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ADJUSTABLE SEWING MACHINE LIGHT

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Fig. 1

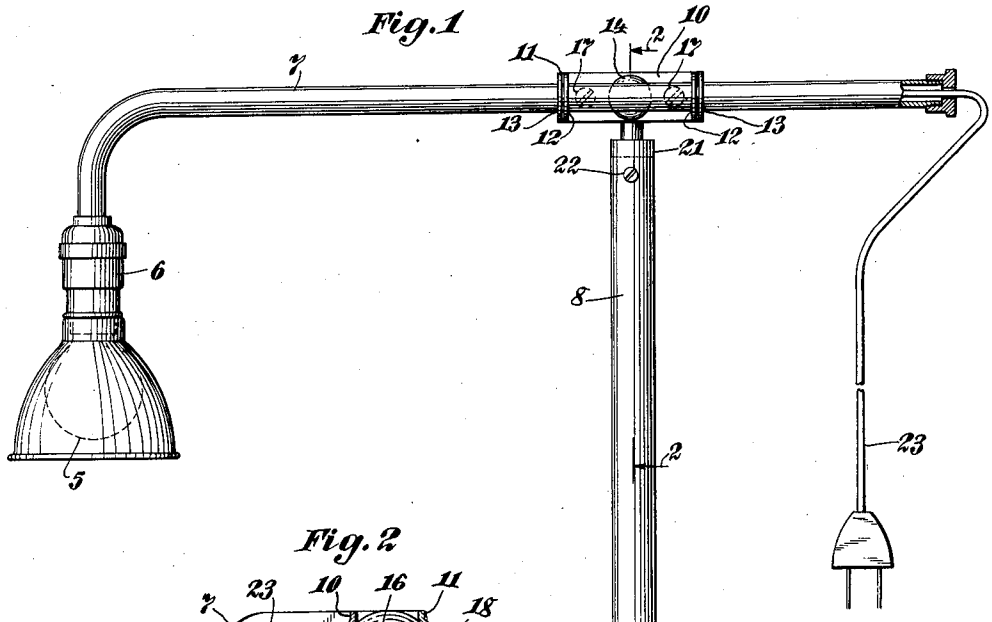


Fig. 2

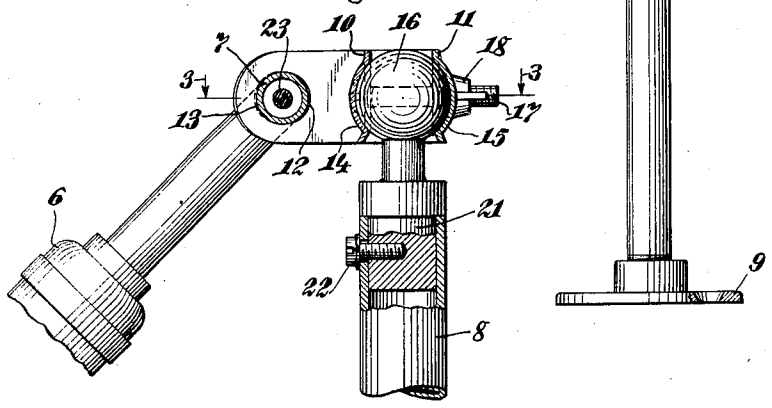
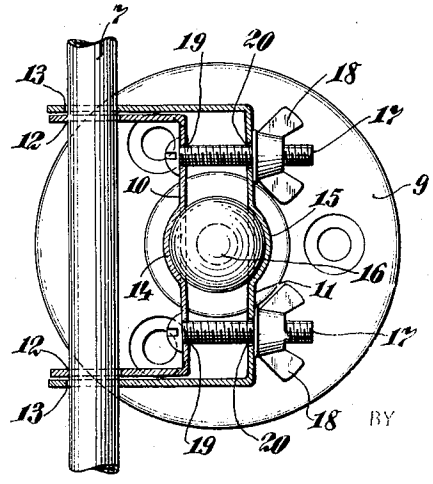


Fig. 3



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ADJUSTABLE SEWING MACHINE LIGHT

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5 Claims. (Cl. 248—122)

The invention here disclosed relates to lights for sewing machines and the objects of the invention are to provide a universally adjustable form of light which can be quickly adjusted and secured in practically any desired position, which will hold securely in the position in which it has been set, which will not become loosened or released from vibration of the machine and which with all such advantages will be of simple, inexpensive construction and thoroughly practical in every way.

Additional objects and the novel features of construction, combination and relation of parts by which all objects are attained are set forth or will appear in the course of the following specification.

The drawing accompanying and forming part of the specification illustrates a commercial embodiment of the invention, but it should be understood that structure may be modified and changed as regards such illustration, all within the true intent and broad scope of the invention as hereinafter defined and claimed.

Fig. 1 is a broken part sectional front elevation of one of the lighting attachments.

Fig. 2 is an enlarged broken sectional detail as on substantially the plane of line 2—2 of Fig. 1.

Fig. 3 is a broken sectional view as on line 3—3 of Fig. 2.

In the form of the invention illustrated, the lamp 5, is carried by a socket 6, on the angularly bent end of a tubular lamp carrying arm 7, and this arm is secured in variously adjusted relations by a special form of clamp adjustably secured on the upper end of a post or pedestal 8, having a base 9, for mounting it on the table of the sewing machine.

The special clamp consists of two interfitting U-shaped members 10, 11, slidably engaged one within the other as indicated in Fig. 3, with the sides of the same in substantially parallel relation and having openings 12, 13, therethrough for the lamp carrying arm and with the opposed back portions of the same formed with partly spherical seats 14, 15, for the ball head 16, on the upper end of the post.

Screws 17, extending through the back portions of the U-pieces at opposite sides of the ball socket with wing nuts 18, provide a means for securing the clamp in adjusted relation on the ball head and for setting the clamp in gripping engagement with the lamp tube.

This double clamping action will be clear from Fig. 3, where it will be seen that tightening the wing nuts 18 will bring the back portions of the U-shaped clamped jaws together over the ball head between the same and that in such clamping movement, the perforated jaw portions of the clamp members will be forced in opposite directions, that is, the outer jaws with openings 13, toward the left in Fig. 3. and the inner jaws with perforations 12, toward the right in that view. The opposite travel of the two sets of jaws causes such jaws to clamp the pipe at separated points at opposite sides of the ball head center.

Usually the U-shaped clamp pieces are made of relatively thin and more or less springy sheet metal, which will bend readily under the force of the clamping screws to firmly grip the ball head and to rigidly clamp the lamp tubing.

Upon loosening the wing nuts, the U-members will release their grip on the ball head and their hold on the tubing, permitting the clamp to be then shifted about to any desired angle and permitting the lamp tubing to be both slid longitudinally and rotated in different angular relations. These adjustments may usually be made by simply taking hold of the lamp, once the clamp is loosened and locating it in the desired position, where it will then be held upon simply tightening the wing nuts. The straining or bending of the clamp members places these members under more or less spring tension, which has the effect of preventing the parts from becoming loose even under severe conditions of vibration.

To prevent the screws from turning, when the wing nuts are tightened or loosened, said screws may be set tight in screw seats 19, in the inner clamp plate and pass loosely through openings 20, in the outer clamp plate. When the parts are tensioned by tightening the wing nuts, the screws, through the bend imparted to the plate, become all the more firmly held against turning in the screw seats.

The ball head 16 is shown carried by plug 21, seated in the upper end of tubular post 8, and held by a screw 22. The elongated and reduced neck portion 23, supporting the ball head, permits the clamp to be rocked to extreme angular positions.

The electric supply cord 23 for the lamp is shown as extended through the tubular lamp carrying arm, so as not to interfere with adjustment of the arm for its full length within the jaws of the clamp.

What is claimed is:

1. An adjustable lamp support, comprising in combination with a lamp carrying arm, substan-

tially U-shaped brackets disposed one within the other, with the back portions of the same in opposition and provided with opposed ball seats, the sides of said brackets having openings receiving said lamp carrying arm, a ball head engaged by said ball seats and screw means for adjustably securing the back portions of the brackets together over said ball head.

2. An adjustable sewing machine light, comprising a lamp carrying arm, substantially U-shaped clamp members disposed one within the other and having opposed back portions and side arms with openings receiving said lamp carrying arm, a support interposed between said back portions and screw means for adjustably drawing said back portions together at opposite sides of said interposed support.

3. An adjustable sewing machine light, comprising a lamp carrying arm, substantially U-shaped clamp members disposed one within the other and having opposed back portions and side arms with openings receiving said lamp carrying arm, a support interposed between said back portions, screw means for adjustably drawing said back portions together at opposite sides of said interposed support, said screw means including screws held non-rotatably in said inner back member and clamp nuts on said screws over said outer back member.

4. In a sewing machine light, the combination of a supporting ball head, clamp plates at opposite sides of said ball head, screws securing said clamp plates together at opposite sides of said ball head, said clamp plates having angularly extending arms at the ends of the same with openings therethrough and a lamp carrying tube slidingly and rotatably adjustable in said openings, said clamp plates being bendable under the strain of said screws to grip the ball head and lamp tube under tension.

5. An adjustable sewing machine light, comprising substantially U-shaped clamp members of springy sheet material disposed one within the other with the back portions of the same in opposition and the side arms of the same in overlapping relation, said side arms having openings therethrough substantially registering in an untensioned condition of the clamp members, a lamp carrying arm extending through said opening in the overlapping side arms of the substantially U-shaped clamp members longitudinally and rotatably adjustable therein in the untensioned relation of said clamp members, a support interposed between the opposed back portions of the clamp members and means connecting said opposed back portions at opposite sides of said interposed support adjustable for springing said back portions together in clamping engagement on the interposed support and for effecting consequent relative displacement of said overlapping side arms of said clamp members to clampingly engage and hold the lamp carrying arm extending through the openings in said side arms.

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