

(No Model.)

E. D. GREEN.
POWER FAN.

No. 466,783.

Patented Jan. 12, 1892.

Fig. 1

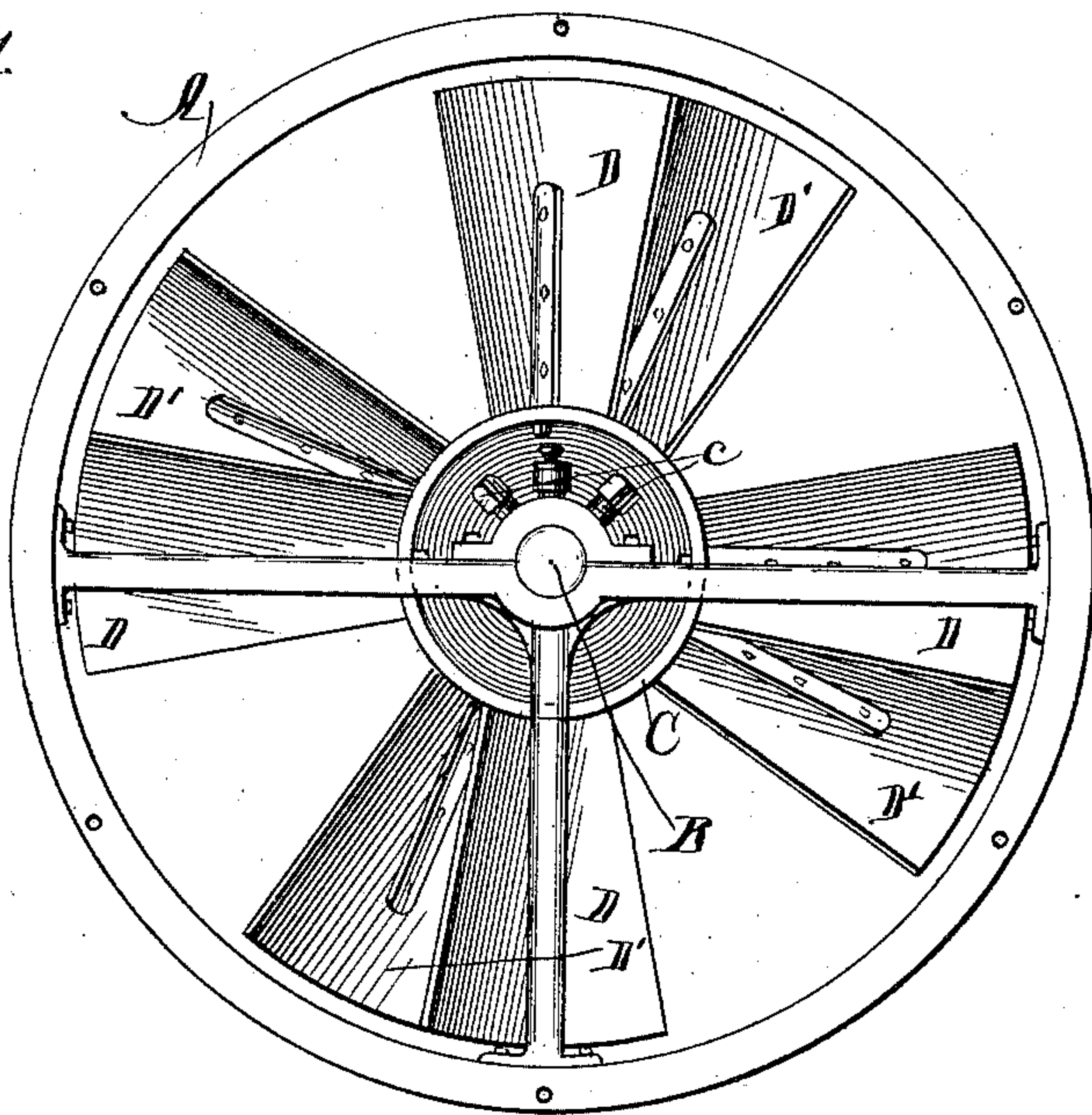
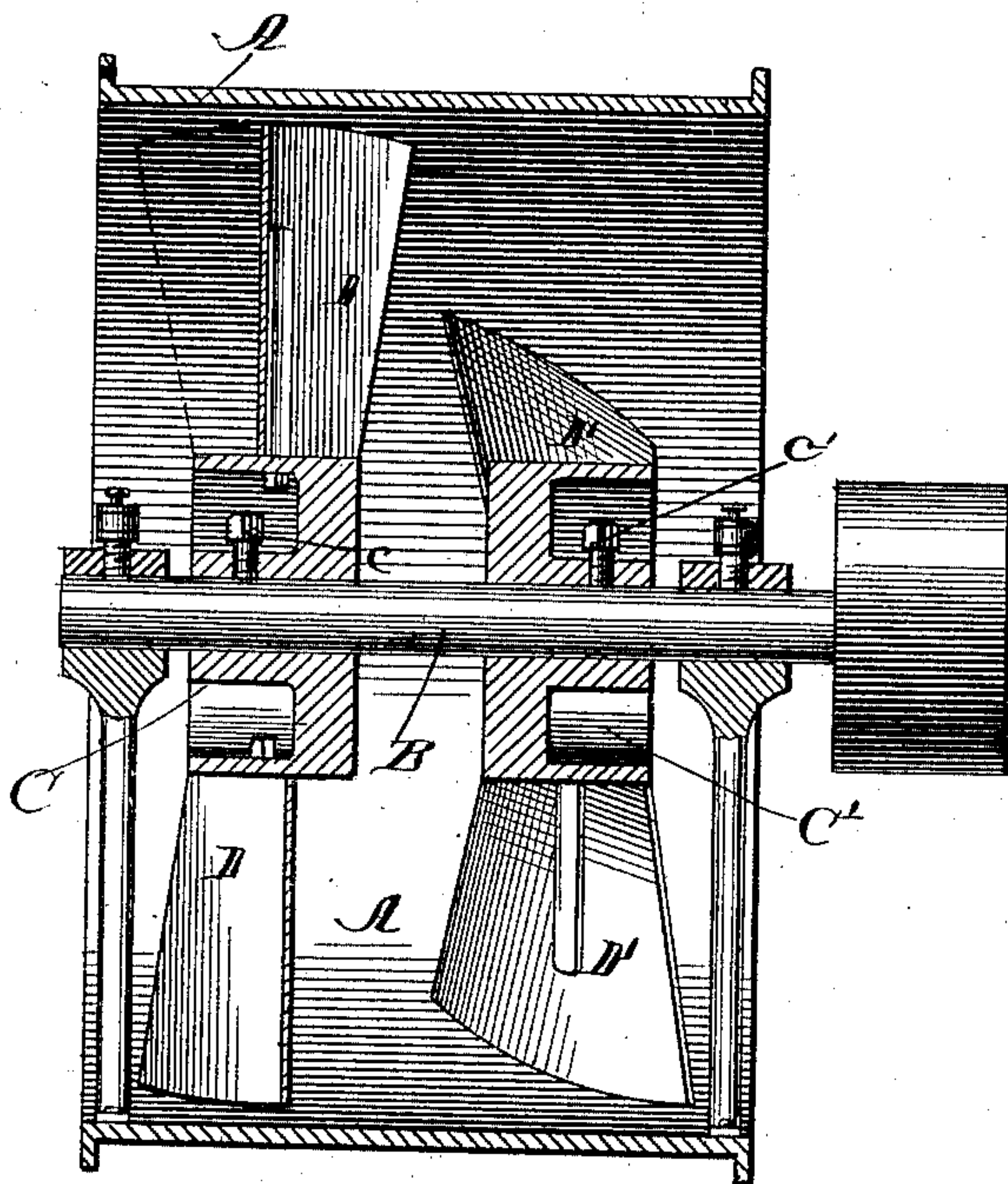


Fig. 2.



Witnesses:

Chas. A. Harvey
C. P. Smith.

Inventor:
Edward D. Green

By Wills, Green & Bitner
Attys.

UNITED STATES PATENT OFFICE.

EDWARD D. GREEN, OF CHICAGO, ILLINOIS.

POWER-FAN.

SPECIFICATION forming part of Letters Patent No. 466,783, dated January 12, 1892.

Application filed February 27, 1891. Serial No. 383,043. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. GREEN, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Power-Fans, of which the following is a specification.

My invention relates to a power-fan designed to create a current of air or to supply air under moderate pressure where large quantities are required. It consists in certain improvements fully described and claimed below, by which greater efficiency is obtained and also the manufacture of such fans rendered simple and easy.

While my improvements are made with especial reference to fans, they may also be utilized in propellers or wind or water motors by removing the encircling cylinder.

My invention is illustrated by means of two figures upon the opposite page, in which Figure 1 is an end view of my improved fan in its preferred form, and Fig. 2 is an axial section of the same.

In the figures, A is an encircling cylinder serving to confine the air within reach of the fans.

B is a shaft mounted in suitable bearings in said cylinder and provided with means for rotating it.

C and C' are collars upon the shaft, made rigid therewith by means of set-screws *c c'*, which collars serve as hubs upon which fans D D' are mounted and adjusted to the proper angle. The fans D' are arranged midway between the fans D and cut into the columns of air coming from said fans. It is possible to thus arrange the fans by the use of a single hub; but it is much preferable to have separate hubs, as shown, and to adjust the two wheels after they are made. This enables the fans to be adapted to various uses and saves much care and painstaking in the manufacture of the wheels.

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

The combination, with a shaft, of two fan-wheels, each having a series of fans arranged in planes oblique to the axis of the shaft and adapted to drive the air in the same direction, said fan-wheels being adjustably mounted upon the shaft, whereby the relative positions of the fans on one wheel with respect to those on the other may be varied as desired, substantially as described.

EDWARD D. GREEN.

Witnesses:

GEO. A. JACKSON,
H. BITNER.