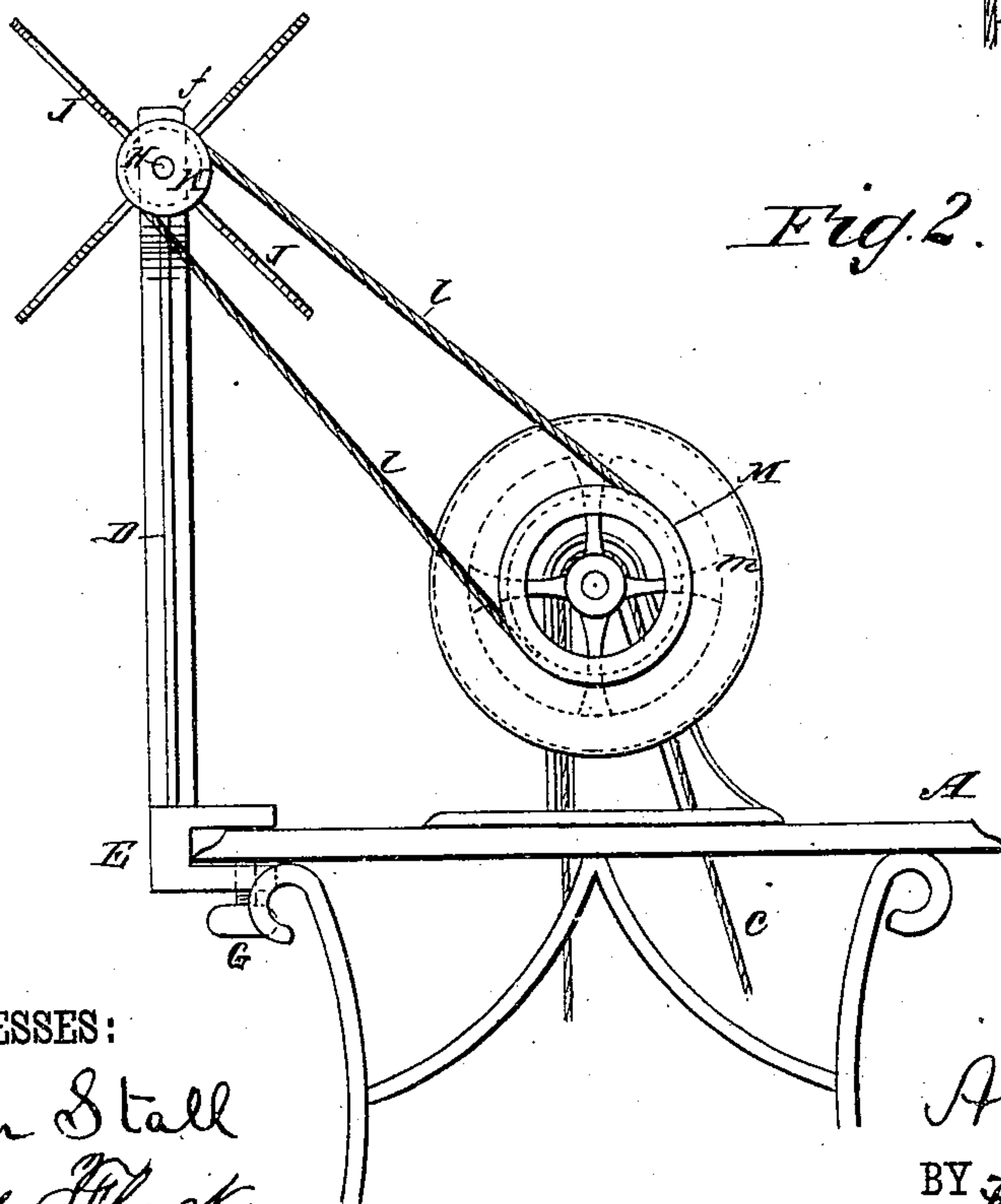
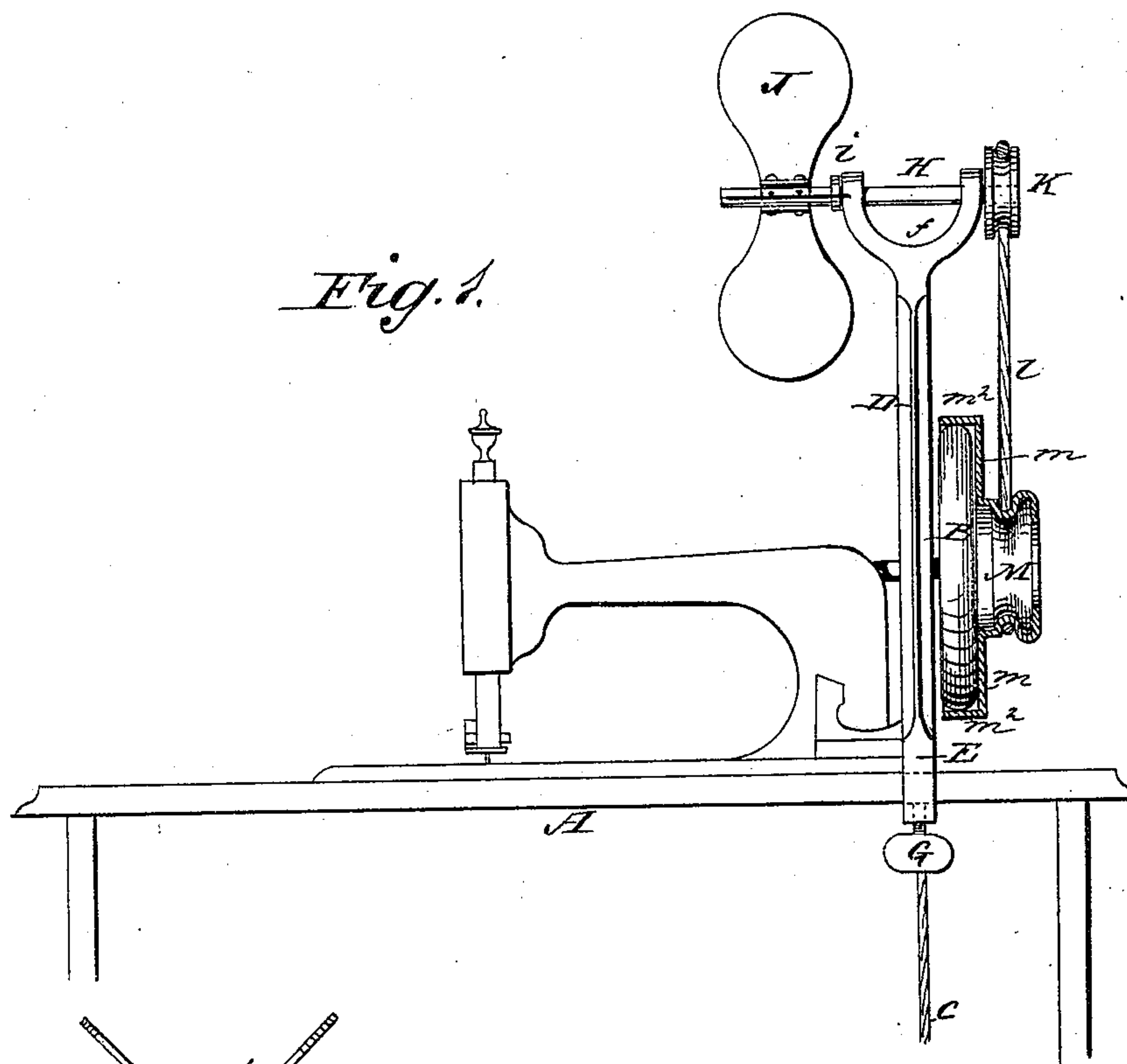


(No Model.)

A. DUKE.
Fan Attachment.

No. 240,979.

Patented May 3, 1881.



WITNESSES:

Marvin Stall
Joseph Black.

INVENTOR:

Alexander Duke,
BY Francis C. Bowen,
ATTORNEY.

UNITED STATES PATENT OFFICE.

ALEXANDER DUKE, OF BROOKLYN, NEW YORK.

FAN ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 240,979, dated May 3, 1881.

Application filed February 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER DUKE, of the city of Brooklyn, in the county of Kings and State of New York, have invented certain
5 new and useful Improvements in Fan Attachments for Sewing-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it ap-
10 pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention consists, first, in a novel construction of a pulley, whereby it is adapted to
15 be readily attached to the hand-wheel of a machine in order to provide for driving a fan attachment, and as readily removed therefrom when not in use; and, further, in the combination,
20 with said pulley and with an adjustable standard, of a fan-carrying shaft and connections whereby provision is made for the carrying of a fan and for the attachment and removal of the same to or from the table of a
25 sewing-machine, as hereinafter described.

The accompanying drawings illustrate a mode of carrying out the invention, Figure 1 being a front view of a sewing-machine with the apparatus attached, and Fig. 2 an end
30 view of the same.

A represents the table of an ordinary sewing-machine, and B the usual hand-wheel provided with a pulley for driving the machine by a band, *c*, from the driving-wheel.

35 D represents a standard made of metal, and ribbed, grooved, or corrugated in its cross-section, in order to combine strength with lightness. At its lower end it is provided with a clamp, E, and a thumb-screw, G, for attaching
40 it to a table, and at its upper end it is forked or divided into two branches, *f*, in which are bearings for a shaft, H. The clamp G and the fork *f* are all in one piece with the standard D. The shaft H carries at one end a fan, J.

There may be any desired number of leaves, 45 and they may be of wood, metal, or other suitable material and attached in any suitable manner. They are here shown as attached to a sleeve which fits on the shaft, and is riveted or screwed thereto. Near the fan is a collar, 50 *i*, which lies up against one of the branches of the fork *f*. At the other end of the shaft is fitted a pulley, K, outside of the other branch of the fork, by which means the fan is driven through a band, *l*, from a pulley, M. This pul- 55 ley is of peculiar construction and form. It is made of sheet metal, and is formed by stamping, hammering, pressing, spinning, or other suitable process. From one side of the pulley proper the metal extends in the form of a flange, *m*, 60 to a distance equal to the dimensions of the hand-wheel B of the machine, and is there turned into a rim or band, *m*². When this pulley is in use it is fitted on the hand-wheel B like the lid of a box, as shown, where it does 65 not interfere with the ordinary use of the wheel. The standard D may also be readily detached by loosening the thumb-screw G.

What I claim, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture, a pulley, M, made of sheet metal, and having a flange or extension, *m*, and rim or band *m*², substantially as and for the purpose herein de- 70 scribed.

2. The shaft H, provided with the collar *i* and carrying the fan J and pulley K, in combination with a standard, D, an endless belt or band, and a pulley constructed as herein described, substantially as and for the pur- 75 pose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of February, 1881.

ALEXANDER DUKE.

Witnesses:

GEO. B. MORRIS,
FRANCIS C. BOWEN.