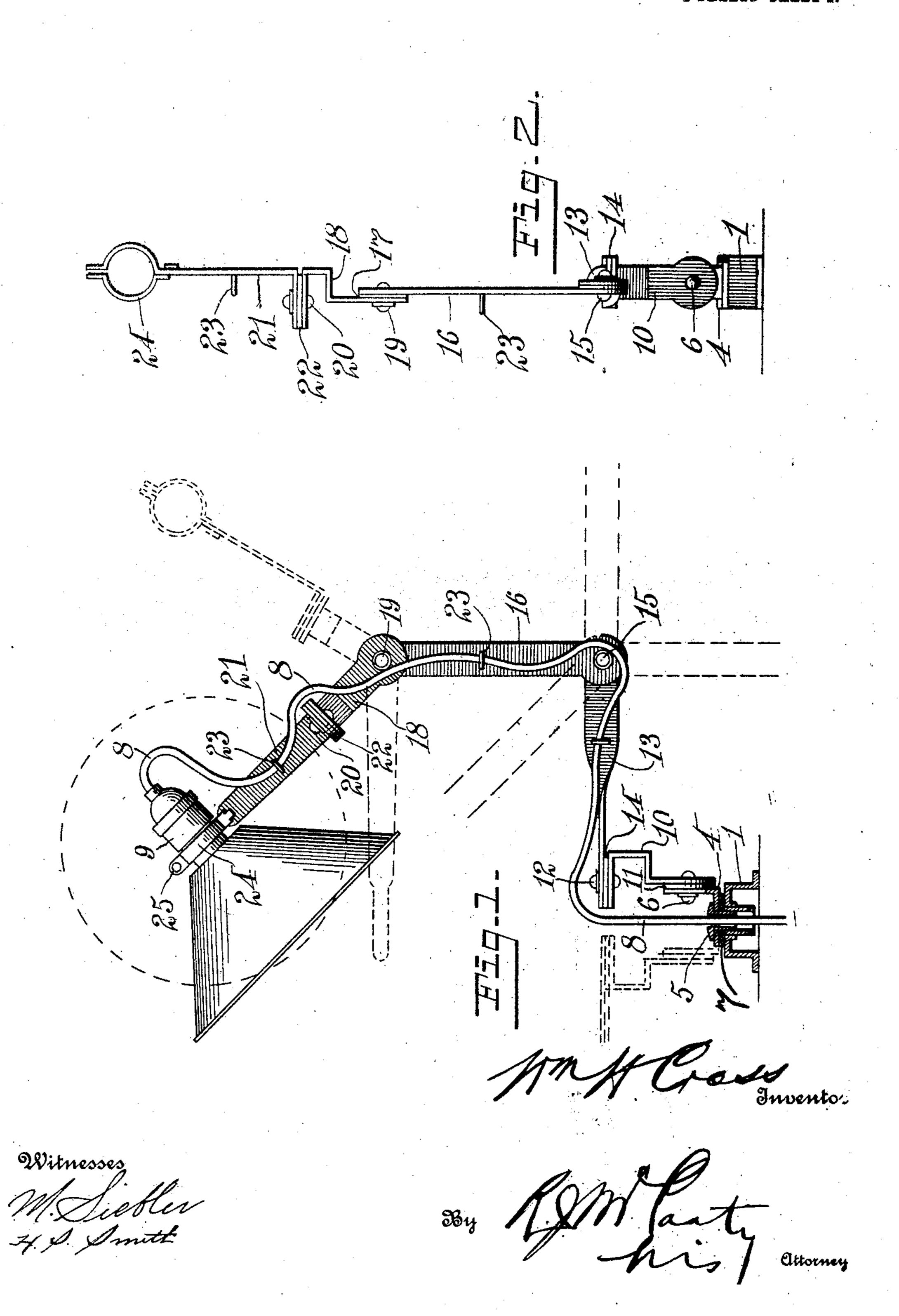
W. H. CROSS. LAMP BRACKET. APPLICATION FILED FEB. 13, 1911.

992,756.

Patented May 23, 1911.



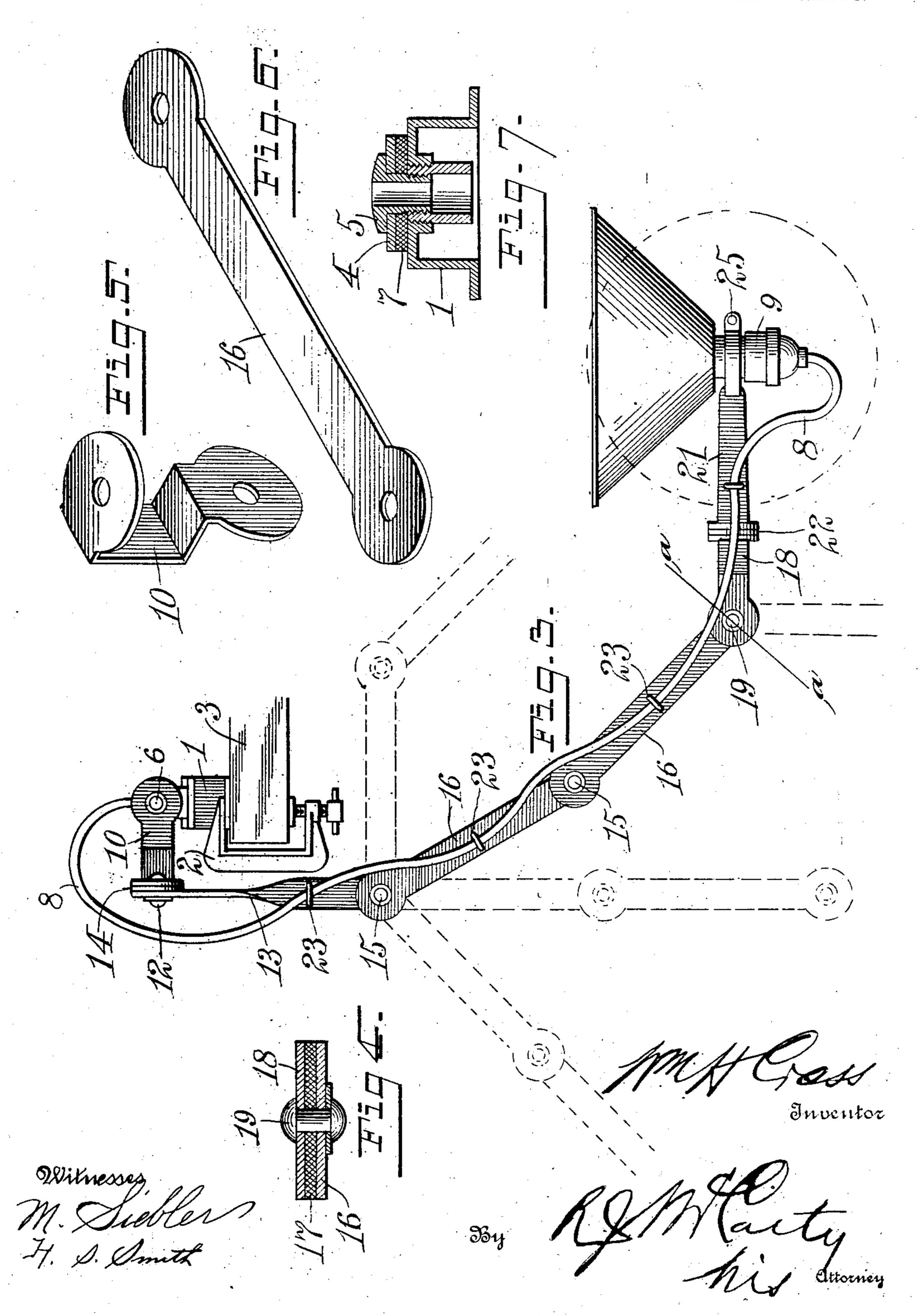
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UNITED STATES PATENT OFFICE.

WILLIAM H: CROSS, OF DAYTON, OHIO.

Specification of Letters Patent. Patented May 23, 1911.

Application filed February 13, 1911. Serial No. 608,286.

To all whom it may concern:

Be it known that I, WILLIAM H. Cross. a citizen of the United States, residing at Dayton, in the county of Montgomery and 5 State of Ohio, have invented certain new and useful Improvements in Lamp-Brackets; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specifi-15 cation.

This invention relates to a bracket for use. about machines such as lathes, screw and

milling machines etc.

The usefulness of the bracket is not con-20 fined alone to machine shops, but in dental offices and for performing surgical operations it is equally serviceable as a means for directing the rays of artificial light on any of the numerous angles to which the bracket 25 may be adjusted. In machine work it is often necessary to throw the rays of light in directions impossible with the usual lamp supports.

It is therefore the object of this invention 30 to provide an adjustable lamp-supporting bracket capable of supporting a lamp at any position within numerous circles, some lying at right angles to each other and

others parallel to each other.

35 In the accompanying drawings, Figure 1 is a side elevation of my improved lamp bracket, the dotted lines showing some of the positions of adjustment; Fig. 2 is an edge elevation looking at a right angle to 40 Fig. 1 with the lamp removed; Fig. 3 is a side elevation showing the bracket extended and adjusted to a position to throw the light upward from a point below the base; Fig. 4 is an enlarged sectional view showing one 45 of the several joints, for example, on line a—a of Fig. 3; Fig. 5 is a detached view, in perspective, of a duplex swivel member; Fig. 6 is a detached view of one of the swivel link connections; and Fig. 7 is a sec-50 tional elevation of the base. In a detailed description of the invention,

similar reference characters indicate corresponding parts in both the description and drawings.

The base member 1 may serve as a stand to support the arm members constituting tween the adjacent parts of pivot 20. The

the bracket without being attached itself, or said base member may be more permanently secured in its position by a clamp 2 which is instrumental in rigidly uniting the 60 lamp bracket to a work bench 3 or other place where it is desired to use the lamp. Mounted upon this base member 1 is the first swivel member 4 consisting of two parts lying at right angles and provided with 65 similarly lying pivots 5 and 6. Inclosed between the lower angle of said swivel member 4 is a suitable friction piece 7 consisting of a leather washer held in position by the apertured screw which forms the verti- 70 cal pivot 5 upon which the lower swivel member 4 turns. The electric conductor or wire 8 passes through the opening in the pivot 5 to the lamp 9. The plane of the movement of the swivel member 4 is hori- 75 zontal to any position within a complete circle. 10 designates a second swivel member so formed to bring the pivot apertures therein at right angles to each other. One of these apertures receives the pivot 6, thus 80 uniting the two swivel members 4 and 10. Inclosed between the two adjacent faces of the pivoted parts of these two members is a leather friction washer 11 similar in all respects to the washer 7 and acting to pro- 85 duce a sufficient force to maintain the swivel member 10 in any position within practically a half circle to which it may be adjusted. The upper portion of this swivel member 10 lies horizontally to bring the 90 pivot 12 thereof vertically to receive the apertured end of an arm or extension link 13. Between the adjacent parts at the pivot 12 is placed a leather friction washer 14 similar to the other washers mentioned. 95 The extension link 13 may be moved horizontally on the pivot 12 to any position within a circle. The said link 13 is formed to receive at its outer end a horizontal pivot 15 which connects an extension arm or link 100 16 with a leather friction washer 17 interposed between the pivoted ends. This extension link 16 supports a further duplex swivel member 18 similar in substantial respects to the swivel member 10, and pro- 105 viding two apertures for horizontal and vertical pivots 19 and 20 which provide for the connection of an extension link 21 which is movable on the vertical pivot 20 to any position with a circle of movement. A 110 leather friction washer 22 is inclosed be-

conductor 8 is carried along these extension links and swivel members through eyes 23 arranged at suitable points. It is obvious that the universal joints thus described may 5 be multiplied beyond what is shown and described, and the bracket extended without in the least changing the functions or mode

of operation of the bracket.

It has been attempted, in the drawings, to 10 show the multitude of positions to which the lamp may be adjusted, but it is impossible within the scope of a drawing to illustrate the great many different angles at which the light may be placed. In machine 15 work it is often desirable in certain classes of work, to have the rays of light thrown from a variety of points, with this universal bracket such is possible. The light may be thrown from above the machine or from below it. It meets all the requirements of machine shop work, or any other work. The lamp 9 is held at the extreme end of the top extension link 21 by a suitable clamp 24 which is tightened by a screw 25.

Having described my invention, I claim: 25 A universal lamp bracket comprising a duplex swivel member 10 providing upper and lower vertical and horizontal pivots, a base swivel member 4 connected to said swivel member 10 by the horizontal 30 pivot, a base 1 providing a vertical pivot for said member 4, extension links 13 and 16 pivoted to each other and to the swivel member 10, a duplex swivel member 18 pivoted to the upper end of the extension link 35 16, and a lamp-supporting link 21 pivoted to the duplex swivel member 18, the pivotal connections between said duplex swivel 18 and the extension links 16 and 21 being vertical and horizontal, substantially as 40 specified.

In testimony whereof I affix my signa-

ture, in presence of two witnesses.

WILLIAM H. CROSS.

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R. J. McCarty, Howard S. Smith.