J. M. DAYIANTIS.

VENTILATING FAN.

APPLICATION FILED JAN. 11, 1913.

1,084,540.

Patented Jan. 13, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

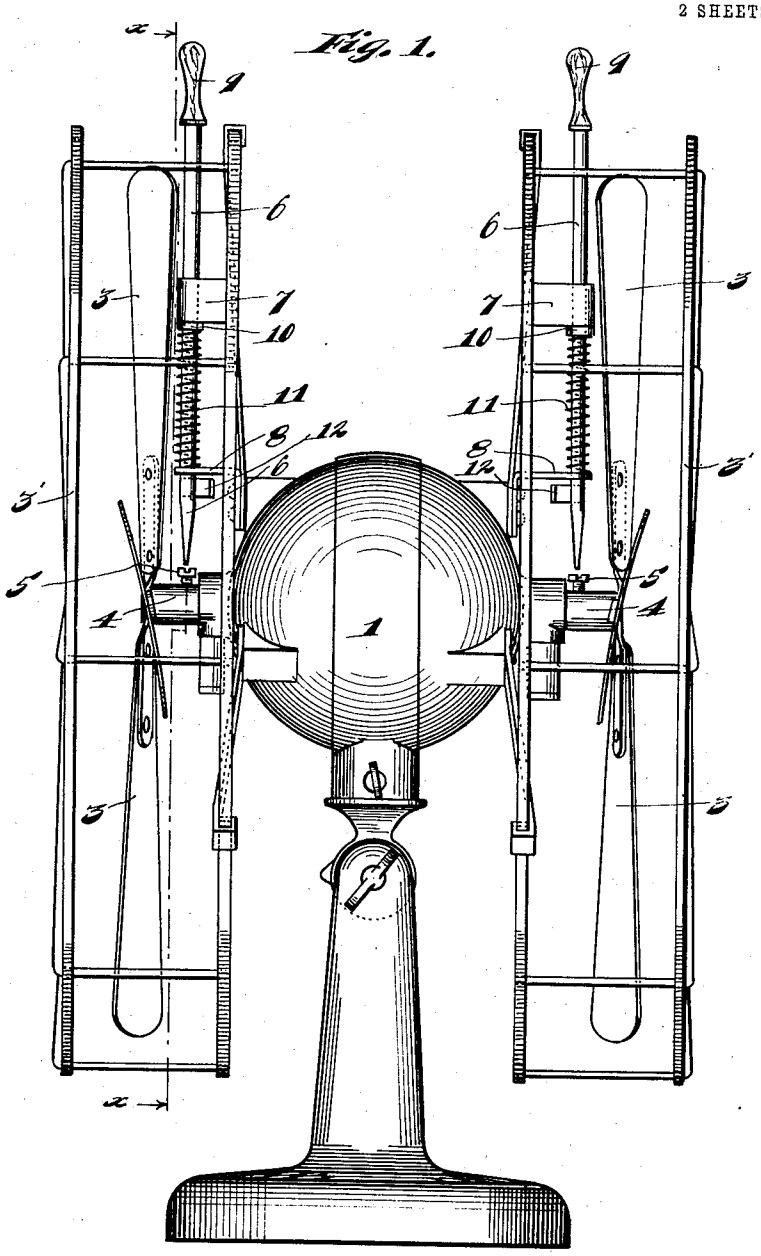




Fig. 2.

Witnesses:

C. E. Wessels.

B. S. Richards

Inventor:

John M. Dayiantis,

By Joshua R. H. Potts

his Attorney.

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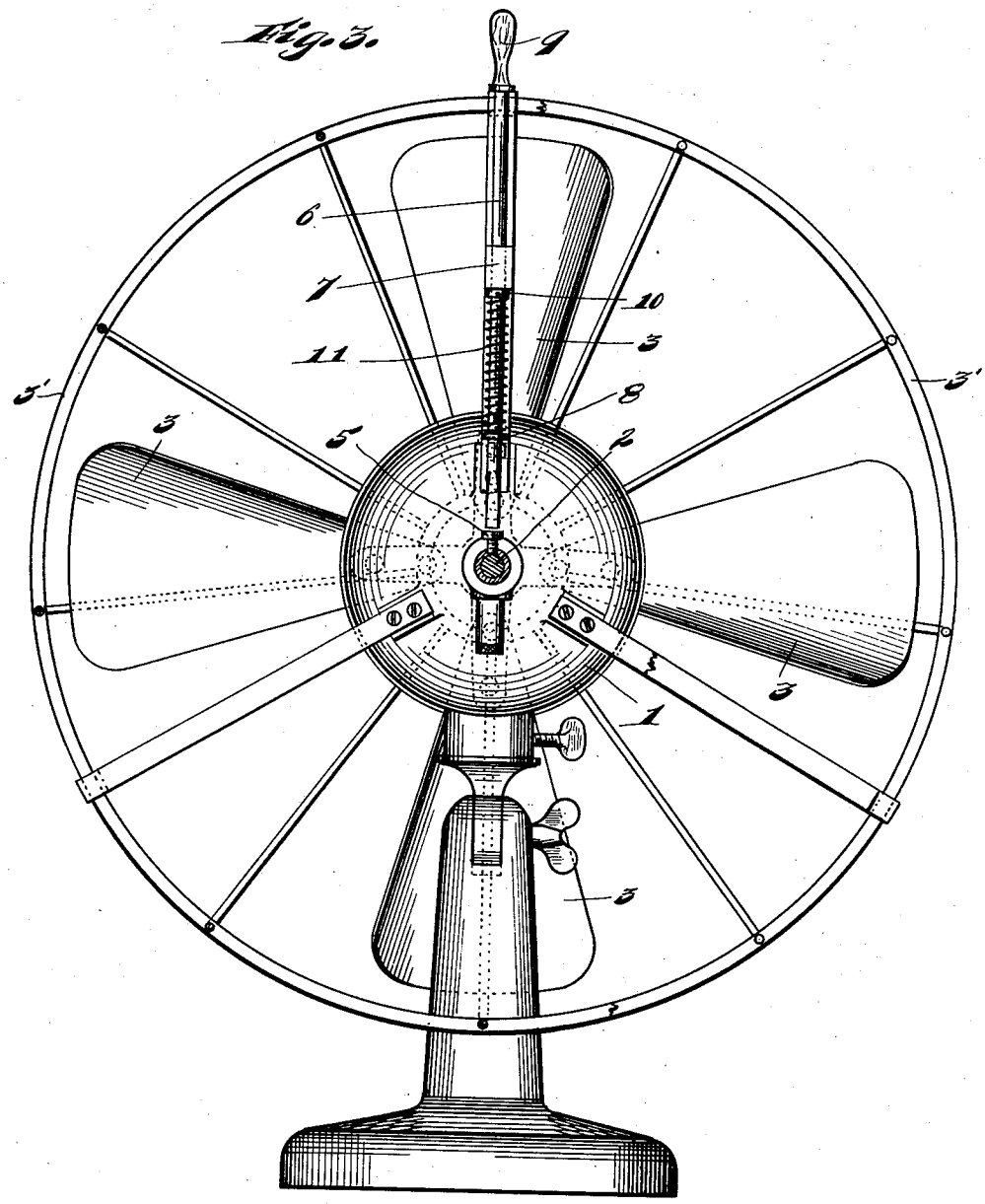
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2 SHEETS—SHEET 2.

Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN M. DAYIANTIS, OF CHICAGO, ILLINOIS.

VENTILATING-FAN.

1,084,540. Specification of Letters Patent. Patented Jan. 13, 1914.

Application filed January 11, 1913. Serial No. 741,401.

To all whom it may concern:

Be it known that I, JOHN M. DAYIANTIS, a former subject of the King of Greece, who have declared my intention of becoming a citizen of the United States, and a resident of the city of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Ventilating-Fans, of which the following is a specification.

My invention relates to improvements in ventilating fans and has for its object the provision of an improved fan of this character which is of simple construction and efficient in operation.

The invention consists in the combinations and arrangements of parts hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings forming a part of this specification, and in which—

Figure 1 is a side elevation of a ventilating fan embodying my invention, Fig. 2, a detail section of a screw driver arrangement employed in the fan, and Fig. 3, a section taken on line *x*—*x* of Fig. 1.

The preferred form of construction as illustrated in the drawings comprises a suitable motor mounted in a suitable casing 1, the motor shaft 2 being extended at both ends from casing 1 to receive fan blades 3. The fan blades are oppositely disposed as shown and are arranged to force a blast of air outwardly from casing 1 in each direction. Each of the fan blades 3 is provided with a hub 4 fitting over the corresponding end of shaft 2 and provided with a set screw 5 for securing said fan to said shaft. Each of the fan blades 3 is surrounded by a suitable guard 3′ and a screw driver 6 is mounted in each of the guards 3′ in bearings 7 and 8 in operative relation with the corresponding set screw 5 as shown. Each of these screw drivers is provided at its upper end with an operating handle 9 and a stop collar 10 resting against the under side of bearing 7 to limit upward movement of the corresponding screw driver. A spring 11 is arranged about each of the screw drivers 6 and is imprisoned between collar 10 and bearing 8 so as to hold the corresponding screw driver normally in elevated or non-engaging position as shown in Fig. 1. Each of the screw drivers 6 is provided with a stop arm 12 adapted to engage the corresponding fan blade upon rotation of said screw driver in loosening the corresponding set screw, said arm thus serving as a means for preventing rotation of the corresponding fan blade when the same has been loosened from shaft 2.

In use both of the fan blades will be operated upon operation of the motor thus forcing a blast of air outwardly from each side of the motor and thus producing excellent ventilation and circulation of the air. When it is desired to discontinue the operation of either of the fan blades, the corresponding screw driver is depressed into engagement with the corresponding set screw and is given a half turn to unloosen the same. This throws arm 12 into position for engagement with the corresponding fan blade to positively prevent rotation thereof. The specific form and arrangement of parts are simple for the purpose and will be found to be highly efficient in use.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. The combination with a shaft, of a fan blade on said shaft; a set-screw securing said fan blade to said shaft; a spring held screw driver arranged to engage said set screw; and a stop arm for stopping said fan blade on said screw driver arranged to swing to stopping position upon loosening movement of said screw driver, substantially as described.

2. The combination with a shaft, of a fan blade on said shaft; a set screw securing said fan blade to said shaft; a guard for said fan blade; a spring held screw driver

on said guard arranged to engage said set screw; and a stop arm for stopping said fan blade on said screw driver arranged to swing to stopping position upon loosening movement of said screw driver, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN M. DAYIANTIS.

Witnesses:
HELEN F. LILLIS,
JOSHUA R. H. POTTS.