

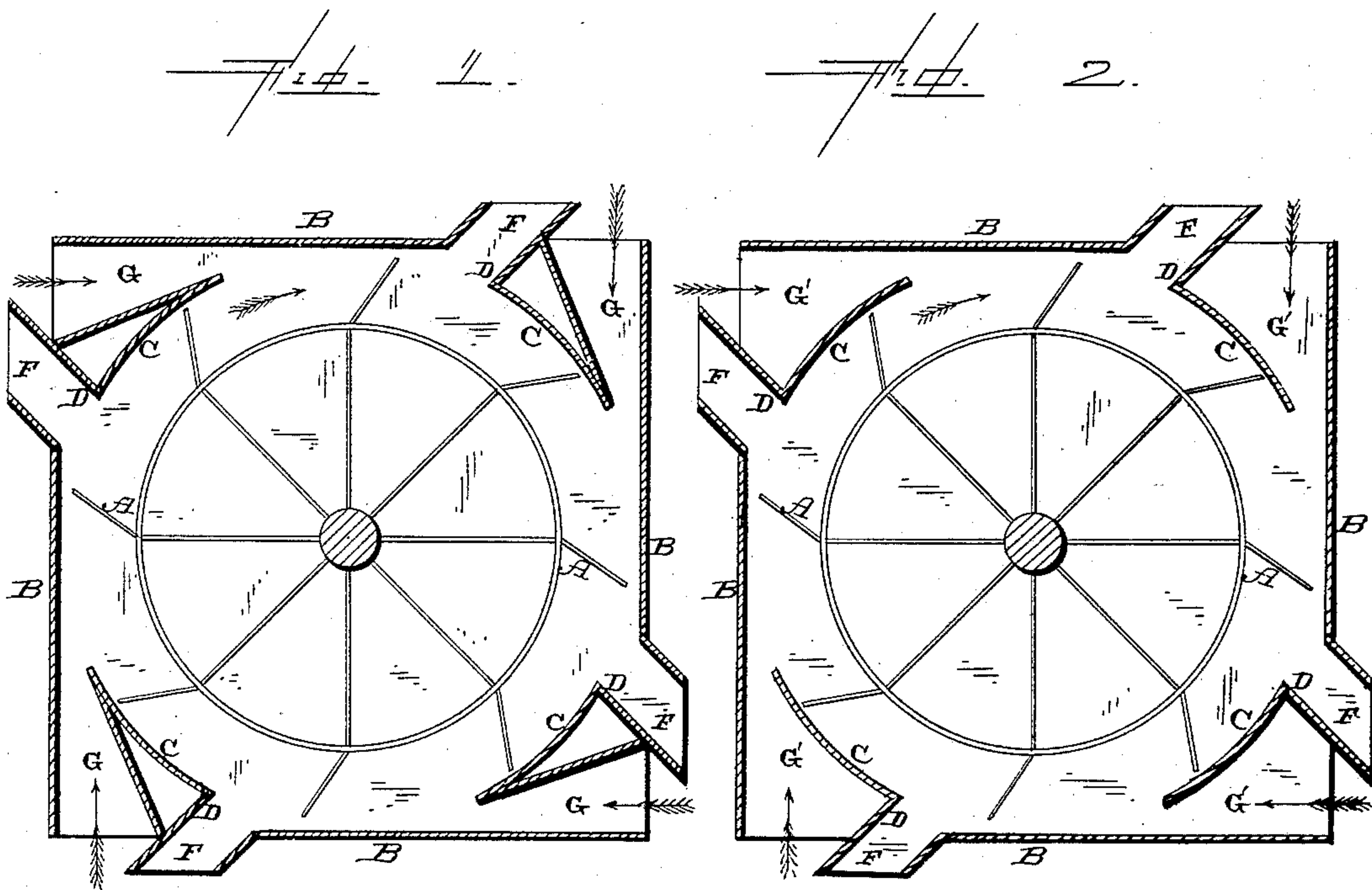
(No Model.)

J. H. BLAKELY.

BLOWER.

No. 341,218.

Patented May 4, 1886.



WITNESSES.

L. D. Gardner  
A. H. Brecht

INVENTOR.

Jas. H. Blakely,  
per  
J. A. Lehmann,  
Atty.

# UNITED STATES PATENT OFFICE.

JAMES H. BLAKELY, OF BRADFORD, PENNSYLVANIA.

## BLOWER.

SPECIFICATION forming part of Letters Patent No. 341,218, dated May 4, 1886.

Application filed February 25, 1886. Serial No. 193,147. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES H. BLAKELY, of Bradford, in the county of McKean and State of Pennsylvania, have invented certain new and useful Improvements in Blowers; 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; and it consists in a suitable rectangular frame, which may be used either vertically or horizontally, and which is provided with inlets and outlets for air, whereby a number of currents of equal force can be sent in different directions from the same fan, as will be more fully described hereinafter.

The object of my invention is to provide the frame or casing of the blower with a number of inlets and outlets for the air, so that as the fan is made to revolve it will draw air into the frame at different points and discharge it in different directions, in contradistinction to those blowers in which the air is taken in at the center and then discharged from one point only.

Figures 1 and 2 are vertical sections taken through the center of the frame, and showing slightly different constructions.

A represents the fan, and B the casing or frame-work. This casing is made rectangular, as shown, in contradistinction to the frames heretofore made, which are circular and conform in shape as near as possible to the revolution of the fan. Inside of this frame or casing B are placed the curved walls or partitions C, opposite to the corners of the frame. These curved walls are entirely separate from each other, so that each one forms only a separate arc of a circle. Those ends of the walls in the directions in which the fan revolves are made to form stops D for the air which is being forced by the fan, and leading from the casing at each one of the stops is an outlet, F, through which the air is forced. The opposite end of the wall from the stop will form a sharp

point, as where the inlet G for the air is made to pass directly through the corner of the frame, as shown in Fig 1. Between the opposite end of the wall from the stop and the side of the frame is made a simple opening, through which the air is drawn, as shown in Fig. 2. Where the construction is used as shown in Fig. 2, an inlet, G, is used at any suitable point in the frame back of the wall. The fan in revolving draws the air in through the different inlets and discharges it through the different outlets, thus forming a number of blasts or currents of equal volume and force, which may be sent in different directions.

As heretofore constructed the frames have been circular in shape, and the air has been taken in only at the center and then discharged at the periphery, making it possible to discharge only a single blast or current of air, whereas by the construction here shown the air is taken in at the periphery and then moved but a very short distance before it is discharged from the frame. The air being thus discharged more quickly from the frame, a larger amount of air can be forced in a given time from the frame in which the inlets and outlets are arranged, as here shown, than can be done from a frame in which the ordinary construction is used.

Having thus described my invention, I claim—

1. The combination of the fan with the enclosing-frame provided at the corners with the inlets G and outlets F, and the shoulders or stops D, located at the inner ends of the outlets, substantially as shown.

2. The combination of the fan with the enclosing-frame provided at its corners with the inlets G, the outlets F, the stops located at the inner ends of the outlets, and the curved inner walls placed between the inlets and outlets, substantially as described.

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

JAMES H. BLAKELY.

Witnesses:

A. BALTON,  
ED. KAHN.