O. SELG.

FAN.

APPLICATION FILED APR. 22, 1908.

**899,684.** Patented Sept. 29, 1908.

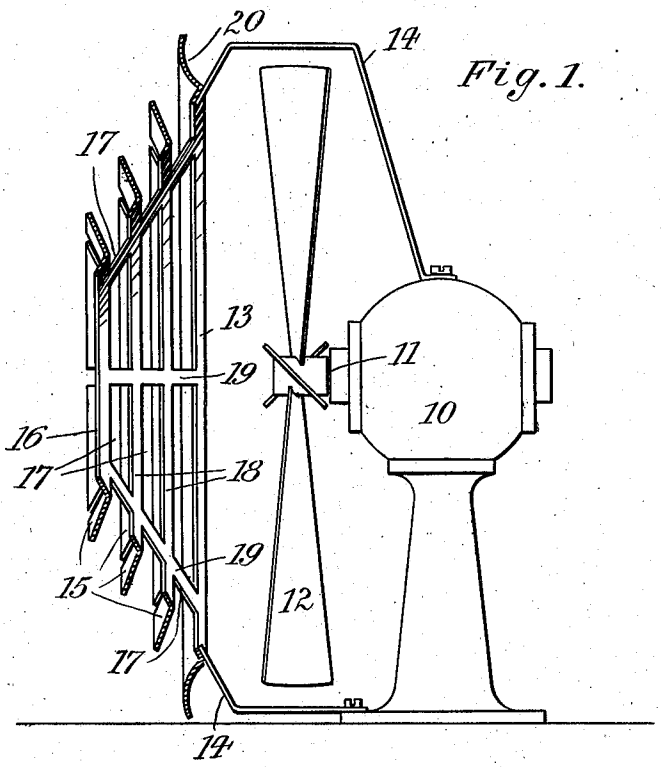
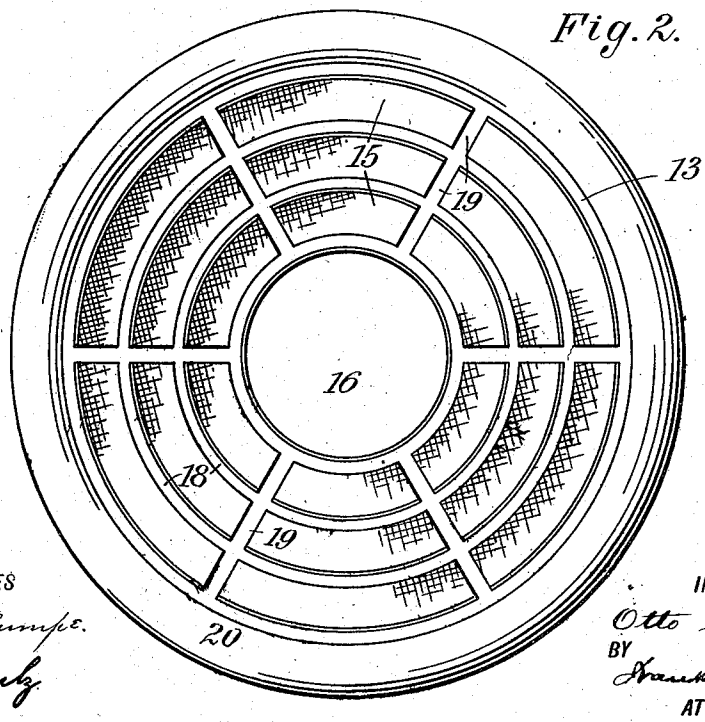



Fig. 1.

Fig. 2.




WITNESSES

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# UNITED STATES PATENT OFFICE.

OTTO SELG, OF NEW YORK, N. Y.

## FAN.

No. 899,684. Specification of Letters Patent. Patented Sept. 29, 1908.

Application filed April 22, 1908. Serial No. 428,498.

*To all whom it may concern:*

Be it known that I, OTTO SELG, a citizen of the United States, residing at New York city, Manhattan, county and State of New York, have invented new and useful Improvements in Fans, of which the following is a specification.

This invention relates to a fan provided with novel means for effectively distributing the air blast over an extended area.

In the accompanying drawing: Figure 1 is a side elevation, partly in section, of my improved fan, and Fig. 2 a front elevation of the deflector.

In casing 10 of an electric fan is journaled the shaft 11 of the wind vanes 12, as usual. The blast is diffused by a frusto-conical deflector 13, so secured by frame 14 to casing 10, that the base of the deflector faces the casing. Deflector 13 is provided with a series of outwardly and forwardly extending integral blades 15 arranged in rows concentrically around a central or axial opening 16. These blades are formed by cutting substantially U-shaped incisions into the body of deflector 13 and then bending, outwards, the sections which have thus become partly severed. In this way an air passage 17 is formed in advance of each blade 15, the several air passages being also arranged in concentric rows. These rows are separated by a series of coned rings or annular webs 13, set back of each other and increasing in diameter from front to rear, while the air passages of the same row are separated by converging webs or ribs 19. The rim 20 of the deflector is curved backward to form a continuous annular trough.

It will be seen that by the means described a central air blast is forced through opening 16. This blast is surrounded by a series of laterally deflected annular blasts passing back of one another through the openings 17 and guided by blades 15, thus insuring a wide distribution of the wind. The area of this distribution is further increased by the trough-shaped rim 20, which deflects the outermost portion of the blast.

I claim:

A fan provided with a coned deflector composed of a series of flaring rings set back of each other and increasing in diameter from front to rear, a series of integral converging ribs, and blades that extend outwardly and forwardly from the rings intermediate the ribs, substantially as specified.

Signed by me at New York city, (Manhattan,) N. Y., this 21st day of April, 1908.

OTTO SELG.

Witnesses:

W. R. SCHULZ,

FRANK V. BRIESEN.