

I. H. SPENCER.
 ORGAN BLOWER.
 APPLICATION FILED AUG. 12, 1912.

1,115,873.

Patented Nov. 3, 1914.

Fig. 1.

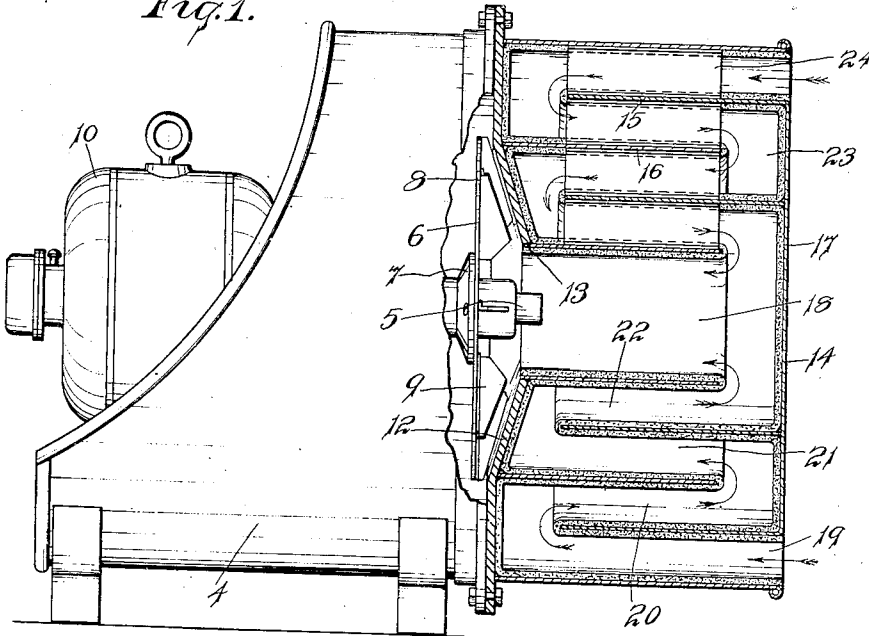
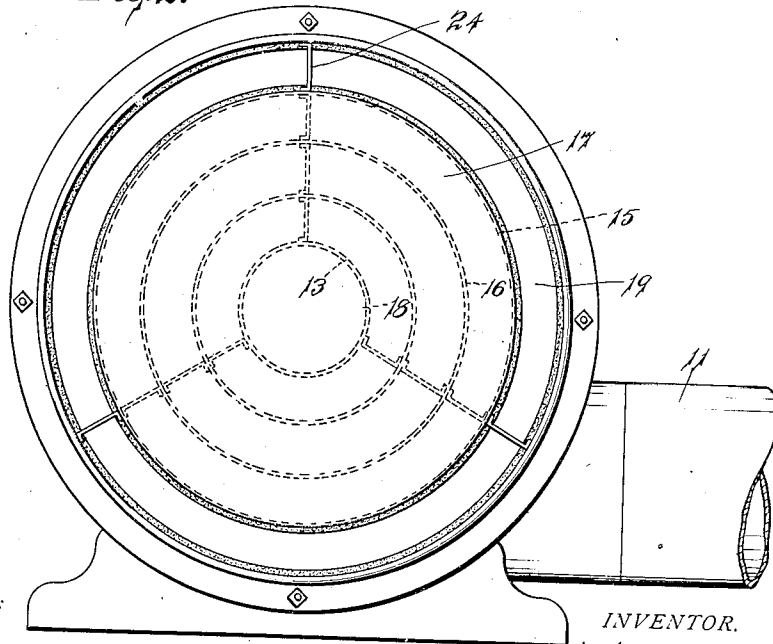


Fig. 2.



WITNESSES:

Louis Lucia
[Signature]

INVENTOR.

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 BY
 Arthur B. Jenkins,
 ATTORNEY.

UNITED STATES PATENT OFFICE.

IRA H. SPENCER, OF WEST HARTFORD, CONNECTICUT, ASSIGNOR TO THE ORGAN POWER COMPANY, OF HARTFORD, CONNECTICUT, A CORPORATION OF CONNECTICUT.

ORGAN-BLOWER.

1,115,873.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, IRA H. SPENCER, a citizen of the United States, and a resident of West Hartford, in the county of Hartford and State of Connecticut, have invented a new and Improved Organ-Blower, of which the following is a specification.

My invention relates to the class of devices used to supply air to musical instruments and especially to church organs, and an object of my invention, among others, is to provide a device of this class that shall be substantially noiseless in its operation.

One form of device embodying my invention and in the construction and use of which the object above set out, as well as others, may be attained is illustrated in the accompanying drawing, in which—

Figure 1 is a side view of an organ blower embodying my invention, with parts cut away to show construction. Fig. 2 is an end view of the same, looking from the right of the device as shown in Fig. 1.

In the accompanying drawings the numeral 4 denotes the casing of a blower, which blower may be of ordinary form and construction, embodying a shaft 5 to which a number of sets of fans 6 are secured, each set consisting of a hub 7, a disk 8, and fan blades 9 secured to the disks. The shaft may be driven by a motor 10, and an outlet or exhaust pipe 11 extends from the casing and through which the air currents generated by the fans are caused to flow outwardly from the casing. The casing is closed on its inlet side by a plate 12 having an inlet opening 13 at the center thereof, and this plate may also form one wall of an inlet casing 14 formed to permit flow of air therethrough to the fans but to prevent the sound caused by the operation of the fans from traveling backward and passing out at the entrance to the inlet casing. To effect this result the casing is composed of a number of concentric deflectors 15—16, the former of which project from the head 17 of the inlet casing and the latter of which project from the plate 12, a tube 18 extending from the plate 12 at the center forming the entrance to the inlet open-

ing 13 to the fan. The deflectors on the head extend inward beyond the outer edges of the deflectors from the plate 12 and preferably to a point near said plate, while the ends of the deflectors 16 terminate near the head 17, this construction providing a tortuous passage for the air which enters at the inlet 19 and turns into the passage 20, from thence into the passage 21, from the latter into the passage 22 and from the latter into the tube 18 from which it passes into the fan chamber and from thence outwardly through the pipe 11 to the organ or other devices to be supplied with air.

The passages 19 to 22 and through the tube 18, have a lining 23 of a material, as felt, to retard the travel of sound outward from within the casing, and this combined with the tortuous passage effectually prevents the sound caused by the operation of the fan from being noticed without the casing while at the same time the effective entrance of the air to the casing is not affected.

The deflectors 15 projecting from the head 17 are connected as by means of struts 24 with the deflectors 16 projecting from the plate 12, these struts being located and secured as may be desired to provide a firm support for the head 17 and the deflector walls secured thereto.

The structure herein shown and described avoids the use of a self-closing valve which has heretofore been employed to prevent the escape of sound when the valve is closed, but which, however, does not prevent such escape of sound when the valve is open, the conditions existing within my improved apparatus being such that sound is equally prevented from escaping when the apparatus is running, whether the air be flowing into the inlet or not.

While I have shown and described herein one form of device for effectually carrying out my purpose, the invention may be present in devices differently constructed and I do not therefore limit the invention to the exact form of apparatus herein disclosed.

I claim—

In an organ blower, a casing having an inlet and an outlet adapted to be connected

to a wind chest or like reservoir, means
within the casing for creating a current of
air, a plate closing the inlet side of said
casing, deflectors projecting from said plate
5 and arranged concentrically thereon, an in-
let casing including a head having deflec-
tors concentrically arranged thereon to lie

between the deflectors projecting from the
plate, and radially arranged struts secured
to and connecting adjacent deflectors.
IRA H. SPENCER.

Witnesses:

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