J. McCLOSKEY.

Rotary-Blower.

No. 161,349. Patented March 30, 1875.

Fig. 1.

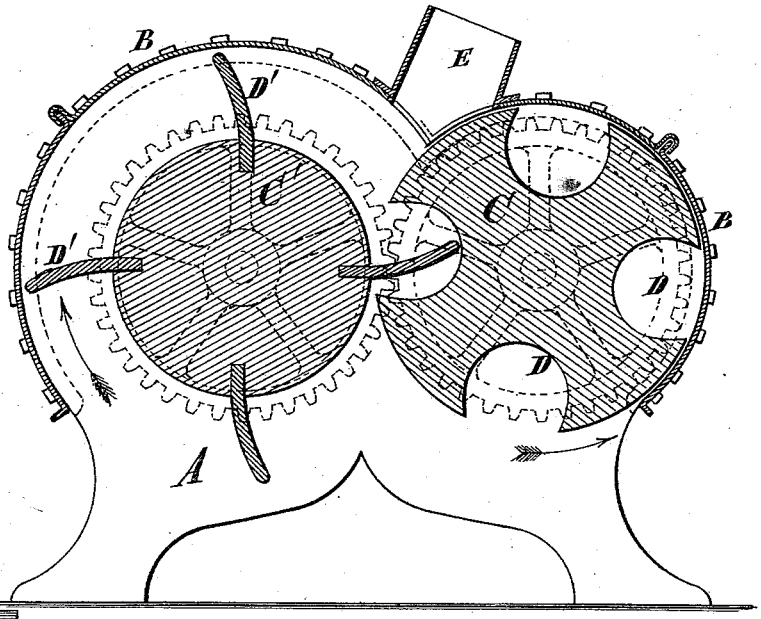
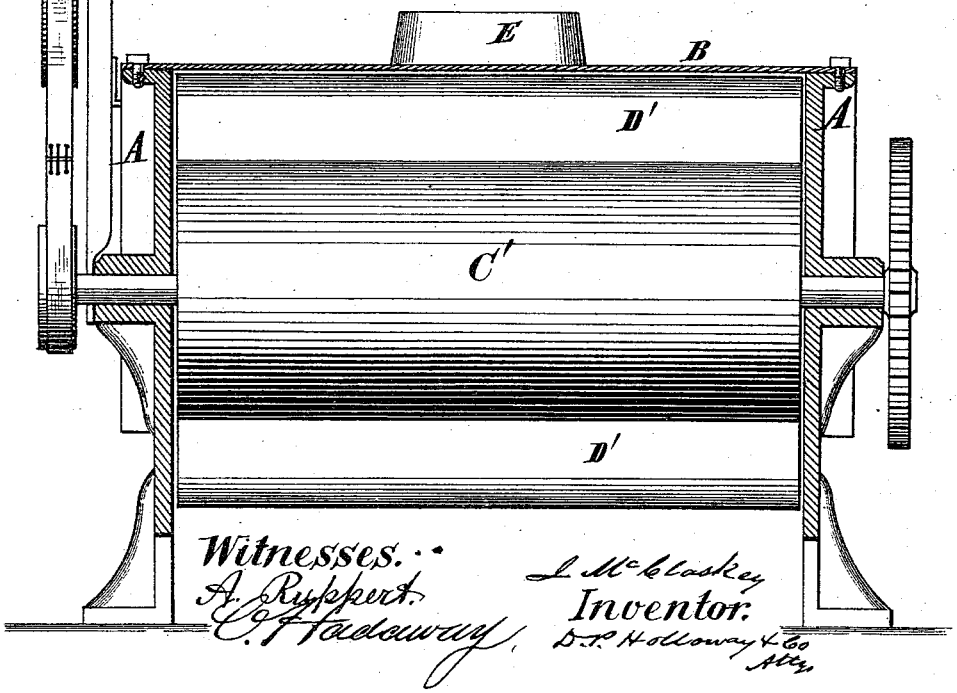


Fig. 2.



Witnesses.
A. Ruppert.
C. F. Tadeaway.

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UNITED STATES PATENT OFFICE.

JOHN McCLOSKEY, OF CONNERSVILLE, INDIANA.

IMPROVEMENT IN ROTARY BLOWERS.

Specification forming part of Letters Patent No. **161,349**, dated March 30, 1875; application filed February 20, 1875.

To all whom it may concern:

Be it known that I, JOHN MCCLOSKEY, of Connersville, in the county of Fayette and State of Indiana, have invented a new and useful Improvement in Rotary Blowers, of which the following is a specification:

In the annexed drawings, making a part of this specification, Figure 1 is a transverse sectional elevation, and Fig. 2 is a longitudinal section elevation.

The same letters are employed in both figures in the indication of identical parts.

The distinctive features of my invention will be set forth in the following specification and claim:

The casing is composed of two solid heads, A, and the shell B, forming two lobes to contain the rotating cylinders C C′. The heads are fitted with suitable bearings to support the shafts of the rotary cylinders, and the jacket B is attached to the edges of the solid heads, which are flanged for the purpose, by means of bolts, as shown. The rotating cylinders are driven by belts, and geared together, so as always to revolve in a fixed relation to one another. The cylinder C is formed with four (more or less) grooves, D, formed as shown. The cylinder C′ is constructed with a corresponding number of blades, D′, which, as the cylinder revolves, are brought in near proximity to the jacket B. The lobed part of the cylinder C revolves in near proximity to the surface of cylinder C′, and the form of the recesses D is such that, receiving the blades D′, the latter may traverse the groove without touching the solid surface. All these contiguous parts are made to fit as neatly as possible, without actually touching.

The narrow-edged blades D′, it will be seen, may travel in the grooves, entering and escaping through an opening formed by the chord of an arc which is less than the diameter of the recess, and thus during a part of the revolution the escape of the air is checked simultaneously by the proximity of the edge of the blade and the surface of the groove, and also by the proximity of the surfaces of the peripheries of the two cylinders. The bottom of the casing is open, so that the blades will carry the air before them, and, being confined by the jacket, it can only escape through the exit-pipe E.

I am aware that in many other well-known blowers the broad principle of giving motion to the air in this manner has been applied. My invention is distinguished from others in the special construction of the parts, whereby the blades are received with the least amount of diminution of adjacent surfaces of the peripheries of the cylinders.

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

The combination of the double-lobed casing and cylinders C and C′, having the segmental recesses D and blades D′, respectively, constructed and arranged to operate so that the approximate contact between the circular parts of the cylinders shall be continued till the blades have entered the recesses a little way, and be resumed on the other side a little before they pass out of the recesses, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN MCCLOSKEY.

Witnesses:

BENJ. F. CLAYPOOL,

GEO. C. FLOREN.