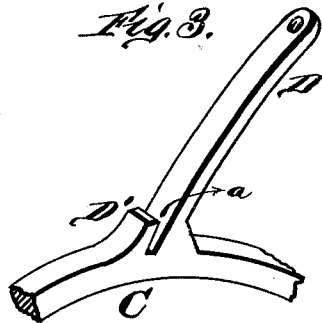
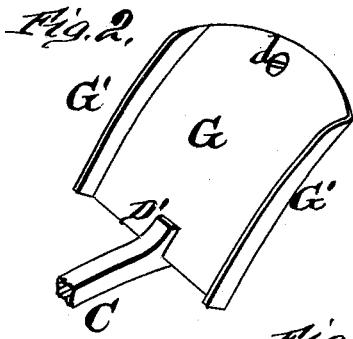
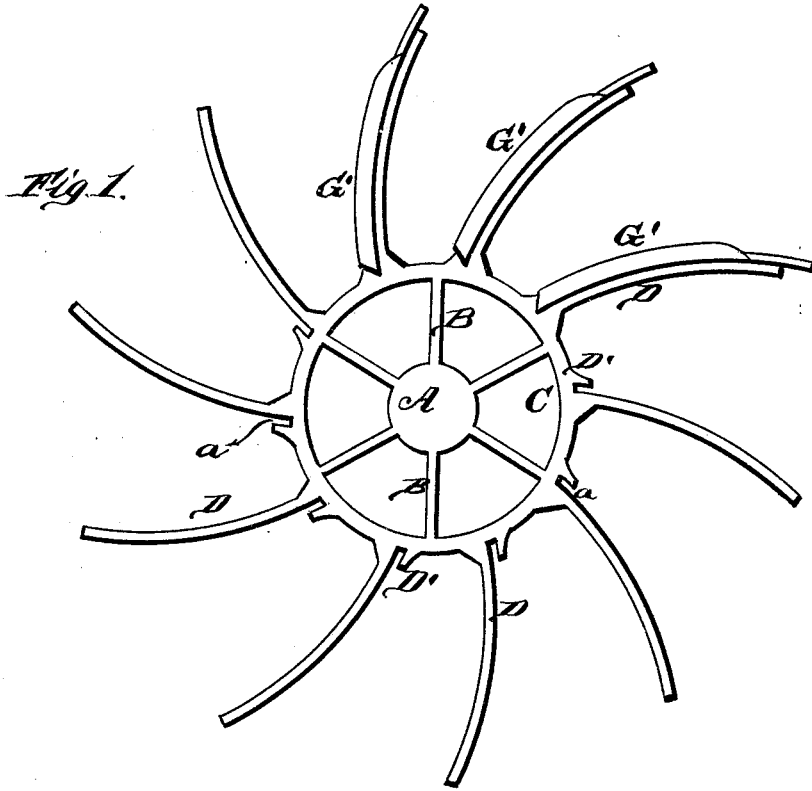


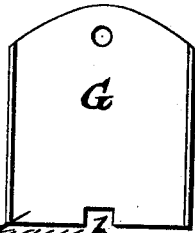
J. P. WILSON.  
FAN-BLOWERS.

No. 195,865.

Patented Oct. 2, 1877.



*Fig. 4.*



WITNESSES  
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ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JERRY P. WILSON, OF MANCHESTER, IOWA.

## IMPROVEMENT IN FAN-BLOWERS.

Specification forming part of Letters Patent No. **195,865**, dated October 2, 1877; application filed August 25, 1877.

*To all whom it may concern:*

Be it known that I, JERRY P. WILSON, of Manchester, in the county of Delaware and State of Iowa, have invented a new and valuable Improvement in Fan-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 plan view of my fan-blower as applied. Fig. 2 is a perspective view. Fig. 3 is a perspective detail, and Fig. 4 is a plan view, of my fan.

The nature of my invention consists in the construction and arrangement of a wheel and fans for blowers intended for forges, cupolas, &c., as will be hereinafter more fully set forth.

The annexed drawing, to which reference is made, fully illustrates my invention.

The wheel for my blower is formed of a central hub, A, with radial spokes B connecting it with the rim C. This rim is, at suitable equal distances apart, provided with a series of curved arms, D D, extending outward from it; and it has, also, a corresponding series of projecting lips, D' D', which form at the base of each arm, on the convex side thereof, a groove, *a*, of such width that the fan will fit therein.

G represents the fan-blade, made of sheet metal, its outer end rounded, and along its

sides are flanges G' G', projecting on the convex side of the fan.

These flanges cause and hold a greater volume of blast, and the curvature of the fan, corresponding with that of the arm to which it is attached, will give a heavier blast with more pressure than the straight inclined fan.

In the center of the inner edge of the fan is a notch, *b*, as shown. This edge of the fan is inserted, between the arm D and lip D', in the groove *a*, the notch *b* causing the fan to pass down sufficiently far to form a shoulder or bearing on each side of the rim C. The fan is then fastened by a single rivet, *d*, or its equivalent to the outer end of the arm D.

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

1. A wheel for blowers, having curved arms D, lips D', and grooves *a*, substantially as shown and described.

2. In blowers, the rim of the wheel, provided with curved arms D and lips D', in combination with the fans G, inserted between the arms and lips and fastened to the arms, substantially as herein set forth.

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

JERRY P. WILSON.

Witnesses:

L. W. ADAMS,  
IRA P. ADAMS.