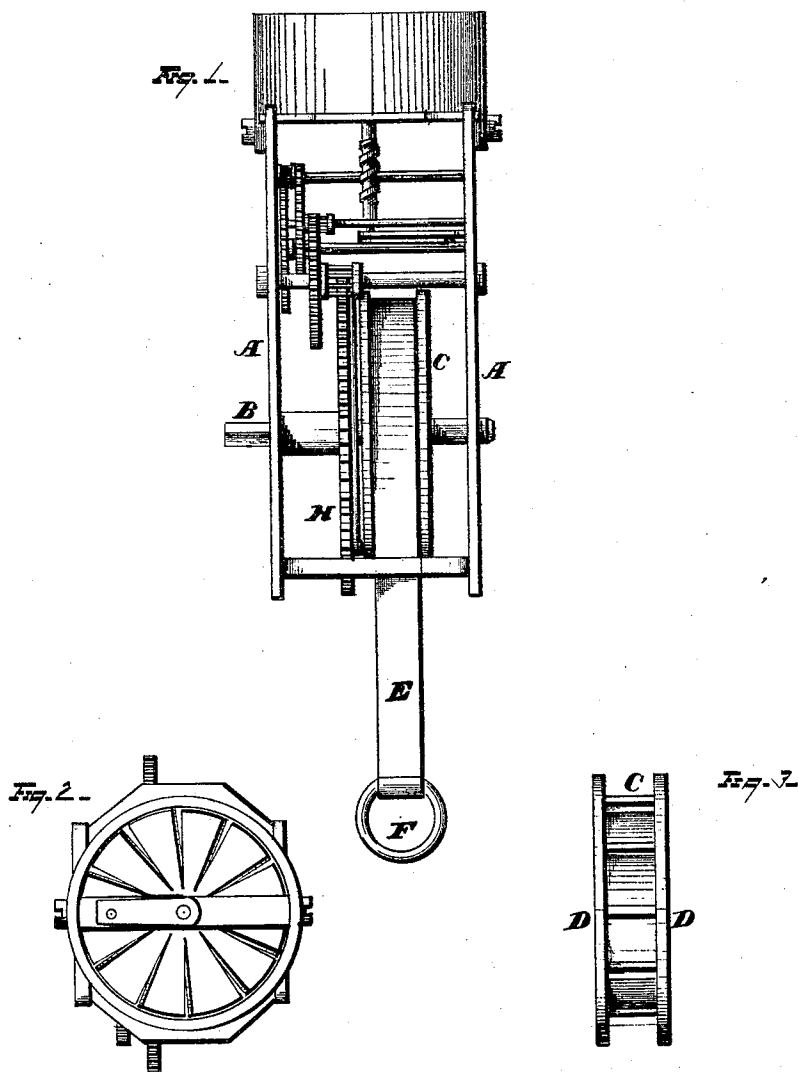


G. A. JONES.
BLOWERS FOR LAMPS.

No. 179,413.

Patented July 4, 1876.



WITNESSES
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UNITED STATES PATENT OFFICE.

GEORGE A. JONES, OF BRISTOL, CONNECTICUT.

IMPROVEMENT IN BLOWERS FOR LAMPS.

Specification forming part of Letters Patent No. **179,413**, dated July 4, 1876; application filed June 2, 1876.

To all whom it may concern:

Be it known that I, GEORGE A. JONES, of Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Blowers for Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in blowers for lamps.

Heretofore the movements in lamp-blowers have been constructed to be actuated by a spring, combined with the winding-arbor, as in ordinary clock-movements, and in practice the blower has been found to be defective, for the reason that when the spring is first wound up it is capable of lifting a weight of from twelve to fifteen pounds, and it is then of sufficient strength to impart sufficient velocity to the fan to furnish the necessary amount of oxygen to the flame of the lamp to produce a clear and steady white flame without the use of a lamp-chimney. When the spring has partly unwound its strength is reduced to such an extent that it is only capable of lifting from six to eight pounds, and in this condition the fan is not impelled with sufficient force to furnish the required amount of oxygen to the flame; hence the flame becomes unsteady, and gradually decreases in size and brilliancy, owing to the varying force of the spring as it unwinds upon the winding-arbor.

The object of my invention is to obviate the defects above noted, and to that end my invention consists in the combination, with the winding-arbor, of a blower for lamps of a metallic ribbon, one end of which is attached to the winding-arbor, while to its outer or free end a ring or hook is secured for the attachment of a weight, whereby the fan is impelled by a constant force, and thus is enabled to furnish any desired amount of oxygen to the flame throughout the running time of the blower.

In the accompanying drawings, wherein like letters designate like parts, Figure 1 shows the lamp-movement with my improvement combined therewith. Fig. 2 is a plan view of the device, and Fig. 3 represents the winding-drum.

A A' represent the frames, within which is journaled the winding-arbor B, to which is rigidly secured the winding-drum C, provided with flanges D D', at a sufficient distance apart to allow the thin metallic ribbon E, preferably made of brass, to wind upon the drum between said disks. The inner end of the ribbon E is secured to the periphery of the drum C, while the ring F, or any equivalent device, is secured to the free end of the ribbon, and serves as a means for the attachment of a weight to said metallic ribbon.

A ratchet-wheel is firmly secured to the winding-arbor or to the disk A, as may be found most expedient in practice, and to said ratchet-wheel the main wheel H is locked in one direction by means of a spring-pawl.

It is designed to attach a weight of about twenty-five pounds to the free end of the metallic ribbon E, and the same may be raised by winding the movement in the ordinary manner.

As the metallic ribbon, which is formed of very thin material, is disposed about the periphery of the drum, the weight, in its descent, will impart a constant and steady power to actuate the fan, as the decrease in leverage on the winding-drum is hardly perceptible, owing to the thinness of the metallic ribbon E.

While the initial cost of the power attachment is considerably less than that of the spring, the ribbon is unaffected by changes of temperature, it is of greater durability, and it effects a marked improvement in the result, as the lamp will afford a steady brilliant white flame during the complete running time of the blower.

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

The combination, with the winding-arbor, of a blower for lamps, of a winding-drum, and a thin metallic ribbon, constructed for the attachment of a weight to its outer or free end, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of May, 1876.

GEORGE A. JONES.

Witnesses:

MILES L. PECK,
HENRY A. SEYMOUR.