No. 862,577. PATENTED AUG. 6, 1907.

W. W. MORRIS.

FAN ATTACHMENT FOR SEWING MACHINES.

APPLICATION FILED MAR. 16, 1907.

Fig. 1.

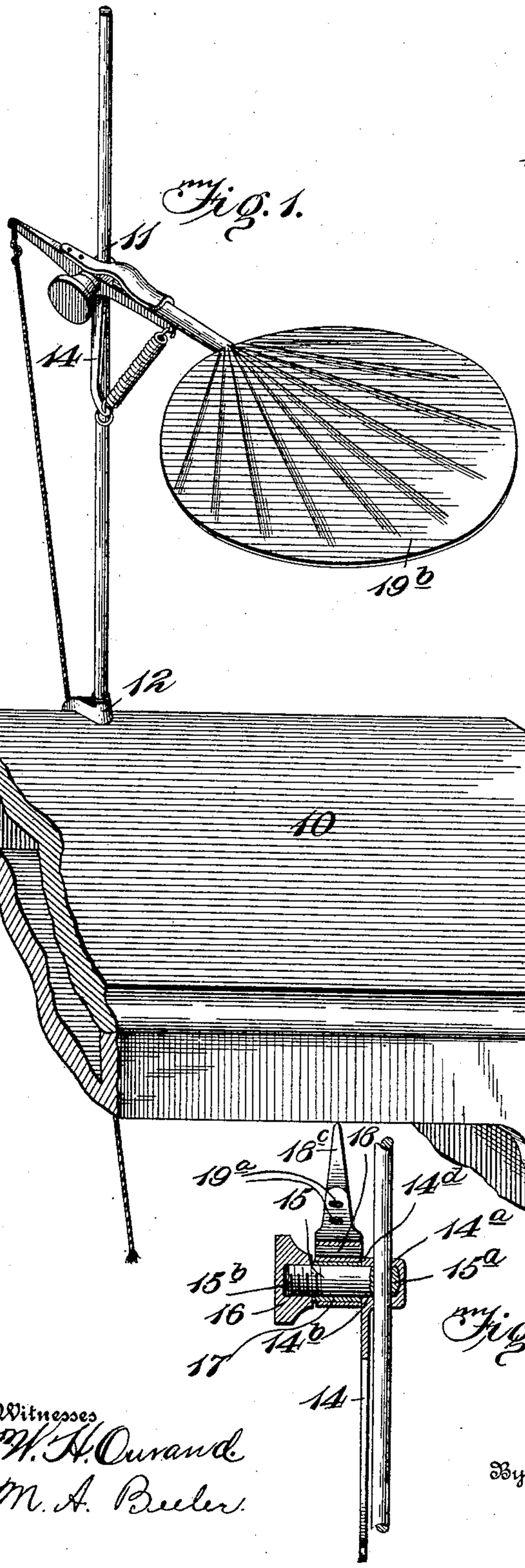

Fig. 2.

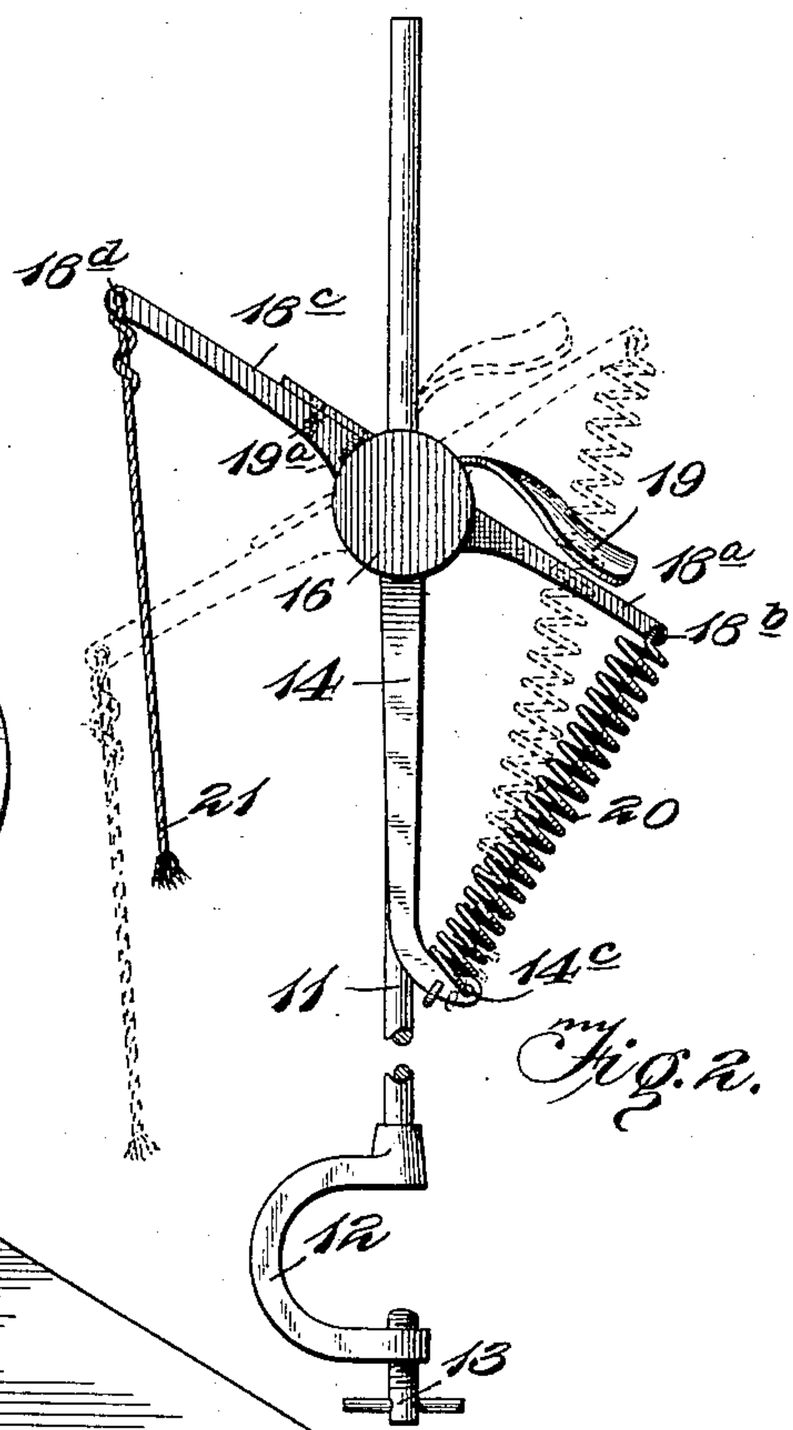

Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

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FAN ATTACHMENT FOR SEWING-MACHINES.

No. 862,577. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed March 16, 1907. Serial No. 362,608.

To all whom it may concern:

Be it known that I, WILLIAM W. MORRIS, a citizen of the United States, residing at Portland, in the county of Jay and State of Indiana, have invented certain new and useful Improvements in Fan Attachments for Sewing-Machines, of which the following is a specification.

This invention relates to fan attachments for sewing machines and other analogous machines at which operators are supposed to be seated, and which provides a simple yet highly efficient means whereby such operators may be fanned while thus seated, and with a very slight expenditure of additional power.

The invention forming the subject of this patent is of simple construction, is easily applied to or detached from the machine, and is not liable to easily become out of order.

The specific improvements forming the subject of this invention are specifically described and claimed hereinafter, and illustrated in the accompanying drawings forming part of this specification and in which

Figure 1 is a general perspective view of the invention applied; Fig. 2 is a side elevation partly broken away, and Fig. 3 is a vertical sectional view of the clamping means.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The numeral 10 indicates the table of the machine to which this improved attachment may be secured.

The device comprises a vertically arranged standard 11 in the form of a rod which may be of any suitable cross sectional form, preferably cylindrical, whereby a greater amount of adjustability is secured. This said standard is rigidly secured at its lower end to a U-shaped clamping member 12 which embraces the edge of the table and is adapted to be secured thereto by means of the clamping screw 13. The upper portion of said clamp 12 which engages the upper surface of the table may be roughened if desired to increase the grip but preferably it is made plain or smooth in order to prevent marring of the polish of said table surface. Mounted upon and adjustably secured to said standard 11 is a supporting arm 14 of peculiar construction. This arm 14 is provided with a vertical eye 14^a which corresponds in form to the standard 11 which passes therethrough with an easy fit. As shown herein the standard and said eye are circular in cross section and for this reason said supporting arm may be adjusted circumferentially about the standard as well as longitudinally thereof. Said supporting arm is provided further with a transverse socket 14^b which lies substantially at right angles to the aforesaid eye 14^a and intersecting the same. Said supporting arm is provided at its lower end with an eye 14^c. A supporting bolt or trunnion 15, provided with a vertical eye 15^a which corresponds substantially in size and form with the eye 14^a aforesaid is received in said socket 14^b, and the said standard 11 passes through said eye 15^a. The other end of the bolt 15 is provided with a screw thread 15^b for the accommodation of a thumb nut 16 mounted upon said bolt and intermediate the ends thereof is a sleeve 17 which has an easy fit upon the bolt and lies snugly between the shoulder 14^d of the supporting arm 14 and the aforesaid nut 16.

It will thus appear that the peculiar arrangement of the bolt 15 in the socket 14^b, sleeve 17, and thumb nut 16 constitute a simple yet exceedingly efficient means whereby the supporting arm 14 may be clamped in any position upon the standard 11. When thus adjusted the arm 14 is rigid. The lever 18 is journaled upon the sleeve 17 and being slightly less in width than the length of the sleeve 17 is adapted to oscillate thereupon at all times. Said lever 18 has at one end an arm 18^a having an eye 18^b, and at the other end an arm 18^c having an end eye 18^d. Secured upon the arm 18^c in any convenient or suitable manner, as by brazing, riveting, or by means of screws, there is a spring clamp 19. The end of said spring clamp opposite the one whereby it is secured to the arm 18^c lies opposite the arm 18^a, and is spaced therefrom a sufficient distance to receive the handle of a fan 19^b and which fan handle is held thereby removably. If desired the screws 19^a may be used in order that the said spring clamp 19 may be adjusted with respect to the arm 18^a to accommodate handles of different size as will be readily understood. The invention, however, is not limited to any specific means for attaching said spring clamp to the lever. Any suitable elastic means, shown herein as a coil spring 20 of proper tensile strength, is secured at one end to the eye 18^b and at the other end to the eye 14^c, and the normal tendency of this spring is to draw the said arm 18^a and the fan carried thereby downwardly. Any suitable traction means such as a flexible connection 21 is attached to the eye 18^d aforesaid, the other end of said connection being secured to any operating part of the machine with which this improved device is adapted to be used. The function of this connection 21 obviously is to draw the arm 18^c downwardly against the tension of the spring 20. It will thus be seen that the fan-carrying lever 18 is vibrated alternately by said cord and spring.

From the foregoing detail description of the mechanism the mode of operation of this device will be appreciated. The standard 11 is first applied to the table in any desired location and the supporting arm 14 with the parts carried thereby are adjusted to any desired height or angle at the option of the operator and secured in such position upon the standard by means of the thumb nut and coöperating parts. The connection 21 is then secured to the treadle or any other operating

part of the machine in accordance with the previous adjustment of the support.

It will be understood that the various parts of this invention may be made of any suitable material and the specific details of construction may be varied within the scope of the invention without departing from the spirit thereof or sacrificing any of its advantages.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent of the United States is:

1. In a fan attachment for sewing machines or like machines, the combination of a vertical standard adapted to be clamped to the machine table, a supporting arm adjustably mounted upon said standard and having a horizontal socket intersected by the said standard, a trunnion seated in said socket and projecting laterally from the standard in proximity to said arm, means coöperating with the trunnion to clamp the said arm to the standard a lever journaled for vibration on said trunnion, means for holding a fan on the lever, and means for vibrating the fan-carrying lever.

2. In a fan attachment for sewing machines, the combination of a table clamp, a standard secured thereto, a supporting arm having a vertical eye receiving said standard and having a transverse socket in the same plane as the vertical eye, a trunnion seated in said socket and projecting laterally therefrom, means including a thumb nut for clamping said supporting arm and trunnion upon the standard, a fan-holding lever journaled upon the trunnion, and flexible means attached to said lever and adapted to be attached to some movable part of the machine whereby said fan-holding lever may be vibrated.

3. The combination with a table clamp and standard, of a supporting arm adjustable circumferentially and longitudinally of said standard and having an eye at its free end, a trunnion extending laterally from said supporting arm, a two-armed lever journaled on said trunnion and whose arms project in opposite directions and each being provided with securing means at its free end, elastic power means secured to the end of one of said lever arms and connecting the same with the aforesaid free end of the supporting arm, means for holding a fan on said lever, and means attached to the end of the other of said lever arms whereby the same may be vibrated in opposition to the aforesaid power means.

4. In a fan attachment, the combination of a table clamp and standard, a supporting arm adjustable circumferentially and longitudinally with respect to said standard, said supporting arm having a socket formed therein in the same plane as the standard and extended at right angles thereto, means for clamping said arm in adjusted position upon the standard comprising a trunnion seated in said socket and having a vertical eye through which the standard extends, a sleeve surrounding the trunnion, and a thumb nut on the outer end of the trunnion and adapted to force said sleeve against the shoulder of the supporting arm, and fan operating means journaled upon said sleeve.

5. In a fan attachment for sewing machines, the combination of a standard, a trunnion mounted thereon, a fan supporting lever pivoted upon said trunnion, and means adjustably clamping the trunnion to the standard, said means comprising a member on the outer end of the trunnion and preventing displacement of the said lever from the trunnion.

6. The combination of a machine table, a clamp thereon, a vertical standard secured to said clamp, a supporting arm having a vertical eye receiving said standard and adapted to be clamped thereto and also having a transverse socket intersecting the said vertical eye, a trunnion in said socket and having a vertical eye which registers with the aforesaid supporting arm eye and receiving the said standard and projecting laterally therefrom, a sleeve fitted upon said trunnion, a thumb nut threaded upon the outer end of the trunnion and abutting against said sleeve whereby the sleeve is forced against the shoulder of the supporting means and the trunnion reacts to clamp the same to said standard, a double armed lever journaled for vibration on said trunnion sleeve, means for adjustably holding a fan on said lever, a coil spring to vibrate said lever in one direction, and flexible means adapted to be secured to a movable part of the machine to vibrate the lever in the opposite direction, substantially as described.

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

WILLIAM W. MORRIS.

Witnesses:
GOLDA LONGERBOWE,
JASON HENLEY.