

No. 701,930.

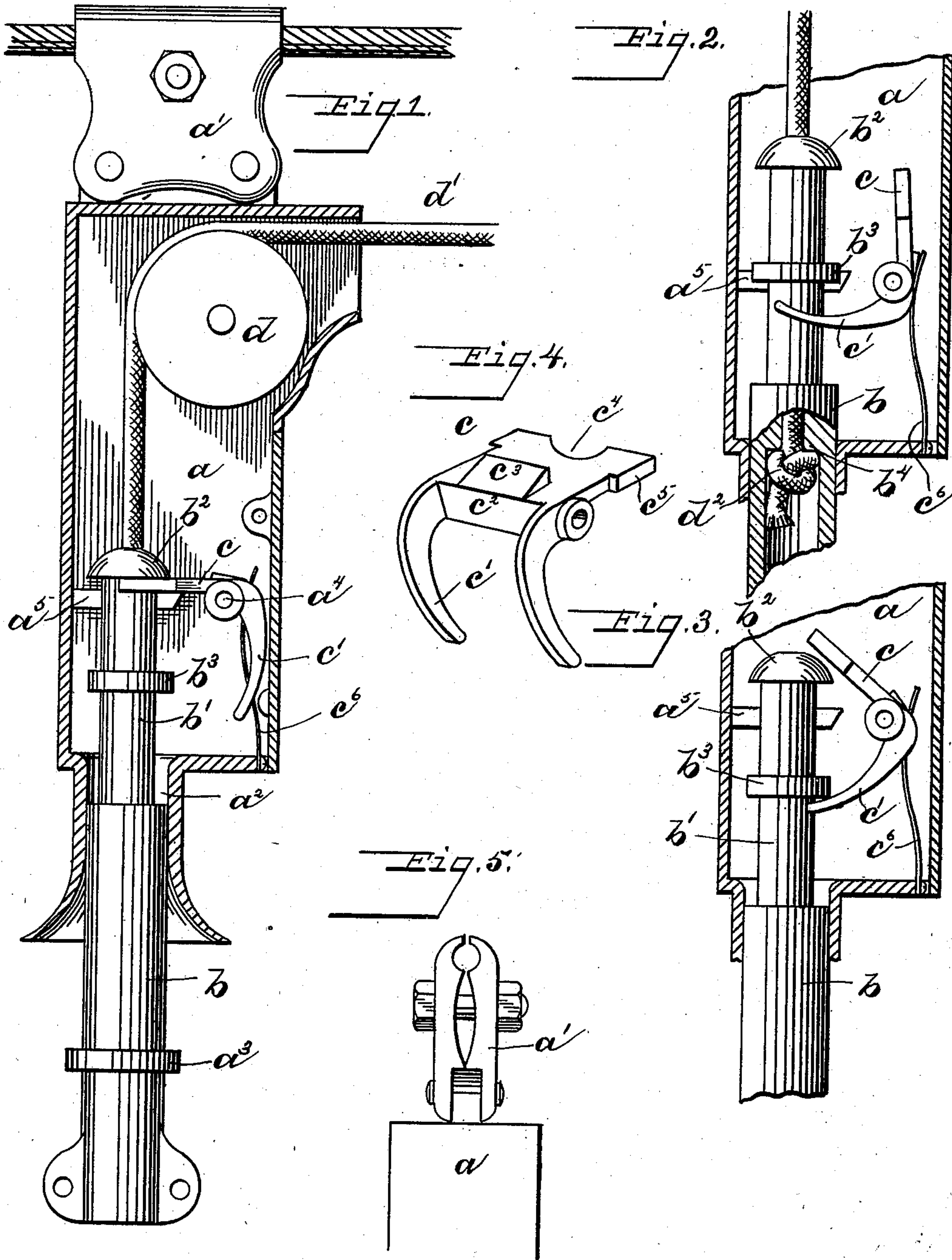
Patented June 10, 1902.

L. POOLE.
ELECTRIC LIGHT HANGER.

(Application filed May 4, 1901.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

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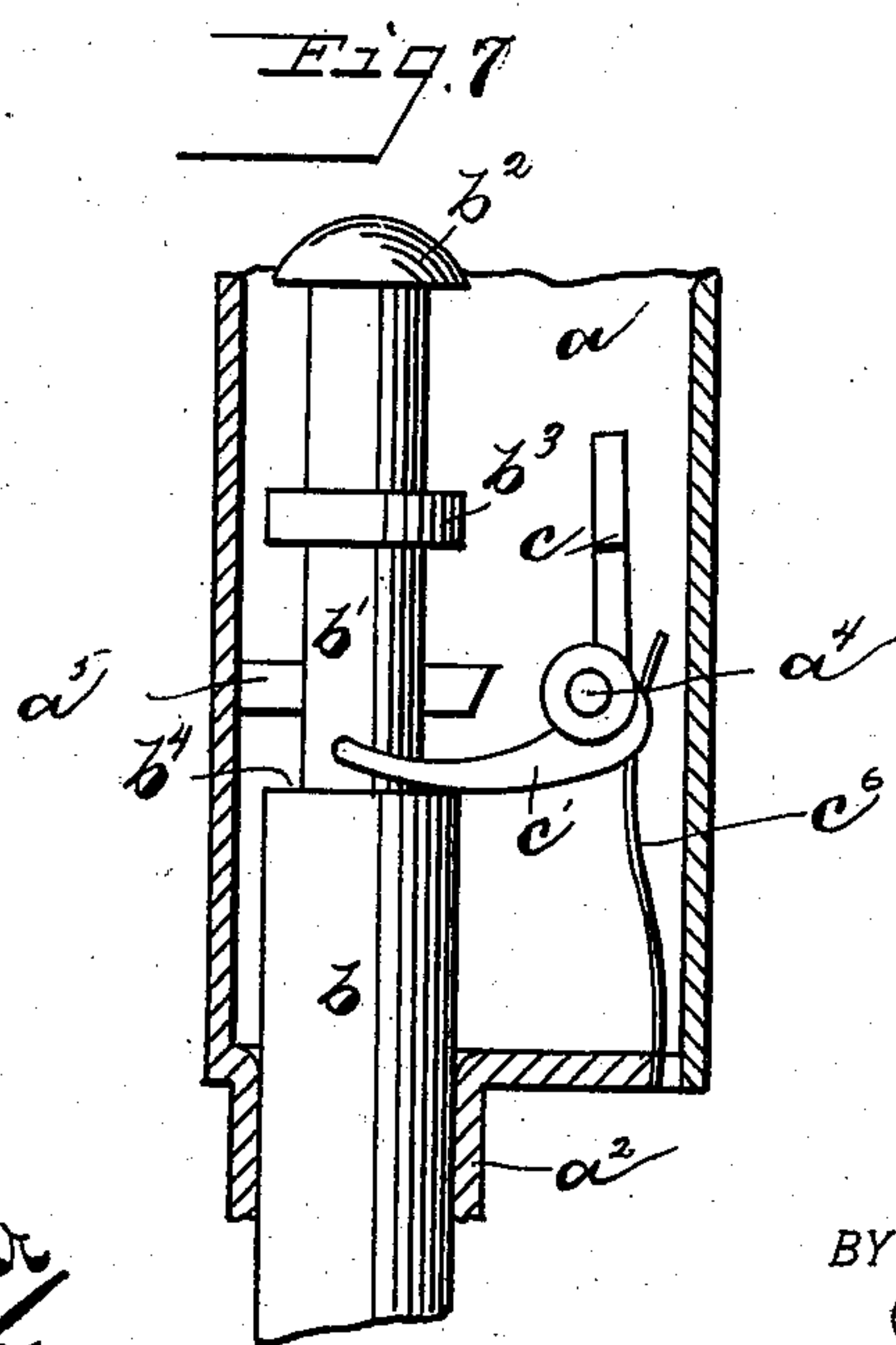
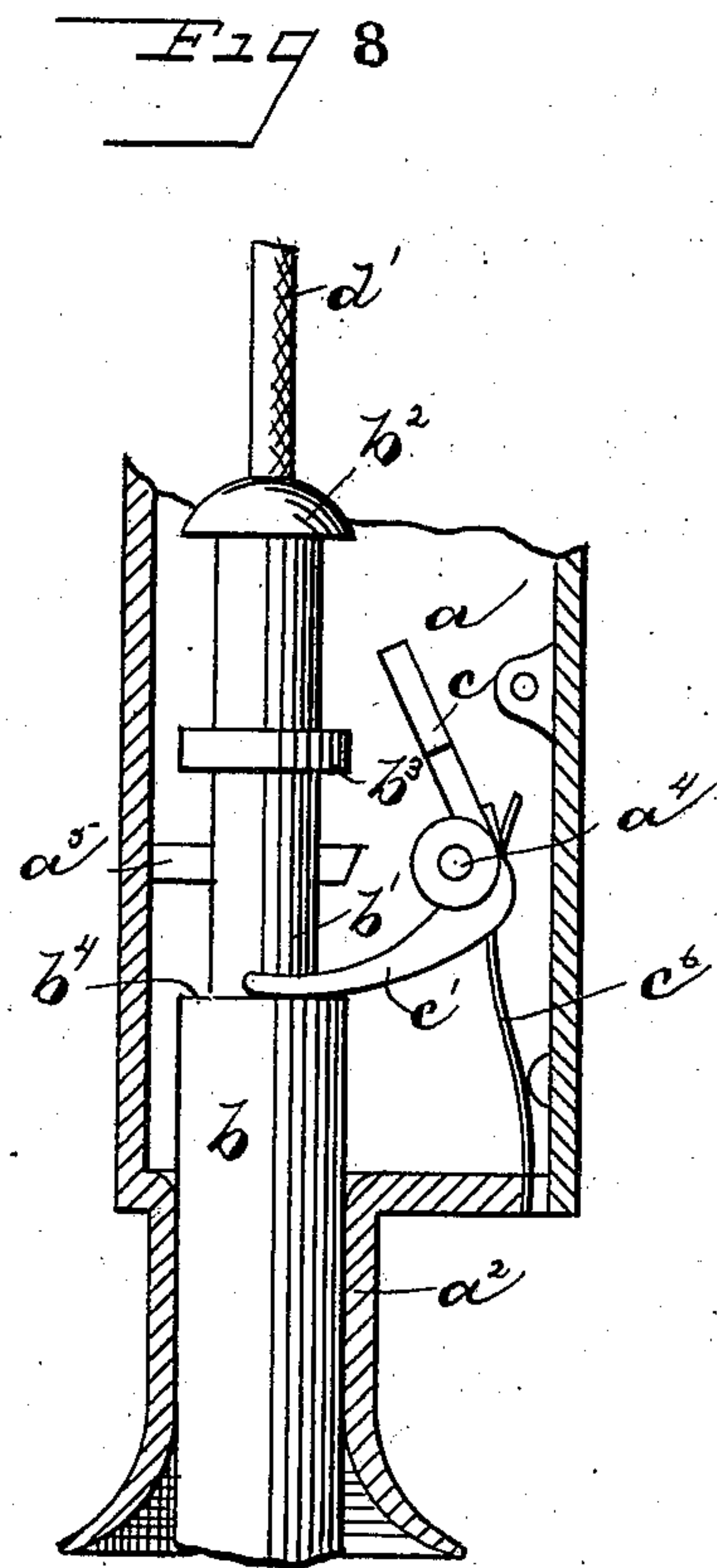
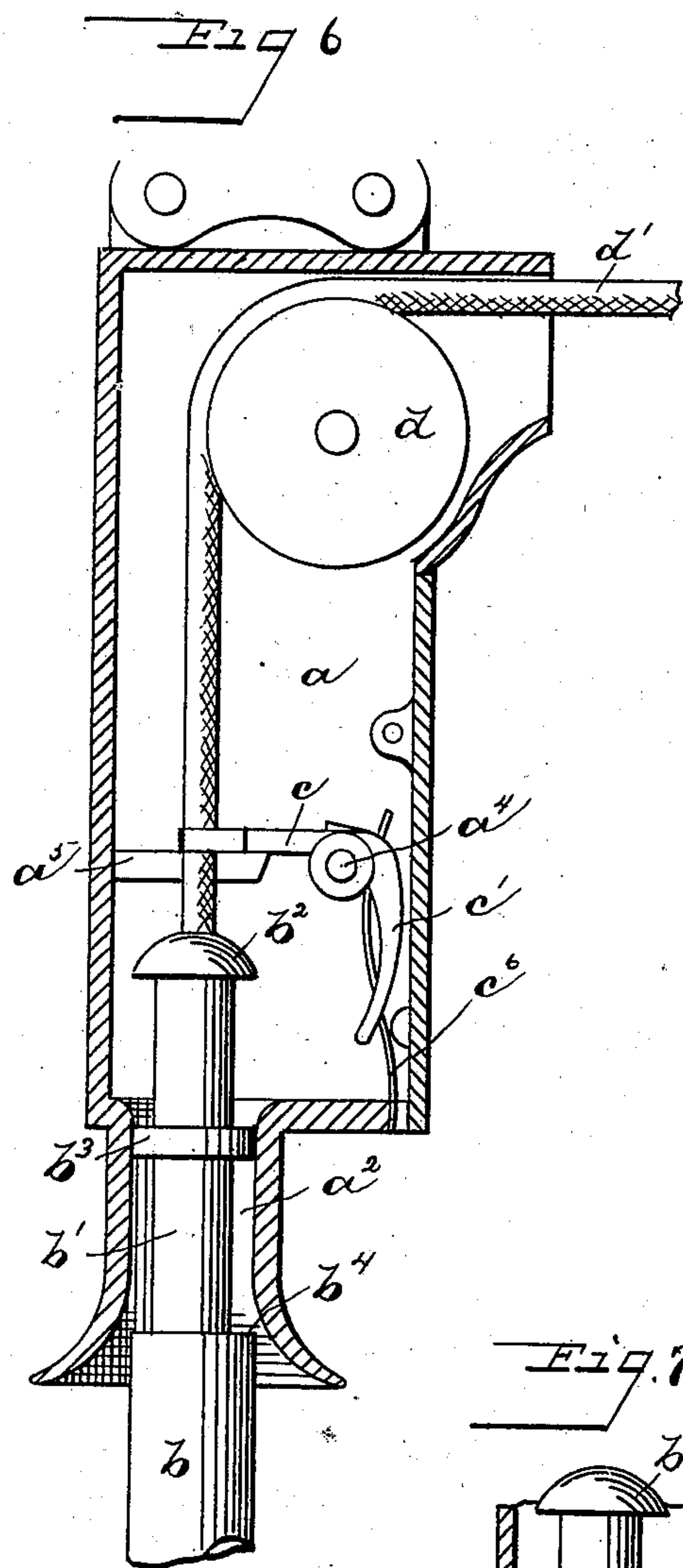
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2 Sheets—Sheet 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

LEMON POOLE, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE ELECTRICAL CONSTRUCTION SUPPLY CO., OF SPRINGFIELD, OHIO, A CORPORATION OF OHIO.

ELECTRIC-LIGHT HANGER.

SPECIFICATION forming part of Letters Patent No. 701,930, dated June 10, 1902.

Application filed May 4, 1901. Serial No. 58,676. (No model.)

To all whom it may concern:

Be it known that I, LEMON POOLE, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Electric-Light Hangers, of which the following is a specification.

My invention relates to improvements in hangers for electric lights, and more especially relates to improved means for locking and unlocking the support for the lamp when it is raised or lowered.

My invention consists in the constructions and combinations of parts hereinafter described, and set forth in the claims.

In the accompanying drawings, Figure 1 is a vertical sectional view of a device embodying my invention, the parts being shown in the position assumed when supporting the light. Fig. 2 is a vertical sectional view of a portion of the same with the supporting device shown thrown in a position to permit the light to be lowered, the lamp having started on its downward movement. Fig. 3 is also a vertical sectional view, showing the position of the parts after the light has been slightly lowered, showing the support being returned to its normal position. Fig. 4 is a detail of the supporting device. Fig. 5 is a detail of a clamp for securing the hanger to its support. Fig. 6 is a vertical sectional view of the device, showing the parts after the lifting-bar has completely cleared the support, the support being shown in its normal position. Fig. 7 is a vertical sectional view of the device, showing the lifting-bar elevated to its extreme position in order to throw the support to the position shown in Fig. 2 to disengage the bar. Fig. 8 is a similar view showing support being moved to its disengaging position.

Like parts are represented by similar letters of reference throughout the several views.

In constructing my device I employ a frame a , attached to an overhead supporting rope or wire by a clamp a' , said frame being preferably closed to protect the operating parts inclosed therein from the weather, with the exception of suitable openings for the lifting rope and bar and a removable side to give

access to the parts. The lower end of the frame I have shown reduced and extended to form the lower opening a^2 , which acts as a guide for a hollow lifting-bar b . This lifting-bar b is formed at its lower half, b' , of suitable size for the opening a^2 and is provided with a collar a^3 to form a stop to limit the movement of the bar into the frame a , any suitable device being employed below this collar for attaching the lamp, perforated ears being shown for the purpose. The upper part of this lifting-bar is reduced, as shown at b' , thus forming a shoulder b^4 . The bar is also provided at its upper end with a head b^2 , preferably hemispherical in form, and between this head and the shoulder b^4 there is formed a collar b^5 , said collar being placed slightly nearer to the head than to the shoulder. The bar thus formed is attached to a rope d' , preferably by the knot d^2 , which rope passes over the pulley d and thence in the usual manner to any convenient point of access for the purpose of raising and lowering the lamp.

Pivoted in the frame, preferably by a bolt a^4 , extending from side to side, is a swinging support c , the pivotal point of said support being to one side of the path of the lifting-bar b , but said support being adapted to extend into the path of said bar and support the same by engagement with its head b^2 , the said support being formed with a rounded recess c^4 , so that the end thereof may conform to the shape of the reduced portion b' of said bar and lie partly around the same, so as to afford a good seat for the head b^2 . Extending downwardly from said support c , near the pivotal end thereof, are two curved fingers or arms c' , said arms c' being adapted to extend on opposite sides of the reduced portion of the lifting-bar when the support c is swung upwardly, so as to contact with the shoulder b^4 or collar b^3 of said bar as the same is raised or lowered. The support c is provided on each side thereof with a shoulder c^5 , which when the support is in its normal position contact with the projections a^3 on the side walls of the frame and form a rest for said support c . The pivoted end of the support c is provided with a face c^2 , against which a

spring c^6 bears to hold said support normally in the position shown in Fig. 1 to engage the lifting-bar. It is also further provided on its upper side with a face c^3 , against which the spring bears when the support stands at right angles to its normal position to hold said support in this position until forced to its normal position again, as will be explained. The spring has such a bearing on the face c^2 , however, that it will always tend to keep the support c in its normal position until said support is swung entirely, or nearly so, to its uppermost position or the position shown in Fig. 2, so that if the support be swung but partly upward by contact with the lifting-bar it will as soon as released be returned to its normal position by the action of the spring.

The operation of the device is as follows: When the lamp is in its elevated or supported position, the parts will be in the position shown in Fig. 1, with the head b^2 of the lifting-bar resting on the support c . To disengage the lifting-bar from said support, so as to lower the lamp, the bar is first pulled upwardly by means of the rope d' until the collar b^3 contacts with the support c and swings the same upwardly sufficiently to throw the projecting fingers or arms in the path of the shoulders b^4 , which, engaging said arms, will force the support to the position shown in Figs. 2 and 7, where it will be held by the spring, as before explained. The lamp may then be lowered, and as the lifting-bar passes downwardly the collar b^3 will contact with the arms c' , thus returning the support c to its normal position, the head b^2 , however, having first cleared said support, as shown in Fig. 3. When the lamp is again raised, the head b^2 , coming in contact with the support, will swing said support upwardly until the head passes the same, when, if the bar be elevated no further, the support will swing back to normal position by the action of the spring, so that the head will engage the same, and thus support the lamp. It will be understood that the head b^2 is only of such size as to swing the support only partly upward before the head passes the support in its upward movement, it requiring the contact of the shoulders b^4 with the arms c' to swing the support to the limit of its upward movement, so as to be held in that position by the spring, as before explained. It will also be understood that the distance from the head b^2 to the collar b^3 is such that as the collar contacts with the arms c' to return the support to normal position the head will be allowed to clear the point of contact before said support reaches its normal or engaging position.

Having thus described my invention, I claim—

1. In an electric-light hanger, the combination, with the lifting-bar, of a pivoted support formed with two bearing-faces, and a spring adjacent to said support and adapted to contact with each of said faces for holding the

support in both engaging and disengaging position with reference to said lifting-bar, substantially as specified.

2. In an electric-lamphanger, the combination, with the frame, and a lifting-bar having a head, collar and shoulder formed thereon and a guide and stop for said bar, of a pivoted spring-pressed support having rigidly-attached laterally-extending arms, and a projection on said frame to limit the movement of said spring-pressed support, substantially as and for the purpose specified.

3. In an electric-light hanger, a lifting-bar provided with a head, a pivoted support adjacent to said bar and adapted to engage said head and thereby support the bar, a device on said bar for swinging said support to disengaging position by slightly raising the bar, and means on said bar for returning the support to its normal or engaging position by lowering said bar after the head has passed below the point of engagement with the said support, substantially as specified.

4. In an electric-light hanger, a lifting-bar provided at its upper end with a head, a shoulder or projection on said bar below said head, and a collar between said head and shoulder, a pivoted support adjacent to said bar adapted to engage said head and thereby support the bar, said support being provided with an extended portion rigidly attached thereto to contact with said shoulder as the bar is slightly raised so as to swing said support from engaging position with said head, said collar being also adapted to contact with said extended portion as the bar is lowered so as to return the support to its normal engaging position after the head has passed below the point of engagement, substantially as specified.

5. In an electric-light hanger, a lifting-bar, a pivoted support adjacent to said bar and adapted to engage the same, means on said bar for swinging said support to disengaging position and a spring for holding said support in said position, said support being adapted, as the lifting-bar is lowered, to be returned to its normal engaging position by said bar after the bar has passed beyond the point of engagement therewith, substantially as specified.

6. In an electric-light hanger, a lifting-bar provided with a head, a pivoted support adjacent to said bar with which said head is adapted to engage, a shoulder or projection on said bar adapted as said bar is raised to contact with said pivoted support and swing the same to disengaging position, and a collar or projection on said bar adapted as the bar is lowered to contact with said pivoted support and return the same to normal position, the distance between said collar and head being such as to permit the head to pass the point of engagement with said support before the said support is returned to its normal or engaging position, substantially as specified.

7. In an electric-light hanger, the combina-

tion of a lifting-bar with a support and means for swinging said support into engaging and disengaging position with reference to said lifting-bar, and a spring for holding said support in engaging and disengaging positions, substantially as specified.

8. In an electric-light hanger, a lifting-bar provided at its upper end with a head, a swinging support adjacent to said bar adapted to engage said head, a projecting arm on said support, a collar on said bar adapted, as said bar is raised, to engage said support and swing said arm in proximity to said bar, a shoulder on said bar adapted, as said bar is further raised, to contact with said arm and swing the support to disengaging position, a spring for holding said support in this position, said collar being adapted, as the bar is lowered, to contact with said arm and return the said support to normal position after the

head has passed the point of engagement with said support, substantially as specified.

9. In an electric-light hanger, a lifting-bar, a swinging support for said bar, a spring for holding said support in either engaging or disengaging positions with relation to said bar, an engaging head formed on said bar adapted to contact with and swing said support a distance which will permit its return by said spring to normal position to engage and hold said head, and means for swinging said support an additional distance to disengaging position and also for returning said support to normal position, substantially as specified.

In testimony whereof I have hereunto set my hand this 1st day of May, A. D. 1901.

LEMON POOLE.

Witnesses:

CHAS. I. WELCH,
CLIFTON P. GRANT.