F. GARRECHT.

EXTENSIBLE ELECTRIC LIGHT FIXTURE.

APPLICATION FILED JULY 30, 1912.

1,066,399.

Patented July 1, 1913.

2 SHEETS—SHEET 1.

Fig. 1.

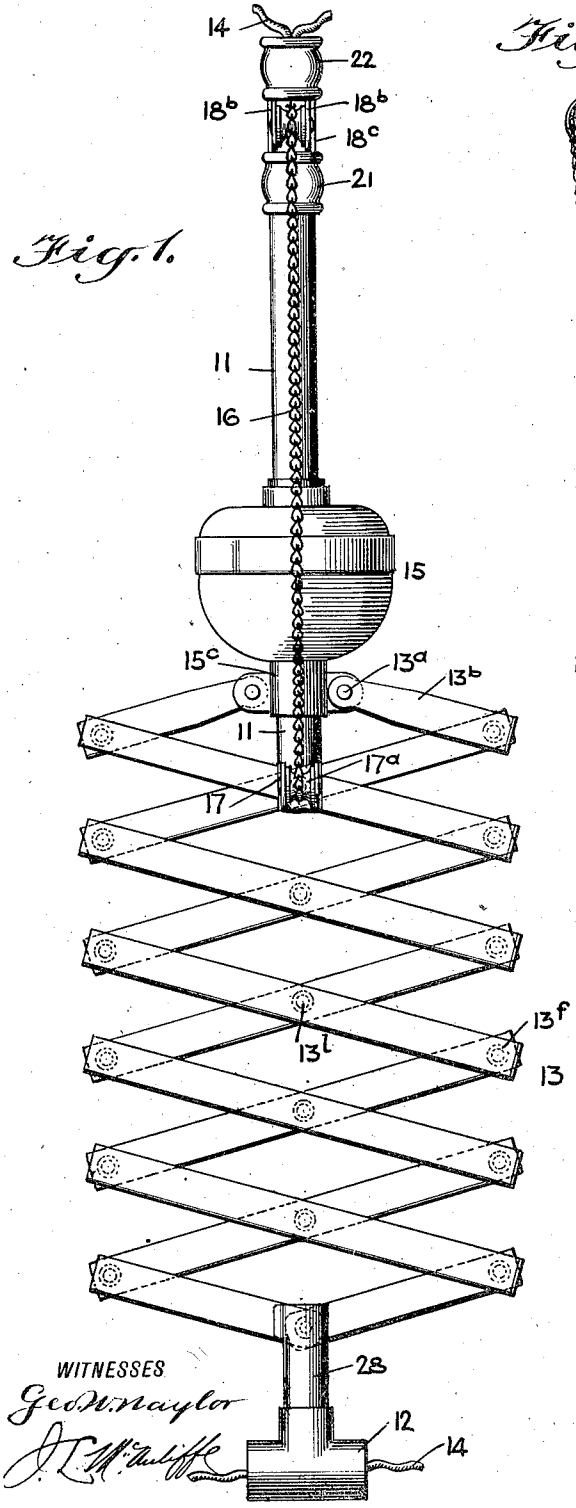
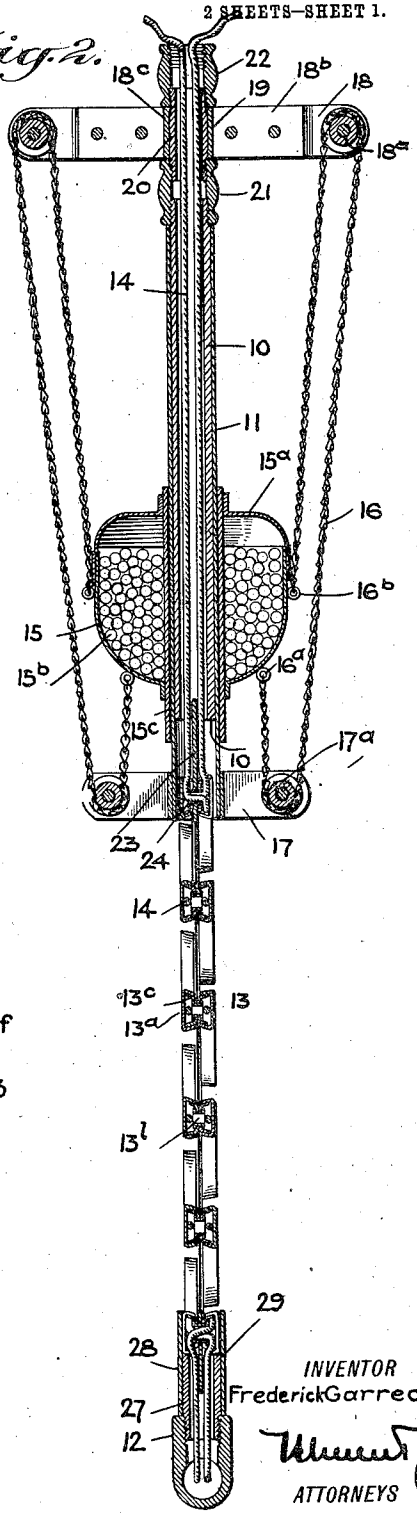


Fig. 2.



WITNESSES

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Fig. 3.

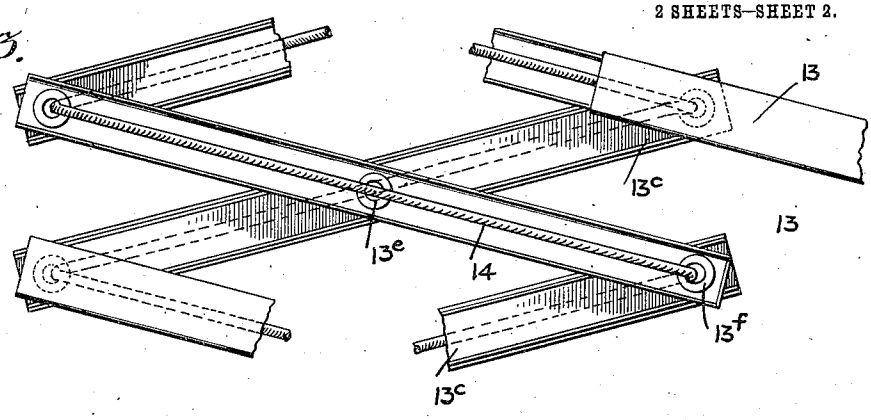


Fig. 4.

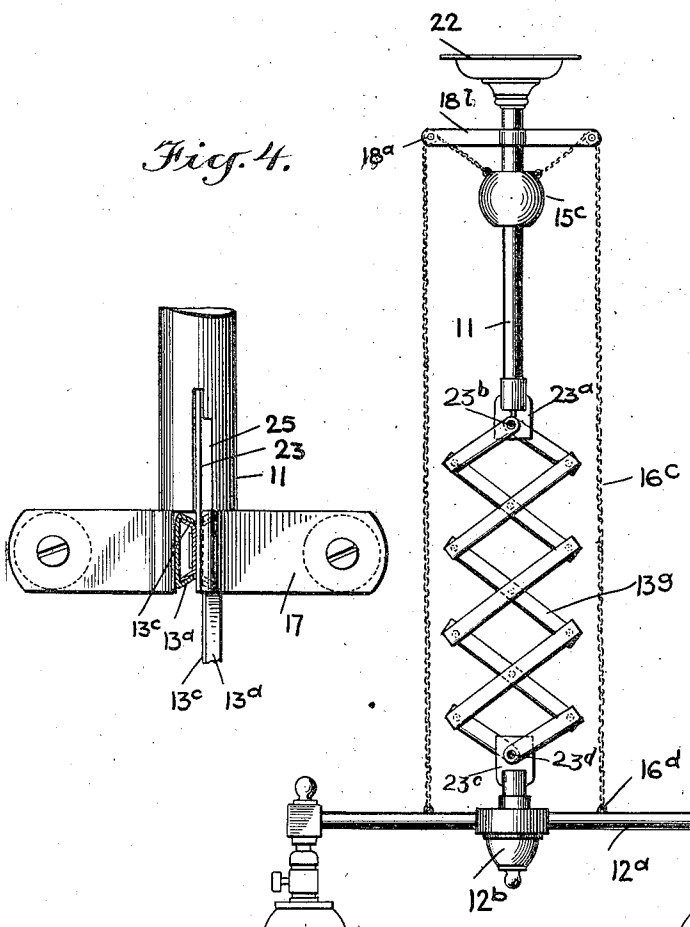


Fig. 5.

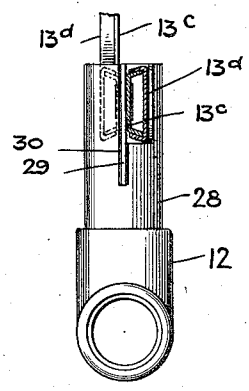


Fig. 6.

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EXTENSIBLE ELECTRIC-LIGHT FIXTURE.

1,066,399. Specification of Letters Patent. Patented July 1, 1913.

Application filed July 30, 1912. Serial No. 712,277.

To all whom it may concern:

Be it known that I, FREDERICK GARRECHT, a citizen of the United States, and a resident of Idaho City, in the county of Boise and State of Idaho, have invented a new and Improved Extensible Electric-Light Fixture, of which the following is a full, clear, and exact description.

My invention relates particularly to suspended electric light fixtures, and objects of my invention are to provide an extensible fixture in which the electric lights are suspended and counterbalanced in a novel manner; to provide for the easy adjustment of the lights to a higher or lower position; to provide for housing and concealing the wires in the extensible elements; and to provide a fixture of the indicated character of a simple construction in which the elements are adapted to be produced in ornamental form.

Other objects of my invention will appear from the particular explanation afforded by the specific description hereinafter to be given.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is an elevation of an extensible electric light fixture embodying my invention; Fig. 2 is a vertical section; Fig. 3 is an enlarged detail view of a portion of the lazy tongs employed in carrying out the invention; Figs. 4 and 5 are details to be hereinafter referred to; and Fig. 6 is an elevation illustrating a different form of the invention.

Referring more particularly to the form illustrated in Figs. 1 to 5, a pipe 10 is provided with a casing 11, and connects with a fitting 12 by lazy tongs 13, the fitting 12 in practice carrying any approved form of bracket arms and lamps. The conductor wires 14 extend through the pipe 10 and through the arms of the lazy tongs 13 in the manner hereinafter explained. The lazy tongs are balanced by a counterweight 15 connected by pivots 13^a with the upper arms 13^b of the lazy tongs 13. In the form shown in Figs. 1 and 2, a lower cross arm 17 is supported at the lower end of the casing 11, and carries pulleys 17^a over which chains 16 run, the said chains at the lower ends being connected as by eyes 16^a with the weight 15. An upper cross arm 18 carries pulleys 18^a over which the chains 16 run, from which pulleys the chains 16 run downward and are connected as by eyes 16^b with the weight 15. In the preferred arrangement, the weight 15 is in the form of a cup having a cover 15^a, the cup receiving shot 15^b, or their equivalent, to vary the weight. The cup is secured to a central tube 15^c that surrounds and slides upon the case 11. The arrangement is such that upon raising or lowering the fitting 12 the arms of the lazy tongs 13 will contract or expand, and the upper arms 13^b thereof will consequently raise or lower the weight 15. The chains 16 during the movement of the weight run freely over the pulleys on the cross arms 17, 18. The upper arm 18 comprises two side plates 18^b, which are given a concavo-convex form at the center, as at 18^c, to embrace a short coupling pipe 20, the lower end of which pipe has threaded connection with the upper end of a coupling 21, the lower end of which coupling has threaded connection with the upper end of the pipe 10. At the upper end of the coupling pipe 20 a second coupling 22 has threaded connection, and is adapted in practice to screw onto a ceiling pipe in the usual manner. The plates 18^a of the upper cross arm 18 are clamped between the upper and lower couplings 21, 22. At the lower end, the main pipe 10 carries a short plate 23, to which the adjacent arms of the lazy tongs 13 are pivotally connected, as by an eyelet 24. The casing 11 at its lower end is formed with slots 25 (Fig. 4) that accommodate the plate 23. The arrangement is such that by uncoupling the member 21 from the pipe 10 the lazy tongs, the plate 23 and the pipe 10, may be drawn downward from the casing 11 for access to the conductor wires 14 at the lower end of the said casing. The conductor wires 14 are housed and concealed within the arms of the lazy tongs. Thus each arm, as shown best in Figs. 2 and 3, is made hollow, consisting of a box 13^c and a sliding cover 13^d. Each box 13^c and its cover 13^d is made dove-tailed, as seen clearly in Fig. 2. The box-like arms of the lazy tongs cross as usual, and are pivoted at the center as at 13^e, and at the ends by eyelets 13^f, and the conductor wires 14 run through the end eyelets 13^f backward and forward

and across each other, following the direction of the arms of the lazy tongs. The fitting 12, which in practice carries the brackets or equivalent fixture and the lamps, is shown in the form of a T, which is threaded to a short nipple 27 surrounding which is a casing 28, and the upper end of said nipple is provided with a plate 29 that extends through slots 30 (Fig. 5), in a manner similar to the plate 23 and slots 25, previously referred to.

In the form shown in Fig. 6, the lower cross arm 17, as previously described, is done away with, and chains 16^c are connected to a sliding weight 15^c; from the weight 15^c the chains extend upward over pulleys 18^d on an upper cross arm 18^e, and then extend downward to a direct connection, as at 16^d, with the electric light fixture 12^a carried by the fitting 12^b, the said fitting having a connection with the lazy tongs 13^g, of essentially the form previously described. The upper end of the lazy tongs is suspended from a ceiling fixture 22^a of any approved design, by a pipe the same as previously described, the pipe having a housing 11, the connection between the suspended pipe and the lazy tongs being effected as by a plate 23^a. The upper arms of the lazy tongs extend on opposite of the plate 23^a, and are united to the plate and to each other by an eyelet 23^b. Similarly, the lower arms of the lazy tongs are united to a plate 23^c, by an eyelet 23^d.

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

1. An extensible electric light fixture, comprising a fitting for carrying the lights, a lazy tongs carrying said fitting, and means for suspending said lazy tongs, said lazy tongs comprising box-like arms having movable covers, said box-like arms being adapted to receive and conceal the conductor wires.

2. An extensible electric light fixture, comprising a fitting for carrying the lights, a lazy tongs carrying said fitting, suspension means for said lazy tongs, including a pipe having means for suspending the same, the arms of the lazy tongs being of box-like form and each having a sliding cover, the cover and the body of the arm being dovetailed in cross section.

3. An extensible electric light fixture, comprising a fitting adapted to carry the electric lights, a lazy tongs, suspension means for said lazy tongs and connected with the upper end thereof, said suspension means including a pipe to receive the conductor wires, an arm in fixed relation to the pipe, a sliding tubular weight surrounding said pipe, pulleys on the cross arm, and flexible elements connected with said weight running on the said pulleys and having connection with members movable as the lazy tongs are contracted or expanded.

4. An extensible electric light fixture, comprising a pipe adapted to receive conductor wires, means for suspending said pipe, a lazy tongs, a fitting adapted to carry electric lamp-supporting means, means for connecting said lazy tongs with the mentioned pipe and fitting, said means including a plate carried by said pipe, and a plate carried by said fitting, said pipe and said fitting having casings formed with slots in which the respective plates mentioned are received.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

FREDERICK GARRECHT.

Witnesses:

J. A. LIPPINCOTT,

WM. WARNER.