

J. H. Stone,

Fan for Sewing Machines.

No 81,429.

Patented Aug. 25. 1868.

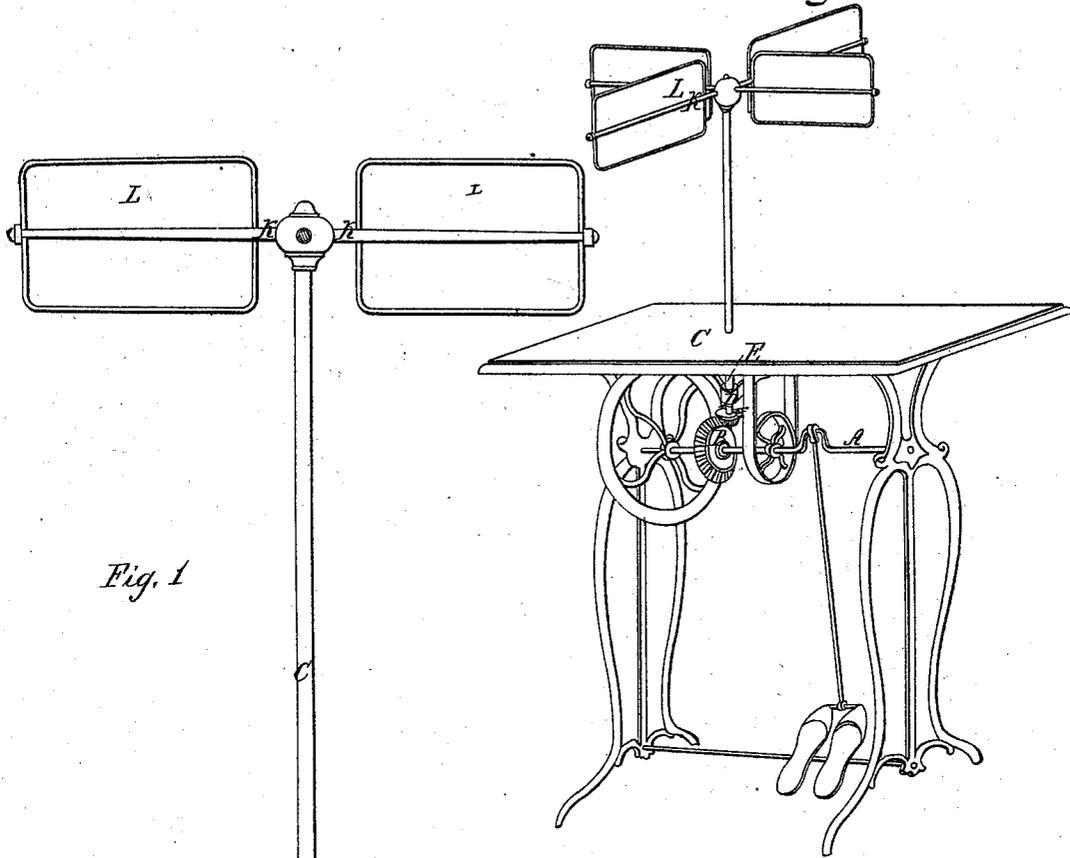


Fig. 1

Fig. 1 of Sheet 2

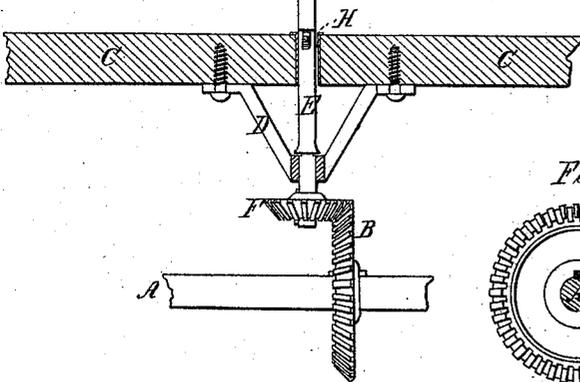


Fig. 2



Witnesses  
Emil S. Friedrich  
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# UNITED STATES PATENT OFFICE.

JAMES H. STONE, OF WASHINGTON, DISTRICT OF COLUMBIA.

## IMPROVED FAN FOR SEWING-MACHINES.

Specification forming part of Letters Patent No. **81,429**, dated August 25, 1868.

*To all whom it may concern:*

Be it known that I, JAMES H. STONE, of the city and county of Washington, in the District of Columbia, have invented a new and useful Improvement in Fans for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1, Sheet 1, is a side elevation of the fan, showing its application to the sewing-machine, the wheel and bed-plate of the latter being detached. Figs. 2 and 3, Sheet 1, are side elevations of the spur and pinion wheels, respectively. Fig. 1, Sheet 2, is a perspective view of a sewing-machine table, with the fan and wheels attached.

Similar letters of reference indicate like parts in the drawing.

This invention has for its object to furnish a simple and cheap fan for sewing-machines, by means of which the operator can, while sewing, cause a current of cool air to circulate about the table of the machine, to reduce the oppressive heat incident to such work during the summer months; and it consists in operating the fans directly from the driving-shaft of the machine by means of gearing or friction-rolls, as will be hereinafter more fully described.

A represents the driving-shaft of an ordinary sewing-machine. Upon it is keyed the beveled spur or driving wheel B. This wheel engages with a correspondingly beveled pinion-wheel, F, secured to the lower end of a short vertical shaft, E, to which the shaft bearing the fans is attached. The short shaft E extends through to table C of the sewing-machine, and has its bearings in a bracket, D, secured to the under side of the table. It

is also provided with a shoulder near its lower end, which rests upon the bracket D, or a metallic socket placed therein, and is thus held in position.

C' is the fan-shaft, bearing at its upper end the radial arms K, to which the fans L are secured in any proper manner. The fan-shaft is secured to the shaft E by a dovetail connection and key, H, in such a manner as to be easily removed when desired. If preferred, a screw-joint may be used; but the method of attaching the shaft is not material.

From the above description, taken in connection with the drawings, the operation will be easily understood. As the shaft A is rotated in the operation of sewing, a rotary motion is imparted to the fan through the gearing B F, impelling a current of cool air over the operator, greatly lessening the fatigue of his labors.

From the foregoing description it will be readily seen that a simple and economical fan is produced, operated directly from the driving-shaft of the sewing-machine, with but little additional power, and which can be easily applied to any sewing-machine in use. It will be found of great value in factories where sewing-machines are used in large numbers, and the crowded condition of the rooms renders the ordinary circulation of air insufficient to overcome the heat.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

Operating the rotary fan to a sewing-machine directly from the driving-shaft A through the medium of the beveled gearing B F, as described, for the purpose specified.

JAS. H. STONE.

Witnesses:

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D. C. WILSON.