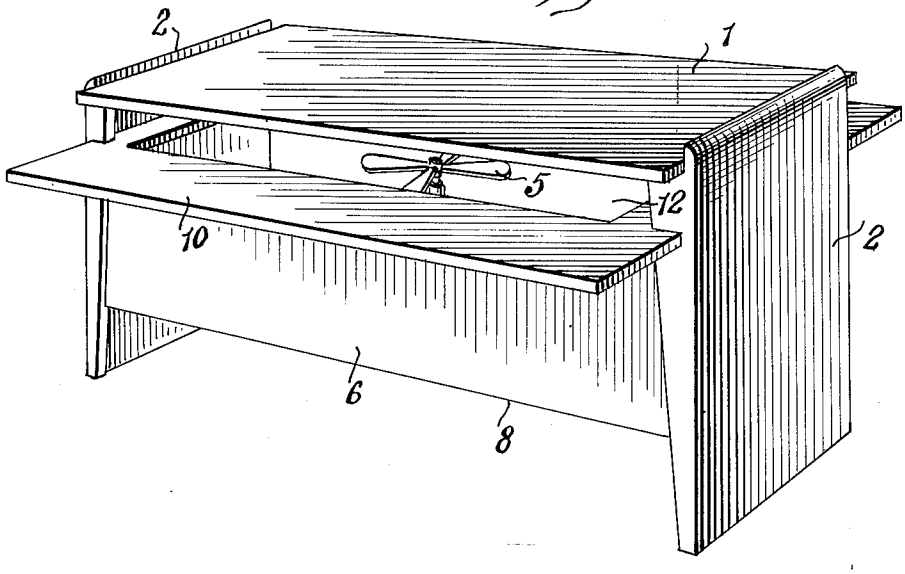
Nov. 4, 1952 H. HILL 2,616,617

AIR CIRCULATING DEVICE

Filed Oct. 7, 1949

Fig. 1.



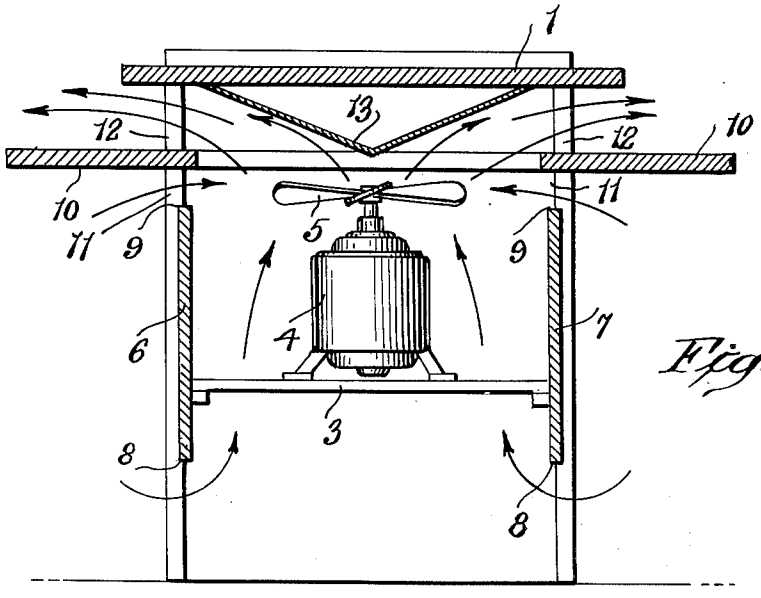


Fig. 2.

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AIR CIRCULATING DEVICE

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2 Claims. (Cl. 230—241)

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This invention relates to air circulating devices, and more particularly to a portable type in which a fan or other air-circulating apparatus is housed within and concealed by an attractive article of furniture, such as a table or the like.

I am aware that prior to the present invention, it has been proposed to house an electric fan within enclosures of more or less cylindrical form and generally resembling round-top tables. Such housings are open at the sides or else are enclosed in an open grill-work which permits the fan and motor to be visible, with the result that the fan and its housing has presented the appearance of a machine or apparatus rather than an article of furniture and is quite out of place in the center of the floor in a well-furnished room.

It is therefore one of the objects of the present invention to provide an air-circulating device which will not only be effective mechanically, but will present the aspect of a handsome piece of furniture serving to enhance the appearance of any room in the home. The invention contemplates the provision of an air-circulating device including a fan or blower, housed within the body of a handsome table in such a manner as to make the fan or blower and the motor and associated parts, concealed or invisible, permitting the device to effectively function both as an air circulator and as an article of furniture. The invention further contemplates the arrangement of the fan within the table in such a manner that the effectiveness of the fan is not retarded while at the same time the fan and operating parts are concealed or rendered unobtrusive.

These and other objects are attained by the invention, a more particular description of which will hereinafter appear and be set forth in the claims appended hereto.

In the accompanying drawing, wherein an illustrative embodiment of the invention is disclosed, Fig. 1 is a perspective view of the improved air-circulating device, and Fig. 2 is a vertical sectional view through the same.

Referring to the drawing, the supporting structure for the air-circulating mechanism, herein disclosed as an electric fan and propulsion means therefor, consists of an article of furniture in the form of a so-called "coffee table." In the form shown, the table includes a substantially flat top 1 supported at its opposite ends by the end-pieces 2, constituting the legs of the table. The legs are connected by the side pieces or vertical and parallel panels 6 and 7 which have their lower edges 8 terminating above the lower ends

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of the legs 2 thereby providing lower air inlet openings through the sides of the table between the edges 8 of the side panels and the floor on which the table rests.

The side panels are suitably connected by the transverse cross-braces 3 which not only serve to lend rigidity to the table but act as a supporting means for the fan motor 4 which has a vertical shaft upon which the fan 5 is attached in the known manner.

The upper edges of the side panels 7 terminate at 9 or some distance below the under side of the table-top 1 and located in this area is a frame which includes laterally projecting wings 10 constituting air-deflectors operating as indicated by the arrows in Fig. 2. Secured to the underside of the table-top 1 is a conical or angular deflector 13 which serves to deflect the air blasts outwardly from the fan, forcing the blasts out through the outlet vents 12 located between the top of the wings 10 and the under side of the table-top 1. Below the wings 10 and between said wings and the upper terminations 9 of the side panels 6 and 7 are inlet vents 11 through which air is drawn inwardly by the fan and then circulated upwardly and outwardly through the vents 12 into the room in which the device is located.

The arrangement of the various parts of the table structure within which the air-distributing fan is housed is such that the operating parts of the device, consisting essentially of the fan and motor therefor, are wholly concealed and on normal inspection are not visible, except possibly by stooping and peering through the vents 12. The result is that the device presents the aspect of an attractive article of furniture quite in place in any attractively furnished room. At the same time, the vents and co-operating parts of the structure are such that the operating efficiency of the fan is in no wise impeded and the device is thus highly efficient as an air circulator or cooler.

While I have herein shown, and solely for the purpose of illustration, the device embodied in an article of furniture, such as a so-called "coffee table" in a certain design, it will be apparent that the device may be modified in many particulars without departing from the spirit of the invention. The design and shape of the table may be changed; the device may incorporate several fans rather than only one, or other air circulating elements, and various other changes may be readily made, as intended shall be comprehended by the scope of the claims appended hereto.

What I claim is:

1. An air-circulating device comprising, a fan, a table in which the fan is housed and is substantially hidden and concealed, said table having a horizontal top, imperforate parallel side panels having upper ends located downwardly of the top and providing vent openings between said upper ends and the top, the table having an open bottom below the lower ends of the side panels, deflector wings projecting laterally out of the vent openings, the deflector wings being located above the upper ends of the side panels, said deflector wings being located below the top of the table and providing outlet vents between them and said top, and an angular deflector secured to the under side of the top above the fan.

2. An air-conditioning device comprising, a fan, a table in which the fan is housed, said table having a horizontally-arranged flat top provided with an angular deflector on its under side above the fan, the table being closed at its opposite ends, imperforate side panels connecting the closed ends and located with their upper ends spaced from the top and their lower ends elevated above the floor on which the table rested, whereby air vents are provided in the table both above and below the side panels, and flat, horizontally-arranged deflectors located below the top and below the upper edges of the panels and projecting laterally beyond the side edges of the top, the fan being directed upwardly toward the angular deflector.

HAROLD HILL.

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