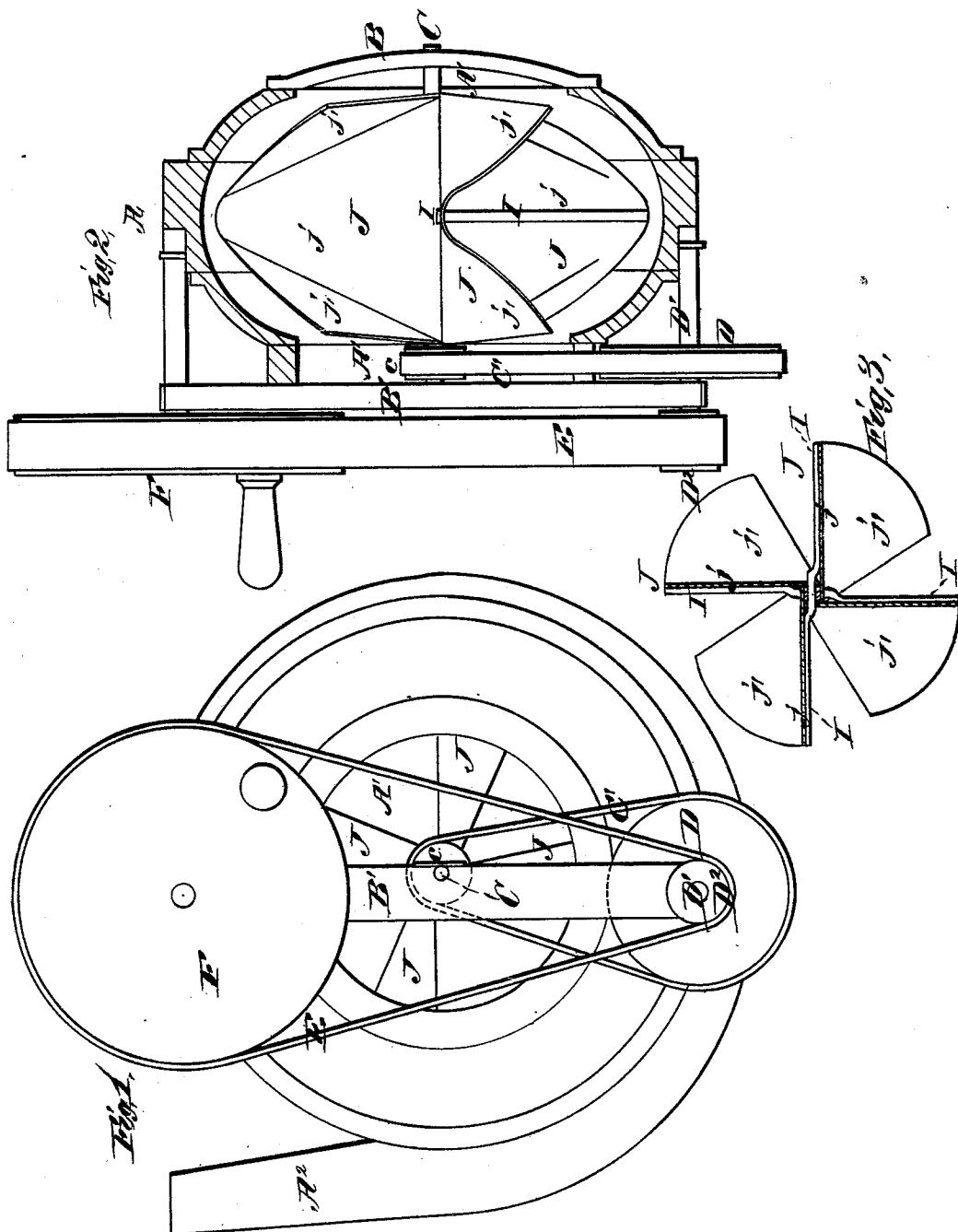


J. C. OVERSTREET.

BLOWER.

No. 185,953.

Patented Jan. 2, 1877.



WITNESSES
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JOSEPH C. OVERSTREET, OF PLEASANT PLAINS, ARKANSAS.

IMPROVEMENT IN BLOWERS.

Specification forming part of Letters Patent No. **185,953**, dated January 2, 1877; application filed October 21, 1876.

To all whom it may concern:

Be it known that I, JOSEPH C. OVERSTREET, of Pleasant Plains, in the county of Independence and State of Arkansas, have invented a new and valuable Improvement in Blowers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side elevation of my blower, and Fig. 2 is a transverse vertical sectional view of the same. Fig. 3 is a detail view of the fan.

This invention relates to rotary fans or blowers; and it consists, mainly, in the peculiar construction of the fans or blades of said blowers, whereby a considerable body of air is discharged through a small outlet. It also consists in auxiliary devices hereinafter particularly described.

In the annexed drawings, A designates the casing of a rotary blower, which casing is provided with side openings A¹ A¹ for the admission of air, and with a discharge-tube, A², for the expulsion thereof. B B' are bridges (B' being the larger of the two) which extend across induction-openings A¹ A¹, and are secured by both ends to casing A. In said bridges the blower-shaft C has its bearings. Said shaft is provided with a small pulley, c, from which a belt, C', extends to a pulley, D, which turns on a shaft, D¹, that has its bearings in said casing A and one of the extended ends of bridge B'. Said shaft D¹ carries a smaller pulley, D², which is connected, by means of a belt, E, with a crank-wheel, F, which is journaled to the other end of said bridge B' and to said casing A.

The above-described construction causes the operating gearing to occupy but a very small space, belt E being almost directly in front of belt C'. When crank-wheel F is rotated shaft C is turned. Said shaft is provided with radial rods I I, which carry and brace vanes or blades J J. Said vanes are preferably constructed of sheet metal. They each consist of a flat base, j, shaped like a truncated inverted V, tapering outwardly, and of two corresponding side flanges, j' j', which slightly diverge from said plate j. As a whole, each one of said blades or vanes is shaped somewhat like half a funnel, the broadest part being nearest the shaft C, and the narrowest part being farthest therefrom. This shape enables said blades, as they are revolved, to gather a considerable quantity of air and discharge it with violence through narrow discharge-tube A².

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

1. A blade or vane, J, for a rotary blower, consisting of truncated inverted V-shaped base j, brace-rods I I, passing through the axis, and side flanges j' j', substantially as set forth.

2. The combination of casing A, shaft C, provided with blades or vanes J, constructed as described, and gearing c C', D D², E and F, all connected with the bridge B', substantially as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOSEPH C. OVERSTREET.

Witnesses:

GEO. L. CHEEK,
GEO. MCCAULEY.