Oct. 15, 1940. W. L. GERBER, JR 2,217,863

SEWING MACHINE LIGHTING ATTACHMENT

Filed Dec. 22, 1937

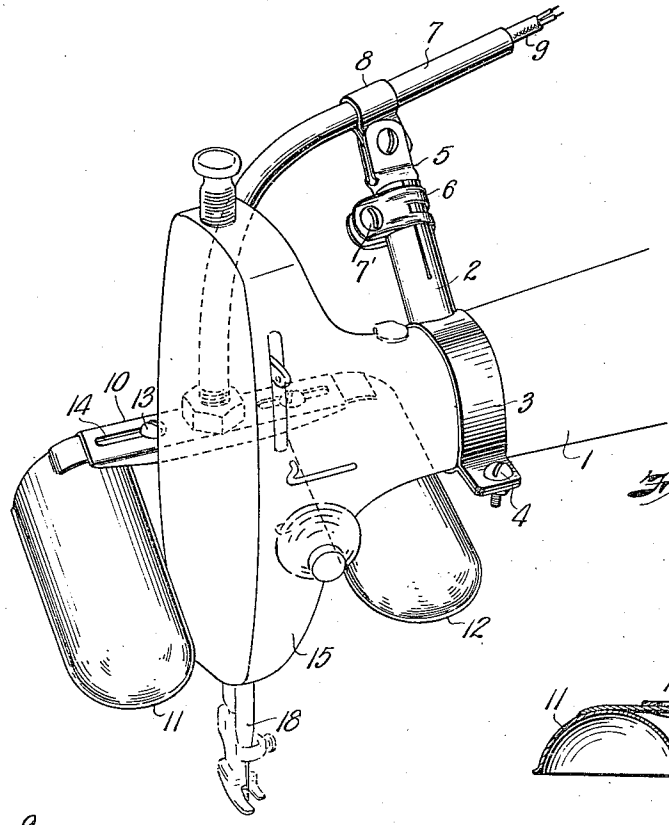


Fig. 1.

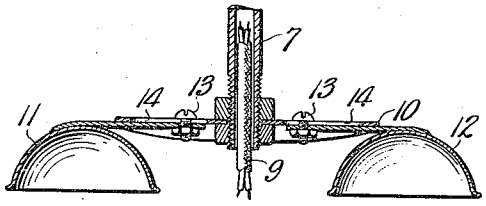


Fig. 3.

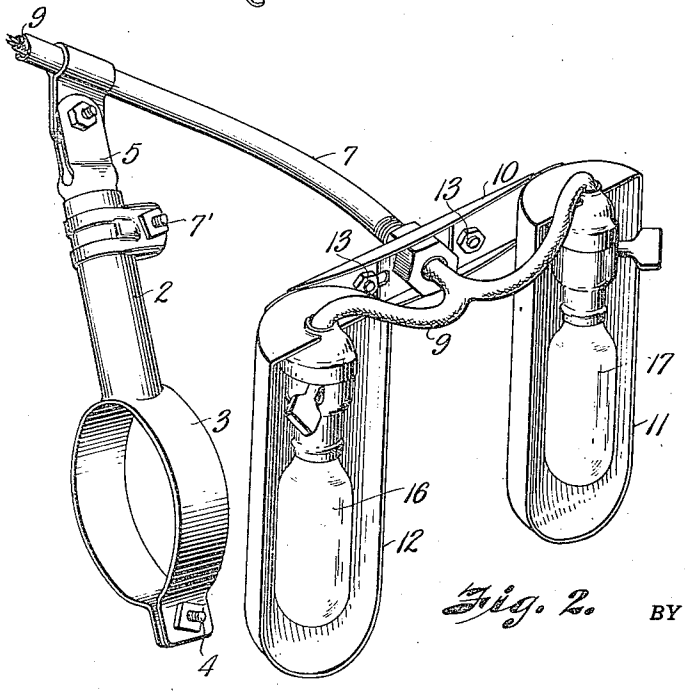


Fig. 2.

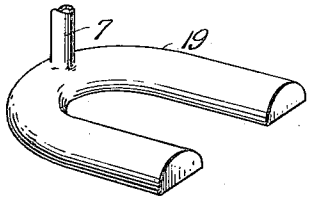


Fig. 4.

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Patented Oct. 15, 1940 2,217,863

UNITED STATES PATENT OFFICE

2,217,863

SEWING MACHINE LIGHTING ATTACHMENT

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Application December 22, 1937, Serial No. 181,132

1 Claim. (Cl. 240—2.14)

My invention relates to sewing machines and more particularly to a novel combination of a sewing machine provided with means for illuminating the needle bar and work.

It has been suggested to illuminate the needle bar and work area of a sewing machine by the provision of lighting means attached to one side, the back or within the face of the sewing machine head. These suggestions, while facilitating the handling of the work, have had a disadvantage of casting shadows.

One object of my invention is to provide, in combination with a sewing machine, means for illuminating the needle bar and work area with a concentrated, substantially shadowless light.

Another object of my invention is to provide means for providing a sewing machine with illumination over the working area to facilitate the handling of the work and resulting in more accurate work.

Other and further objects of my invention will appear from the following description.

In the accompanying drawing which forms part of the instant specification and is to be read in conjunction therewith and in which like reference numerals are used to indicate like parts in the various views,

Figure 1 is a perspective view of a sewing machine head, provided with a lighting arrangement embodying one mode of carrying out my invention.

Figure 2 is a perspective view of the lighting arrangement removed from the sewing machine head.

Figure 3 is a sectional view through the reflectors, and support therefor.

Figure 4 is a fragmentary detail view showing another type of reflector embodying my invention.

In general, my invention contemplates the provision of light sources on both sides of the head of the sewing machine head in order to eliminate shadows which would otherwise be created by the use of a single light source. While I have shown the light arrangement removably supported from the arm of the head, it is to be understood that the support may be made integral with the head, if desired, the salient feature of the invention being the positioning of light sources on both sides of the head.

More particularly referring now to the drawing, secured to the arm 1 of the sewing machine is a bracket 2. This bracket may be of any suitable design and is shown to comprise a member 3 adapted to embrace the arm 1 and is secured thereto by means of a bolt 4. Telescoped within the bracket 2 is a member 5 which is secured against relative rotation by means of a clamp 6 which is tightened by bolt 7. The member 5 is provided with a bifurcated end and supports a tube 7 by means of member 8. The conducting cable 9 passes through the tube 7 which is bent, as clearly shown in the drawing, and acts as a support for a member 10 to which a pair of reflectors 11 and 12 are adjustably secured by means of bolts 13. The member 10 is provided with slots 14, enabling the reflectors 11 and 12 to be adjusted outwardly or inwardly, depending upon the particular design of the head 15 of the sewing machine.

Mounted within the reflectors are incandescent lamps 16 and 17, which are supplied electric current through the conductor cable 9.

The pair of incandescent lamps are thus supported on each side of the head 15 of the sewing machine head, illuminating the needle bar 18 and the working area with concentrated light. Because the source of light is two-fold and disposed on opposite sides of the needle bar, any shadows cast by the head 15 or the needle bar 18 will be substantially eliminated. In other words, the shadows cast by the lamp 17 under reflector 11 will be to the right, as viewed in Figure 1. These shadows will be illuminated by the rays from incandescent lamp 16.

Referring now to Figure 4, it will be seen that the reflector 19 is U-shaped. This reflector may contain a U-shaped neon tube or a plurality of incandescent lamps and is adapted to carry out my invention in that it may embrace the head 15 of the sewing machine head and provide light from opposite sides of the head, furnishing a concentrated, substantially shadowless light in the working area.

By means of my invention, sewing machine operators are enabled to do more accurate work. They are able to work for longer intervals without the undue strain heretofore experienced due to the poor illumination existing. This reduces fatigue usually accompanying close work such as sewing.

It has been a difficult matter to properly light the working area around the needle bar of a sewing machine. It will be observed that my invention positions the sources of light where they are enabled to accomplish the objects of my invention without interfering with the working parts of the sewing machine.

It will be understood that certain features and sub-combinations are of utility and may be em-

ployed without reference to other features and sub-combinations. This is contemplated by and is within the scope of my claim. It is further obvious that various changes may be made in details within the scope of my claim without departing from the spirit of my invention. It is, therefore, to be understood that my invention is not to be limited to the specific details shown and described.

Having thus described my invention, what I claim is:

In combination with a sewing machine having an arm, a head and a needle bar, supporting means, means for securing said supporting means to said arm, an elongated hollow member and a cross piece carried by said supporting means, means for adjustably positioning a pair of reflectors on said cross piece, a pair of incandescent lamps mounted within said reflectors, said reflectors being disposed on opposite sides of said head and below the arm thereby providing shadowless illumination adjacent the needle bar, and electric conductors positioned within said elongated member for supplying energy to said incandescent lamps.

WILLIAM L. GERBER, JR.