

No. 782,437.

PATENTED FEB. 14, 1905.

G. W. DAVIS.

FAN.

APPLICATION FILED JUNE 1, 1903.

Fig. I.

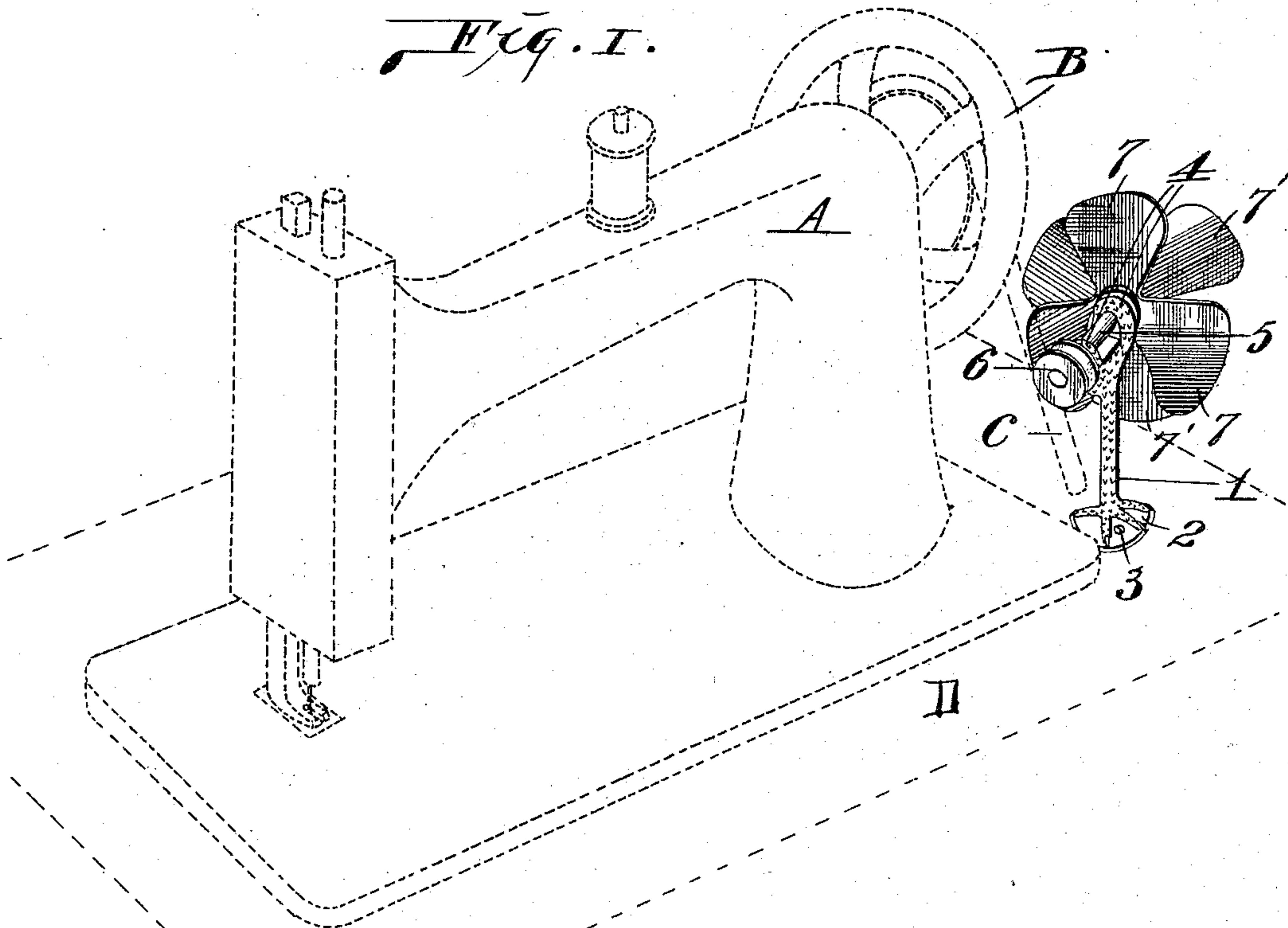
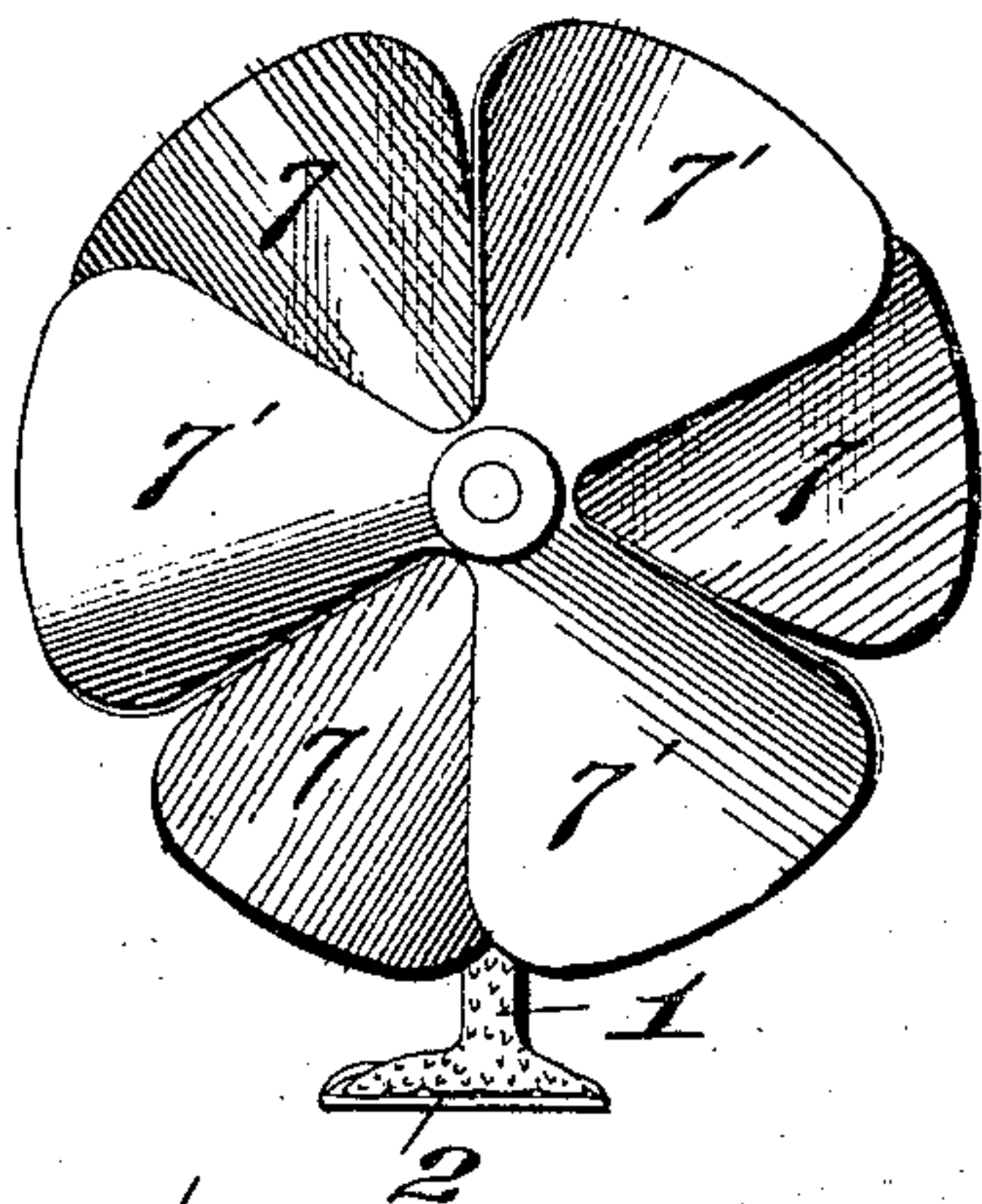
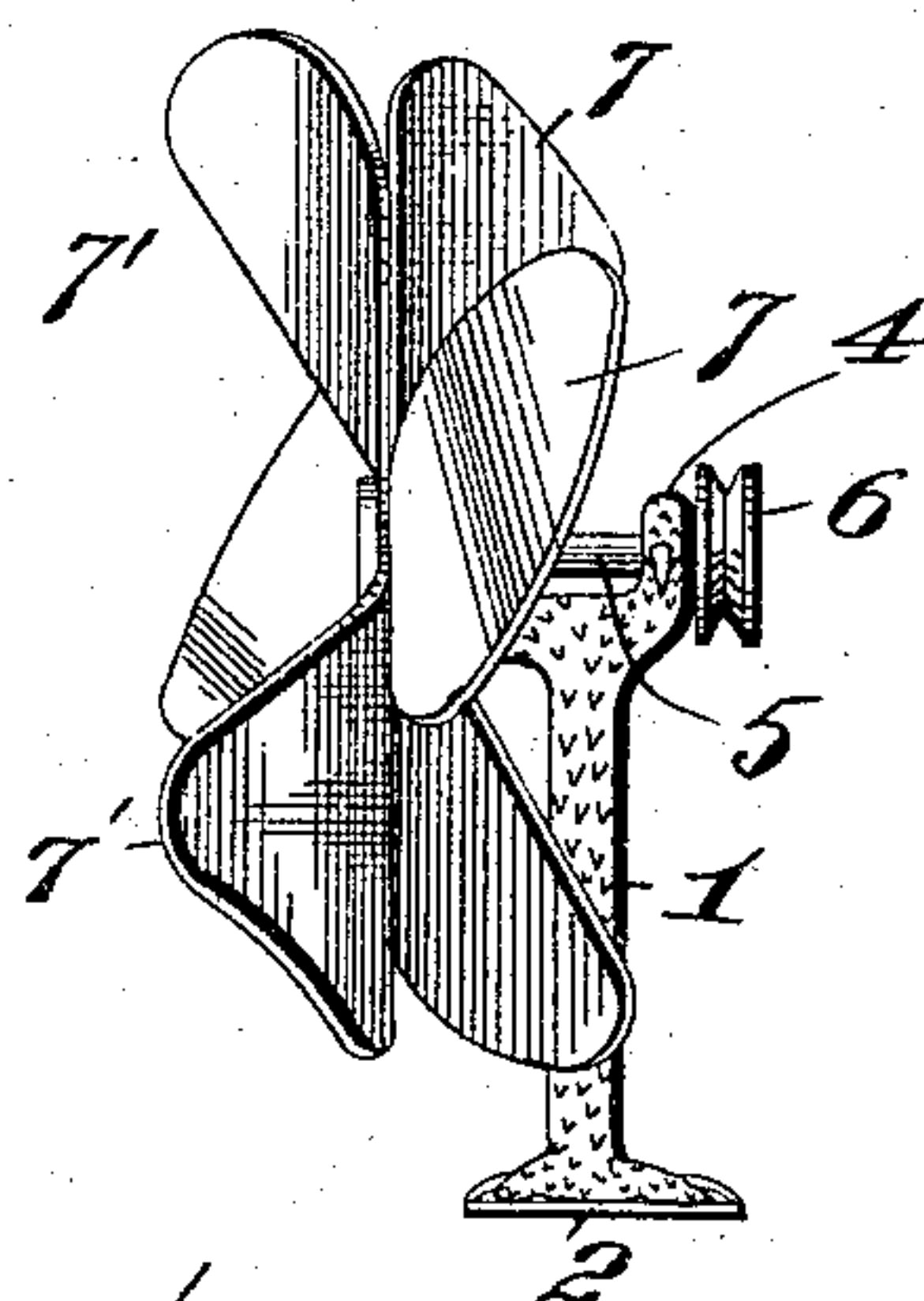


Fig. II.



attest:—
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Fig. III.



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UNITED STATES PATENT OFFICE.

GEORGE W. DAVIS, OF ST. LOUIS, MISSOURI.

FAN.

SPECIFICATION forming part of Letters Patent No. 782,437, dated February 14, 1905.

Application filed June 1, 1903. Serial No. 159,536.

To all whom it may concern:

Be it known that I, GEORGE W. DAVIS, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Fans, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a fan for use in connection with sewing-machines or machines of other descriptions in which the mechanism is operated through the medium of a belt.

The object of the present improvement is to provide a fan in the use of which currents of air may be blown in opposite directions for cooling effect at both sides of the fan.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claim.

Figure I is a perspective view of my fan illustrated as applied to a sewing-machine. Fig. II is a rear elevation of the fan. Fig. III is a side elevation of the fan.

For the purpose of illustrating the use of my fan I have shown in Fig. I the outline of a sewing-machine A, having a belt-wheel B; to which a belt C is applied.

1 designates the supporting-post, in which my fan is mounted. This post is preferably in the form of a bird's leg, as shown, and at its lower end is a base 2, adapted to be fastened to the table D of a sewing-machine or other machine in connection with which the fan is used by a pivot-screw 3. By using the pivot-screw 3 to secure the post 1 I provide for rotation of the post for the purpose to be hereinafter explained. At the opposite end of the post 1 is a pair of claws 4, which constitute the bearing-arms for a rotative shaft 5, journaled therein. Fixed to said shaft 5 is a friction-disk 6, that receives the belt C of the sewing-machine or may have applied to it the belt of any other description of machine in connection with which it is possible to use my fan.

7 and 7' designate fan-blades fixed to the rotative shaft 5, which consist of a series of wings, the wings of one of the sections being

bent sidewise and outwardly from the plane of the axis of the shaft 5 in one direction and the wings of the other section being bent sidewise and outwardly from the plane of the axis of said shaft so as to be presented in the opposite direction to that of the first section.

By the fan construction shown and described herein I am enabled to produce currents of air directed from both sides of the fan, so as to be obtained by two persons situated at opposite sides of the fan. This arrangement is very desirable in connection with a sewing-machine, inasmuch as it provides a current of air that may be directed toward the operator of the machine when the fan is in position as seen in Fig. I, and a second current of air, which is directed toward a person sitting at the end of the machine, thereby furnishing a cooling agency for both persons when so situated. By pivoting the base of the fan-supporting post 1 to the table of the machine upon which it is used it will be seen that said post may be rotated to vary the position of the fan with respect to the person or persons using it, and thereby causing the currents of air to be thrown in varying directions according to the position occupied by the person onto whom the current of air is to be thrown. I have shown the fan position in front of the belt-wheel of the machine; but it may be positioned at the rear of such wheel to be operated by the belt-wheel with the same efficiency as in the position shown.

While I have shown my fan as applied to a sewing-machine, I do not wish to be limited to its use in this particular connection, as it may be readily applied to various other mechanism—such, for instance, as dental engines.

While I have described my fan as having two fan-sections, it is evident that it may be constructed with a single section, thereby providing a more simple and cheaper construction in the use of which a current of air will be blown in one direction only instead of in two directions.

I claim as my invention—

In a fan for use in connection with a sewing-machine, a vertical standard having a flat base, a single pivot-screw in said base eccentric

with the standard for rotary adjustment of the base and the standard on the machine-table, a pair of bearing-arms integral with the standard at the upper end thereof, a horizontal shaft
5 journaled in said bearing-arms, a rotary fan secured to said shaft on one side of the journal, a grooved friction-disk secured to the shaft

on the other side of the journal for engagement with the driving-belt of the machine.

GEORGE W. DAVIS.

In presence of—
E. S. KNIGHT,
M. P. SMITH.