

(No Model.)

T. W. GREEN.
ROTARY BLOWER.

No. 533,293.

Patented Jan. 29, 1895.

Fig. 1.

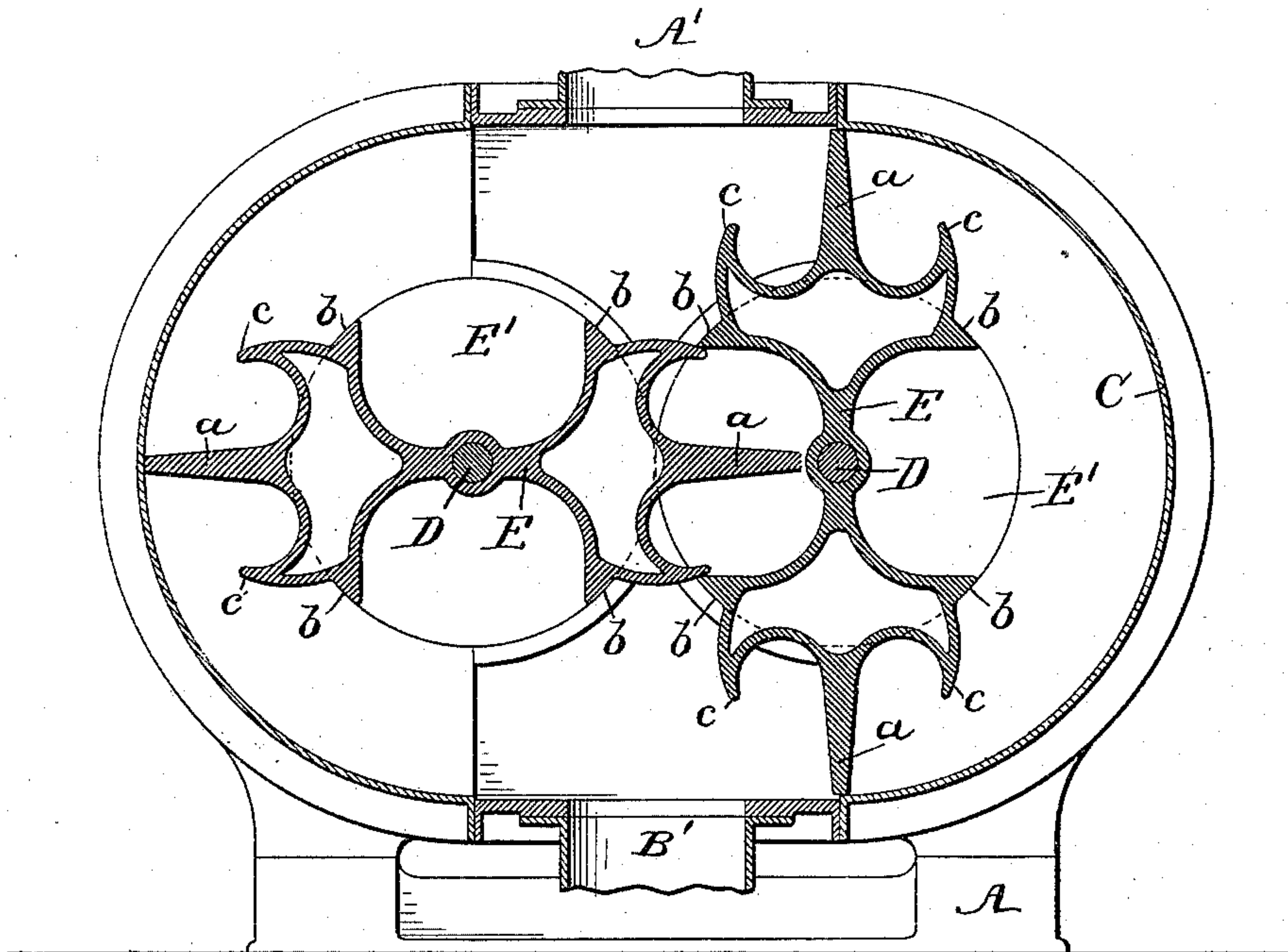
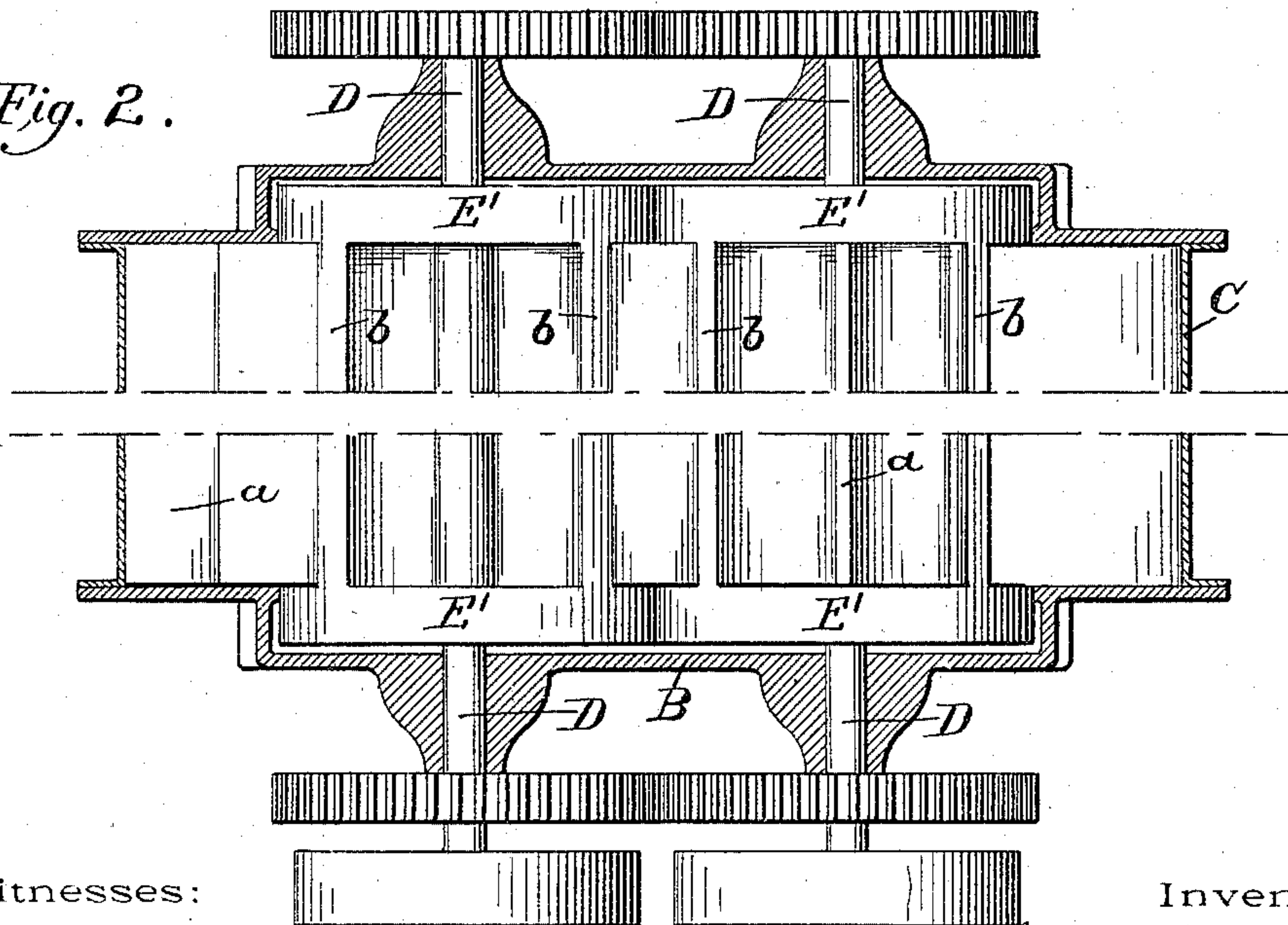


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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ROTARY BLOWER.

SPECIFICATION forming part of Letters Patent No. 533,293, dated January 29, 1895.

Application filed November 27, 1894. Serial No. 530,088. (No model.)

To all whom it may concern:

Be it known that I, THOMAS W. GREEN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Rotary Blowers; and I do 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 appertains 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.

My invention relates to rotary blowers or exhausters for forcing or exhausting air, water or other fluids and the improvement consists in the particular construction and the arrangements of those parts of the revolvers that form the locks or cut offs to prevent the backward flow of the fluid acted upon.

In the patent granted to me on February 20, 1894, and numbered 515,212, the construction and operation of this class of blowers was particularly described.

My present invention differs from the blower described in my former application only in the construction of the parts forming the cut off mechanism.

In the accompanying drawings Figure 1, is a vertical cross section of my improved blower. Fig. 2, is a plan view with the upper half of the outside casing removed.

A, is a bed plate of the machine.

B, is the end casting forming the support for the driving shafts; C, the external casing.

B', is the intake for the air and water; A', the outlet or discharge port; D, D, the driving shafts; E, E, the revolvers on the shafts D.

E', E', are solid heads one on each end of each revolver and cast integral with the other parts of the revolver.

a, a, are the wings or blades of the revolvers.

b, b, b, are a series of short segmental ex-

tensions formed on each of the revolvers E, E, and equidistant from each other. The outer surfaces of these segmental extensions are segments of circles, the centers of which, are the centers of the respective driving shafts, the diameters of said circles, being the distance between the centers of the two driving shafts D, D.

c, c, c, c, are four larger segmental extensions formed on each of the revolvers E, E, and converging in the direction of the parts forming the wings. Each pair of these long segmental extensions c, c, is formed from the same center, said center being located on the circumference of the circle forming the short extensions b.

When the segmental extensions b, b, and c, c, are formed to circles of correct diameter, the forward end of one of the short extensions b, on one revolver will engage with the outer surface of one of the long extensions c, on the opposite revolver and follow along, preserving the lock until the corresponding parts next following come in play.

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

In a rotary blower or exhauster the combination of the two revolvers E, E, each of said revolvers being provided with two flat wings or blades and between said wings or blades, having the short segmental extensions b, b, and the long segmental extensions c, c; the extensions c, c, converging in the direction of the wings or blades and adapted to engage with the short extensions b, on the opposite revolver to form locks or cut offs, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS W. GREEN.

Witnesses:

SAML. H. KIRKPATRICK,
THOS. D. MOWLDS.