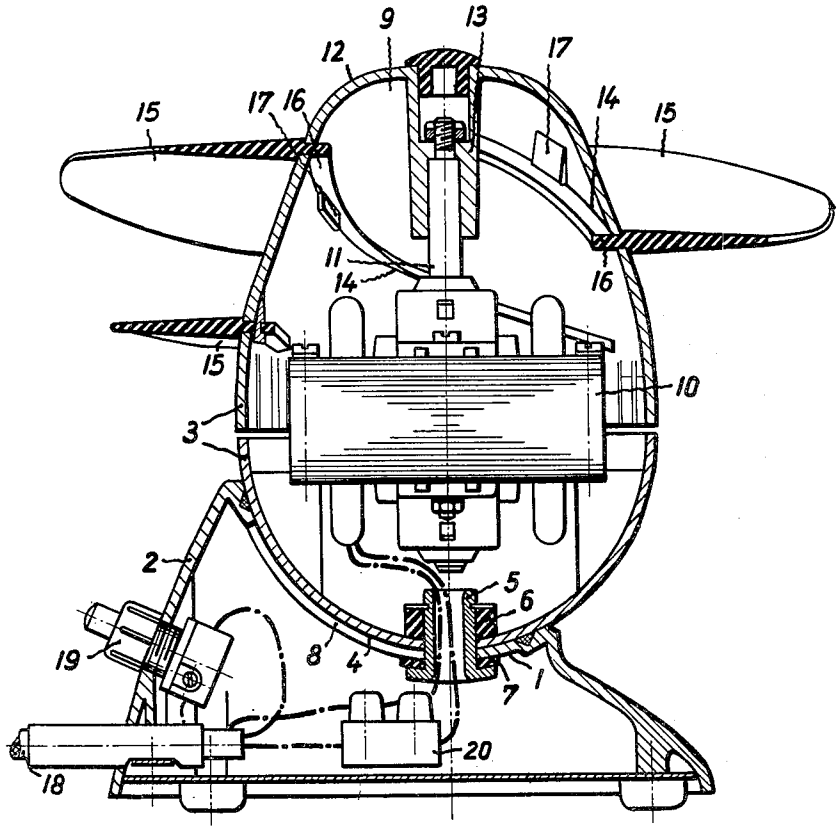
Feb. 27, 1962 H. FLECKENSTEIN ET AL 3,022,969

VENTILATOR

Filed Sept. 16, 1958



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United States Patent Office 3,022,969 Patented Feb. 27, 1962

3,022,969

VENTILATOR

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Filed Sept. 16, 1958, Ser. No. 761,429
2 Claims. (Cl. 248—13)

The present invention relates to ventilators. More in particular, the present invention relates to tiltable table and wall ventilators.

The known tiltable table ventilators comprise a foot supporting a column whose upper end forms one of the two halves of a rotary joint. The other half of the rotary joint is attached to the motor driven ventilator casing. The connecting link between the ventilator casing and the foot is also composed of a resilient connecting link forming a fork with the latter supporting the ventilator casing with the motor and the ventilator blades. Still other constructions do not have a special foot but have a spiral-, loop- or ring-shaped supporting member.

The last mentioned construction suffers from the disadvantage that the switch and the terminals cannot be housed in the foot of the ventilator. Above all, all of the known constructions call for at least three different elements, i.e. the foot and/or connecting support member, a rotary joint, and a casing housing the motor and the ventilator blades, and in addition various small connecting elements.

It is the object of the present invention to provide a tiltable and adjustable table and wall ventilator having a greatly simplified and nevertheless a much more stable and compact construction.

This object is achieved by the ventilator of the present invention in which the ventilator casing is composed of two complementary portions of which one supports the motor and the other supports the ventilator blades and wherein the portion supporting the motor is directly connected with the stand of the ventilator by means of an open, force locking joint formed by the surface of the casing portion supporting the motor and a part of the upper surface of the stand, and by a connecting element which connects the last-mentioned part. The portion of the ventilator casing is positioned on the shaft of the motor and serves as a hub of the ventilator blades.

The invention is illustrated in the accompanying drawing showing the ventilator of the present invention in a sectional view.

A stand 2 of the ventilator has an upwardly directed inclined calotte shaped and spherical shell portion 1 adapted to receive the lower, spherical part 4 of the ventilator casing 3. The part 4 and the stand 2 are kept in force-locking connection by the hollow peg 5. Elastic rings 6 and 7 composed, for example, of rubber render this connection a resilient one. The spherical shell 1, the spherical portion 4, and the peg 5 form the open, force-locking rotary joint, with the peg 5 being adapted to glide along the slot 8 provided in the spherical shell 1. The other, upper portion 12 of the ventilator casing 3 is so calotte shaped, that the combined portions 4 and 12 have an egg-shaped configuration. The motor 10 is housed by the spherical portion 4. The shaft 11 of the motor 10 supports the portion 12 through the hub 13 resting on or screwed to the shaft 11. The top portion 12 is provided with slots 14 disposed in the manner of the threading of a screw, and serves as the hub of the ventilator. The edges 16 of the elastic ventilator blades 15 composed, for example, of rubber are inserted into the slots 14. The blades 15 are attached to the top portion

12 by means of wedges 17 in the slots of the margins 16 of the blades.

The supply line 18 is introduced into the stand 2 with one of its leads being connected directly to the terminal 20 and the other lead being connected thereto via the switch 19. The leads are then passed through the hollow peg 5 and connected to the motor 10.

Instead of providing the guide slot 8 in the stand 2 it is also possible to have this slot in the spherical portion 4, although this arangement is less advantageous as it would expose this slot whenever the ventilator 9 with its casing 3 is tilted.

In order to maintain the spherical shell 1 in the stand 2 in the proper position the foot is preferably shaped as a scalene tetrahedron whose one, upper angle is cut off transversely relative to the opposite surface, the base surface, so that the cutting line is parallel relative to the base surface and so that the edge of the spherical shell is positioned in the sectional plane and the slot 8 in the spherical shell 1 is disposed vertically relative to the shorter side of the base surface.

The ventilator of the present invention can be used as a table ventilator but it can also be suspended and used as a wall ventilator with the lowermost portion of stand 2 facing the wall.

It will be understood that this invention is susceptible to modification in order to adapt it to different usages and conditions, and, accordingly, it is desired to comprehend such modifications within this invention as may fall within the scope of the appended claims.

What is claimed is:

1. A supporting structure for a motor driven fan comprising: a stand having an inclined, upwardly directed, concave, spherical-calotte surface, there being a slot in said surface; a housing for the fan motor having a convex spherical surface directly resting on said concave surface of said stand and forming a ball and socket joint permitting movement of said housing with respect to said stand; and force-locking means including a resilient ring receiving a flanged peg, the latter being adjustably received by said slot for connecting said stand and said housing to each other at a desired relative position.

2. A supporting structure for a motor driven fan comprising: a stand having an inclined, upwardly directed, concave, spherical-calotte surface, there being a slot in said surface; a housing for the fan motor having a convex spherical surface directly resting on said concave surface of said stand and forming a ball and socket joint permitting movement of said housing with respect to said stand; a flanged, tubular peg received by said slot and protruding into said housing; and resilient rings seated on said flanges and engaging the undersurfaces of the said two spherical surfaces for adjustably force locking said housing to said stand.

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