

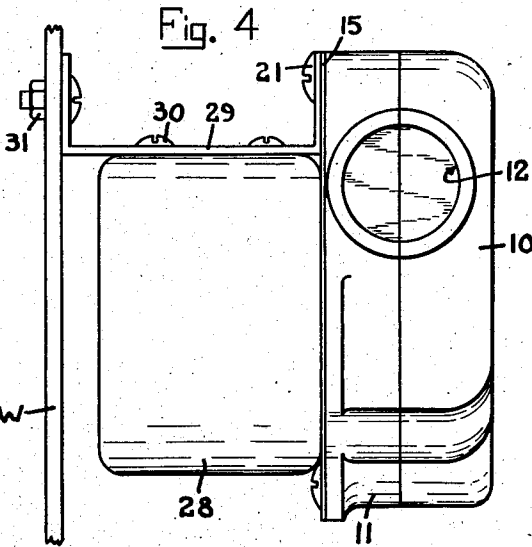
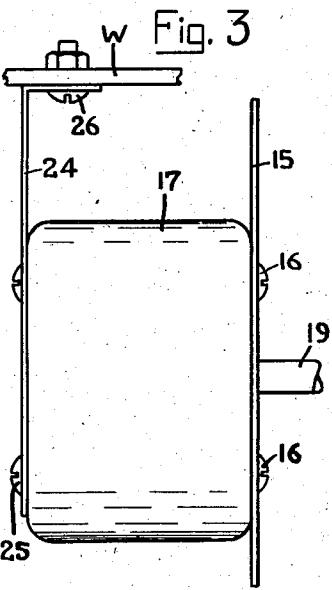
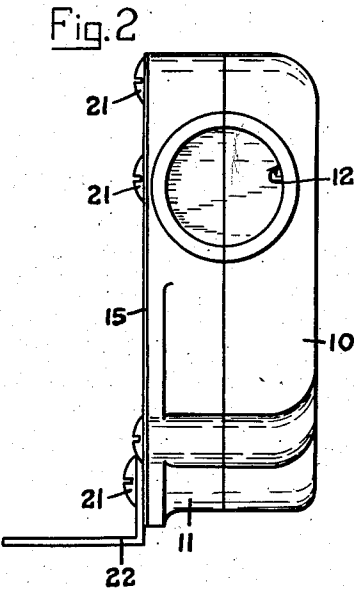
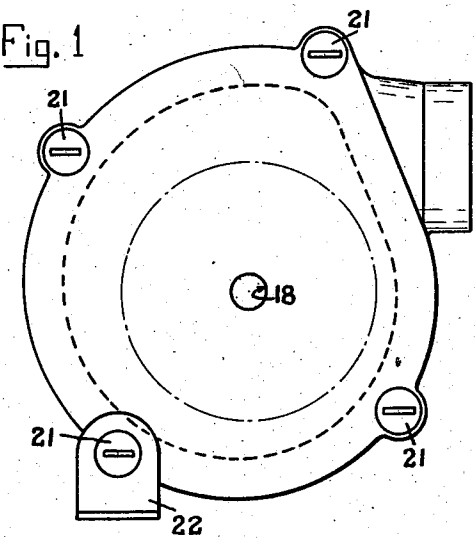
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BLOWER HOUSING AND ASSEMBLY

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BLOWER HOUSING AND ASSEMBLY

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4 Claims. (Cl. 230—117)

The invention relates to a blower housing and the combination of the housing and a motor having wide application although intended primarily for blowing cooling air over the tubes of a radio receiver or transmitter. The blower is driven by a small motor of which there are a great many styles and different dimensions, the housing is constructed so that it is easily adapted to receive any style of motor with their widely differing bases or attaching means.

It is an object of the invention to construct a blower housing which is adapted to mount any style of small motor which drives the impeller within the blower housing.

Another object of the invention is to construct a blower housing which is adapted to be mounted in a great many different positions thereby permitting the greatest degree of latitude in the position in which the housing may be mounted when put in use.

A still further object is to construct a blower housing and motor assembly which affords a wide variety of ways in which a motor and the housing may be secured together and may be secured to some supporting structure.

Other objects of the invention will be more apparent from the following description taken in connection with the accompanying drawing illustrating a preferred embodiment thereof, in which:

Figure 1 is a side elevation of the blower housing.

Figure 2 is an elevation of the housing with a bracket for securing the same to a supporting structure.

Figure 3 is a view of a flat plate forming one side of the housing to which a motor has been secured. The motor is shown attached to any suitable structure such as the wall of a radio chassis.

Figure 4 shows a blower housing with a motor secured thereto in another manner and the assembly mounted upon a wall or other supporting structure.

Many radio sets require a cooling stream of air to be blown into the cabinet so that it will circulate over the tubes and to dispel the heated air from within the chassis or case. Such a blower must be capable of being mounted within the chassis in a great variety of ways. Again, a particular style of motor to drive the impeller may not be available and hence the user must take whatever motor is available of a proper size. The screw holes or base dimensions of various styles or manufacture of motors differ widely and the

blower housing must be capable of receiving any style of motor.

The blower housing has a body portion which preferably is of plastic or molded material. A molded housing is split through the center thereof to form body sections 10 and 11. The body portion or particularly body section 10 has a side wall in which there is an air inlet opening not shown. The two sections of the body when assembled have an outlet opening 12 which directs a stream of air from the blower housing in the direction desired.

The body or particularly the body section 11 has an open side through which the blower impeller is inserted within the housing. The open side is covered by a plate 15 which is preferably flat, so that it may be easily drilled to receive screws 16 which secure the motor 17 to the plate and housing. Screw holes may be drilled anywhere in the plate thereby adapting the blower housing to be driven by a motor having any style of base or securing means. The plate has a hole 18 through which the motor shaft 19 projects and the blower impeller is secured to the motor shaft.

The flat plate is secured to the housing by screws 21. These screws also secure the two halves of the housing together by having threaded nuts embedded or molded into the body section 10 and screw holes are then provided in the body section 11 in alignment with the nuts. The screws 21 therefore secure the flat plate and the body sections 11 and 12 together to form the complete housing. The screws 21 have a varied spacing with respect to each other and also with respect to the motor shaft opening 18 thereby rendering the screws available for a wide variety of mountings for the housing and motor.

In Figures 1 and 2 a bracket 22 may be secured to the housing by one or more of the screws 21 and the bracket in turn is anchored to some part of a radio chassis or other piece of mechanism upon which the blower is to be mounted. The motor 17, in being secured to the plate 15, and the blower are therefore mounted as a unit in position by the bracket 22.

Figures 3 and 4 each illustrate another way in which the motor and blower may be mounted and suggest the many other ways in which the combination of motor and blower may be secured together and the assembly may be secured to any supporting structure. In Figure 3 the motor is secured to the plate 15 and the plate 15 carries the body portion of the blower housing. The motor, however, carries a bracket 24 which is secured to the motor by screws 25 which utilize

the securing means or screw holes already provided with this style of motor. The bracket 24 is in turn secured to a wall W by a screw 26 to mount the motor and blower in a desired position.

In Figure 4, still another style of mounting is illustrated for a motor 28 having a different style of base or securing means. This style of motor has securing means in the periphery thereof, and consequently requires a bracket 29 which is secured to the motor by screws 30. One end of the bracket may be secured to the blower housing by one of the screws 21 and the other end of the bracket may be secured to a supporting structure such as a chassis wall W by screw 31.

The three embodiments of mountings illustrated are merely indicative of the wide adaptability of the blower housing to receive any style of motor and having any style of base or securing means. The drawings also illustrate a wide variety of ways in which the motor and blower assembly can be mounted in any desired position wherever used such as in a radio chassis.

This invention provides an improvement in a blower housing and assembly. It is understood that various modifications in structure, as well as changes in mode of operation, assembly, and manner of use, may and often do occur to those skilled in the art, especially after benefiting from the teachings of an invention. This disclosure illustrates the preferred means of embodying the invention in useful form.

What is claimed is:

1. A blower housing comprising a body portion having a completely open side and an inlet opening in the other side, an outlet at a point in the periphery of the body portion, a flat plate forming the side wall over the open side and having an opening for a motor shaft therethrough, the plate being adapted to be drilled at any point to secure a motor thereto, and screws carried by the body portion variously spaced from each other and from the motor shaft opening to secure the flat plate to the body portion, said screws adapted to also engage a support.

2. A blower housing comprising a body portion formed of sections and with a completely open side, an inlet opening in the other side, an outlet at a point in the periphery of the body portion, a flat plate forming the side wall over the open side and having an opening for a motor shaft therethrough, the plate being adapted to be drilled at any point to secure a motor thereto, and screws carried by the body portion variously spaced from each other and from the motor shaft opening to secure the sections together and the flat plate to the body portion thereby covering the open side, said screws adapted to also engage a support.

3. A blower and motor assembly comprising a body portion having a completely open side and an inlet opening in the other side, an outlet at a point in the periphery of the body portion, a flat plate forming the side wall over the open side and having an opening for a motor shaft therethrough, a motor secured to the plate which is drilled to conform to the motor to secure the same to the plate, an impeller driven by the motor, and screws carried by the body portion variously spaced from each other and from the motor shaft opening to secure the flat plate to the body portion, said screws adapted also to engage a support.

4. A blower and motor assembly comprising a body portion having a completely open side and an inlet opening in the other side, an outlet at a point in the periphery of the body portion, a flat plate forming the side wall over the open side and having an opening for a motor shaft therethrough, screws variously spaced from each other and from the motor shaft opening to secure the flat plate to the body portion, a motor having a shaft, an impeller carried by the shaft, and a bracket attached to the blower by at least one of the screws and secured to the motor to hold the latter in position with respect to the blower.

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