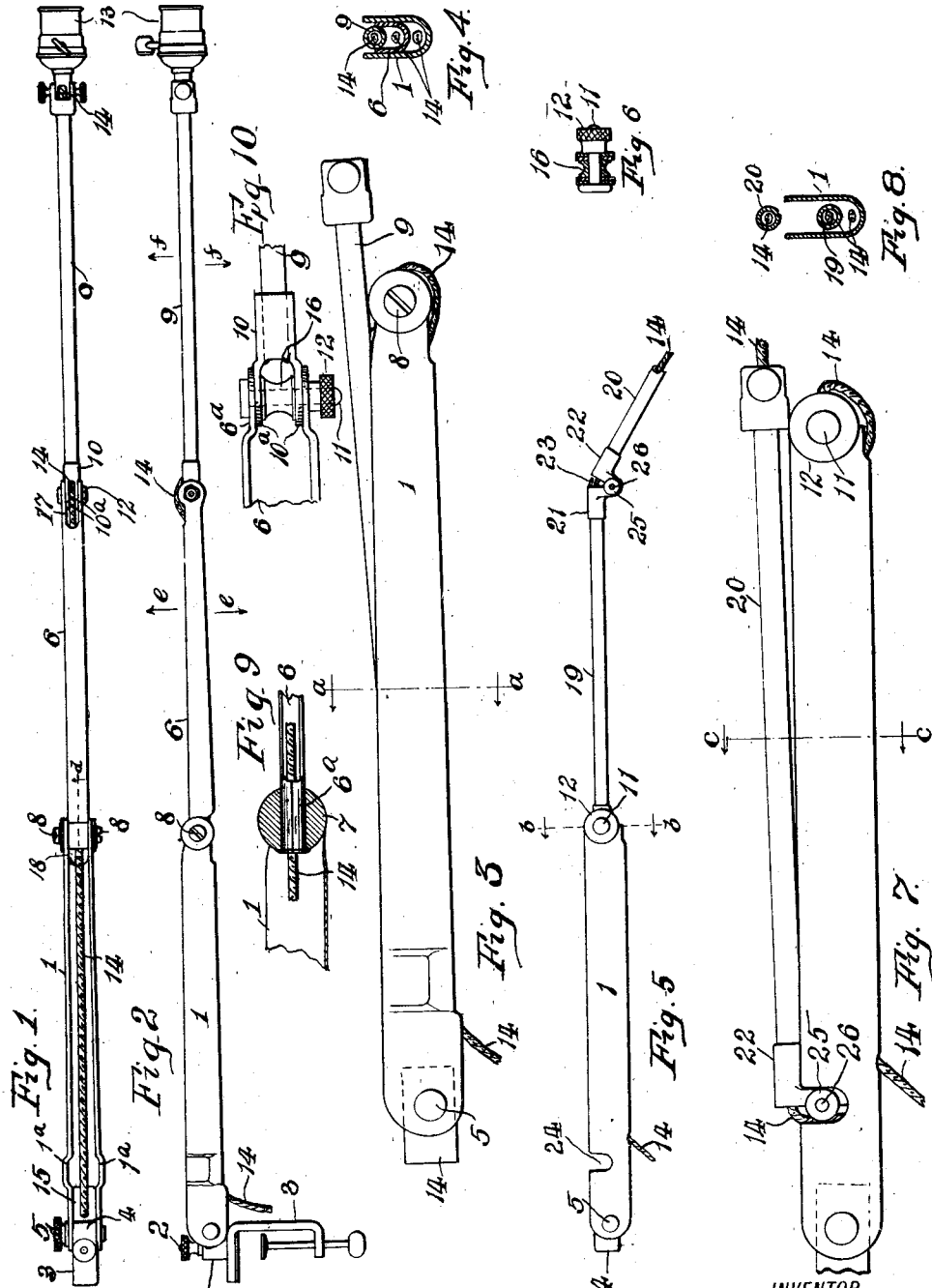


F. L. ELLIS.
EXTENSIBLE ELECTRIC LIGHT BRACKET.
APPLICATION FILED JULY 17, 1911.

1,030,987.

Patented July 2, 1912.



WITNESSES:

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UNITED STATES PATENT OFFICE.

FREDERICK L. ELLIS, OF MILLDALE, CONNECTICUT.

EXTENSIBLE ELECTRIC-LIGHT BRACKET.

1,030,987.

Specification of Letters Patent.

Patented July 2, 1912.

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To all whom it may concern:

Be it known that I, FREDERICK L. ELLIS, a citizen of the United States, residing at Milldale, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Extensible Electric-Light Brackets; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in extensible electric light brackets, and it consists in certain details of construction to be more fully set forth in the following specification.

Referring to the drawings wherein similar letters and figures of reference indicate like parts throughout the several views: Figure 1 represents the bracket arms fully extended showing the second arm reversed so as to fold into the first arm; Fig. 2 is a side elevation of Fig. 1; Fig. 3 is an enlarged view representing the arms folded; Fig. 4 is a cross-sectional view on line *a a* of Fig. 3; Fig. 5 is a broken modified construction; Fig. 6 is a cross-sectional view on line *b b* of Fig. 5; Fig. 7 is an enlarged folded side elevation of the bracket shown at Fig. 5; Fig. 8 is a cross-sectional view on line *c c* of Fig. 7; Fig. 9 is an enlarged broken view of the first and second arms of the construction shown at Figs. 1 and 2, and a sectional view of the first joint on line *d* of Fig. 2; and Fig. 10 is an enlarged broken view of the second and third arms and the joint connecting them.

In all the views the first arm 1 is alike in construction, being made of sheet metal U-shape in cross-section, and is adapted to be pivotally supported on the pintle 2 of the bench clamp 3, through the medium of the block 4 embraced by the sides of the arm 1 and the retaining bolt 5, said block having a hole (not shown) therethrough adapted to rotatably embrace the pintle. The next arm extension 6 is also of sheet metal U-shape in cross-section similar to the first arm, but smaller. The joint connecting these arms comprises the cylindrical block 7 embraced by the forked end of the arm 1. This block is rotatably held within such forked end by the screws 8 journaled therein. This permits a movement of the second arm extension

in the direction of arrows *e*, Fig. 2. This second arm extension also has a rotative movement in the block 7, Fig. 9, by means of its folded tubular end 6^a, being journaled in a central hole extending through said block at right angles to the axis on which said block rotates. The outer end of this tubular portion is headed over as shown to maintain the arm 6 in working relation with the block 7. The third arm extension 9 is a tube whose outer end is rotatably journaled in the tubular end of the forked head 10 shown more clearly at Fig. 10. The forked end 10^a of this head is embraced by the forked end 6^a of the arm 6, each having a rotative movement on the bolt 11 in the direction of arrows *f*, Fig. 2, and are held in working relation by the nut 12. The outer end of arm 9 is secured to the lamp socket 13 in the usual manner of bracket of this kind. The cord conductor 14 enters through the opening 15, Fig. 1, at the rear end of arm 1 and is carried along said arm and through the tubular end 6^a of arm 6, and along said latter arm over the grooved pulley 16, Figs. 1 and 2, and through the tubular arm extension 9 to the lamp socket. The channel or U-shaped construction of the arms 1 and 6 enables the latter to be folded into the former, as shown at Figs. 3 and 4, and the major part of the small third extension will also lie within the embrace of the other U-shaped arm extensions. The outer ends of the arms 1 and 6 cut away at 17 and 18 to give freedom to the cord conductor when the arms are extended, and avoid pinching said cord when the arms are folded. It will be understood that all of the arm extensions could be made U-shape in cross-section, but it is essential to my improved bracket that the first arm extension must be of this construction to receive the other extensions when the device is folded. The construction above described is not only capable of movement in several directions, viz.; laterally on the pintle 2, whether the bracket is closed or extended, and at right angles to such lateral movement on the part of the second and third arm extensions, and a rotatable movement of said second and third extensions.

The construction shown at Fig. 5 has the same U-arm 1, while the extensions 19 and 20 are of tubular or pipe construction. The

first joint pivotally connecting arm 1 with arm 19 being the same as that shown at Fig. 10 will be designated by the same figures of reference. The arm 19 is journaled to have a rotary movement the same as arm 9 shown in the other views. 21 is a head on the forward end of arm 19 jointed on the underside to the head 22 on the arm 20. 23 is a curved tongue projecting from the interior of the head 21 and overlying the cord conductor to act as a shield and guide to prevent the cord getting caught between the meeting faces of the joint when the arms are unfolded or extended. To facilitate folding of the tubular extensions 19 and 20 into the arm 1, the notch 24 is formed in opposite sides of the arm 1 and near the rear end to receive the nut 25 of the bolt 26 and also the head (not shown) for the bolt. The bulge 1^a, Fig. 1, in the sides of the arm 1 serves a similar purpose for the reception of the second joint of the extension bracket.

Having thus described my invention, what I claim is:—

1. A bracket of the character described comprising a pivotally supported arm U-shape in cross-section, arm extensions having a rotatable jointed connection with the initial or U-shape arm and adapted to be folded therein.

2. A jointed bracket of the character described comprising an arm U-shape in cross-section, tubular sections jointed thereto and adapted to fold therein, and a cord shield between the tubular joint to protect and guide the cord when the tubular sections are opened.

In testimony whereof I affix my signature in presence of two witnesses.

FREDERICK L. ELLIS.

Witnesses:

ROBERT J. HURD,
JAMES FEELEY.