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PATENT SPECIFICATION
DRAWINGS ATTACHED



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COMPLETE SPECIFICATION

Air Moving Apparatus

We, YARRA INVESTMENT CORPORATION LIMITED, of Sandringham House, Shirley Street, Nassau, Bahamas, a Company organised under the laws of the Bahamas, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

10 This invention relates to air moving apparatus and has for its object the provision of an apparatus of simple construction which is capable of producing an effective but comfortable cooling action on a person seated or lying down.

15 To this end according to this invention there is provided air moving apparatus comprising a casing having mounted therein a pair of coaxially disposed centrifugal fan elements, with a single motor mounted between said fan elements and adapted to rotate same to cause air to be dispelled through an outlet disposed tangentially of the fan elements, said casing having means thereon whereby it can be suspended from above at various angles so that air can be dispelled downwardly in different directions as required.

20 According to a preferred feature of this invention the motor is mounted between spaced transverse walls disposed centrally of the casing by means of rubber or the like resilient means so that the motor is substantially quiet and vibration free in operation. Moreover these walls are apertured or otherwise arranged to permit a good circulation of air around the motor, thereby enabling it to run at a very low temperature, and thus prolonging its life.

40 The casing may be of generally elongated cylindrical shape with a tangential outlet duct. This duct would, in use, normally be directed downwardly at a required angle.

The suspension means may comprise hooks or the like disposed in the opposite ends of the casing which can selectively be engaged with links of suspension elements such as chains, apertured straps or the like. A light fitting may also be incorporated in the apparatus.

50 Air moving apparatus in accordance with one embodiment of this invention will now be described, by way of example, with reference to the accompanying drawings, in which:—

Figure 1 is an underneath perspective view of the apparatus.

Figure 2 is an end view of the apparatus.

Figure 3 is an exploded view of the apparatus being drawn on a somewhat smaller scale.

Figure 4 is a longitudinal section through the apparatus on the line IV-IV in Figure 6, being drawn on a somewhat larger scale. Figure 5 is a section on the line V-V in Figure 4 and

Figure 6 is a view in the direction of the arrows VI-VI in Figure 4, the left hand half of the casing, as viewed in Figure 4, and the fan element therein having been removed.

For convenience a light fitting has only been shown in Figures 1 and 2.

The air moving apparatus shown in the drawings includes an elongated casing 1 of generally cylindrical shape with a tangential outlet duct 2 extending the whole length thereof, the outer end of this duct being closed by a grille 3, which may be of any desired form.

Centrally the casing 1 includes a pair of spaced transverse walls 4 between which is mounted an electric motor 5 with coaxial rotary shafts 6 extending through said walls 4. Fixed on the shafts 6 in the opposite end halves of the casing 1 are drum like

[Price 4s. 6d.]

centrifugal fan elements 7, the open ends thereof registering with apertures 8 in end plates 9 of the casing.

The mounting of the motor 5 includes on each side thereof four rubber or the like resilient support blocks or the like 10 which fit into apertures 11 formed in the walls 4 so that in operation the motor 5 will be quiet or substantially so. Where the walls 10 4, between which the motor is mounted, extend into the outlet duct 2 they are narrowed, as at 12, so that the total effective area of the actual outlet is not reduced. Moreover, good circulation of air is provided around the motor thus ensuring a long life therefor.

On each of the opposite end plates 9 of the casing there are provided a pair of hooks, pins or the like 13 which can be engaged by a suspension element such as a chain 14, apertured strap or the like.

It is envisaged that, in normal use, the apparatus will be suspended from a wall bracket or the ceiling of a room (as in Figure 1) for example above a bed, desk or the like, suspension hooks being secured in the ceiling. By selectively engaging the suspension elements 14 with the hooks, pins or the like 13 on the end plates 9 of the casing 1 the angle at which air will be dispelled downwardly can be varied as required. The dispersion of air downwardly increases progressively so that the overall cooling effect is not limited to one small area. What is more, air is directed towards a person being cooled gently and without the creation of a draught or blast of air which in itself can cause considerable discomfort.

The casing 1 as shown is actually manufactured from synthetic plastics material. It is formed from a plurality of moulded parts adapted rigidly to be fitted together with the motor and fan elements in position therein. A lead for the motor (not shown) is taken off at any convenient point.

Thus, more specifically, the casing 1 is made up, as clearly shown in Figure 3, by two central sections 20 and 21 and two end sections 22 and 23, each two sections being mirror images one of the other. The central sections 20 and 21 however, differ in one slight detail; on the section 20 are provided spigots 24 (as indicated in Figure 6) which fit into sockets 25 (Figure 3) in the section 21, thereby securing the two sections together.

The walls 4 are included in the central sections 20 and 21 being joined to the curved peripheral walls thereof by apertured webs 26 which permit circulation of air around the motor as referred to above. The end walls 9, with apertures 8 therein, are provided by the end sections 22 and 23.

The tangential outlet 2 is formed on fit-

ting the central and end sections 20 to 23 together and into this fits the grille 3, which is also moulded as a separate section. Centrally the grille 3 provides a mount 27 for an electric control switch 28.

The resilient support blocks or the like 10 assist during shipment in protecting the various component parts against breakage.

A light fitting may be incorporated in the apparatus as above described. As shown in Figures 1 and 2 this may comprise a tubular lamp 30 mounted adjacent the outlet 2. A shade 31 may be provided for the lamp 30 and this shade may be fixed (as shown) or adjustable in position.

There may be occasions when it is not desired to have the air cooling apparatus overhead, as described above. Then the apparatus can be taken down and simply rested on a pad, block or the like with the outlet duct disposed at any desired angle.

WHAT WE CLAIM IS:—

1. Air moving apparatus comprising a casing having mounted therein a pair of co-axially disposed centrifugal fan elements, with a single motor mounted between said fan elements and adapted to rotate same to cause air to be dispelled through an outlet disposed tangentially of the fan elements, said casing having means thereon whereby it can be suspended from above at various angles so that air can be dispelled downwardly in different directions as required.

2. Air moving apparatus as claimed in claim 1 wherein the motor is mounted between spaced transverse walls disposed centrally of the casing by means of rubber or the like resilient means so that the motor is substantially quiet and vibration free in operation.

3. Air moving apparatus as claimed in Claim 1 or 2 wherein said walls are apertured or otherwise arranged to permit a good circulation of air around the motor, thereby enabling it to run at a very low temperature, and thus prolonging its life.

4. Air moving apparatus as claimed in Claim 1, 2 or 3 wherein the casing is of generally elongated cylindrical shape with a tangential outlet duct.

5. Air moving apparatus as claimed in any one of the preceding claims wherein the suspension means comprises hooks or the like disposed in the opposite ends of the casing which can selectively be engaged with links of suspension elements such as chains, apertured straps or the like.

6. Air moving apparatus as claimed in any one of the preceding claims wherein the casing is manufactured in sections from synthetic plastics material.

7. Air moving apparatus as claimed in Claim 6 wherein the casing is made up by two central sections and two end sections, each two sections being mirror images one



centrifugal fan elements 7, the open ends thereof registering with apertures 8 in end plates 9 of the casing.

The mounting of the motor 5 includes on each side thereof four rubber or the like resilient support blocks or the like 10 which fit into apertures 11 formed in the walls 4 so that in operation the motor 5 will be quiet or substantially so. Where the walls 10, between which the motor is mounted, extend into the outlet duct 2 they are narrowed, as at 12, so that the total effective area of the actual outlet is not reduced. Moreover, good circulation of air is provided around the motor thus ensuring a long life therefor.

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2. Air moving apparatus as claimed in claim 1 wherein the motor is mounted between spaced transverse walls disposed centrally of the casing by means of rubber or the like resilient means so that the motor is substantially quiet and vibration free in operation.

3. Air moving apparatus as claimed in Claim 1 or 2 wherein said walls are apertured or otherwise arranged to permit a good circulation of air around the motor, thereby enabling it to run at a very low temperature, and thus prolonging its life.

4. Air moving apparatus as claimed in Claim 1, 2 or 3 wherein the casing is of generally elongated cylindrical shape with a tangential outlet duct.

5. Air moving apparatus as claimed in any one of the preceding claims wherein the suspension means comprises hooks or the like disposed in the opposite ends of the casing which can selectively be engaged with links of suspension elements such as chains, apertured straps or the like.

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8. Air moving apparatus as claimed in any one of the preceding claims and also including a light fitting.

5 9. Air moving apparatus as claimed in Claim 8 wherein a shade is provided for the light fitting, such shade being adjustable in position.

10. Air moving apparatus substantially as herein described with reference to and as shown in the accompanying drawings.

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