nails or screws driven through them into the wall. In Fig. 6 is shown also a notch formed in inner end of the frame *p'* for embracing the corner of a wall when it is desirable to have the crane project from the corner of a building.

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

1. In a crane for electric lamps, the combination, with a fixed arm, of a lever pivoted thereto and provided with a sheave on its outer end, a rope or chain for supporting a lamp passed over the sheave and having its end fixedly secured below the pivot of the lever, and means for holding the lever in a horizontal position, whereby when the outer

end of the lever descends the rope or chain will be slackened and drawn over the sheave by the weight of the lamp and the latter lowered, as set forth.

2. In a crane for electric lamps, the combination, with a fixed arm, of a lever pivoted thereto and provided with an adjustable counter-balance at its inner end and with a sheave at its outer end, a rope or chain to one end of which a lamp is attached, passed over the sheave, and having its other fixedly secured below the pivot of the lever, and a rope or chain secured to the inner end of the lever, substantially as herein shown and described.

3. In a crane for electric lamps, the combination, with a fixed arm formed of plates connected together at their outer ends, of a lever pivoted between the plates and provided with a sheave on its outer end and with an adjustable counter-balance on its inner end, a chain or rope to one end of which a lamp is attached, passed over the sheave, and having its other end fixedly secured below the pivot of the lever, and a chain or cord connected to the inner end of the lever, substantially as described.

4. In a crane for electric lamps, the combination, with a fixed arm A, of a lever C, pivoted thereto and provided at its outer end with a sheave F and at its inner end with a box D for containing weights, a chain G, having one end made fast, passed over the sheave F and carrying a lamp at its end, and the chain *h*, secured to the lower end of the box D, substantially as herein shown and described.

5. In a crane for electric lamps, the combination, with a pivoted lever carrying a lamp at its outer end and a chain or cord for operating the lever, of a box having a slot in its top for the passage of the chain or cord and provided with a tongue for partially closing said slot, and a sliding bolt within the said box for engaging the said chain or cord, substantially as herein shown and described.

EMILIO CARDARELLI.

Witnesses:
R. D. LEE,
R. S. MOISE.