This invention relates to a drier and refers more particularly to a drier for use in drying a person's body after a shower or bath.

Drying apparatus for drying portions of the human body after bathing are old and well known in the art. Known apparatus, which generally utilizes heated air as the drying agent, has the major drawback that it is intended only to be used for drying the user's hands or face. None of these drying devices known in the art are satisfactory for use in drying a person's entire body after a shower or bath. It is, therefore, a primary object of the present invention to provide a drier which may be used by a person to dry their entire body after taking a shower or bath.

Another object is to provide a drier for drying a person's body which may be regulated to dry any selected portion of the user's body or the entire body at one time. Still another object is to provide a drier which is particularly suited for use in drying a person's hair as, for example, after a hair shampoo or rinse. A further object is to provide a drier for drying a person's body which is simple to operate.

A still further object is to provide a drier which eliminates the need for towels for drying purposes in public establishments such as hotels.

Another object is to provide a drier for drying a person's body which is safe to operate.

Other objects of the present invention will become apparent in the course of the following specification.

The aforementioned objectives of the present invention may be achieved by providing a drier which has a stall for enclosing a person's body and on which is mounted a number of diffuser heads for directing a flow of heated air to cover substantially the whole of the user's body. Means are also provided for supplying heated air and for controlling the flow thereof.

The invention will appear more clearly from the following detailed description taken in conjunction with the accompanying drawing showing, by way of example, a preferred embodiment of the inventive concept.

In the drawing:

FIGURE 1 is a front elevational view of a drier constructed in accordance with the principles of the present invention.

FIGURE 2 is a top plan view of the construction shown in FIGURE 1.

FIGURE 3 is a side elevational view on enlarged scale and partly in section of one of the diffuser heads used in the drier.

FIGURE 4 is a sectional view as taken along line IV—IV of FIGURE 3;

FIGURE 5 is a sectional view as taken along line V—V of FIGURE 3; and

FIGURE 6 is a sectional view as taken along line VI—VI of FIGURE 3.

In the drawings like reference numerals are used to indicate like parts.

The drier 10 of the present invention comprises a stall 11 having sides 12 and 13 and a back 14, and which constitutes an enclosure wherein a person may stand for purposes of drying their body after taking a shower or bath.

Heated air is used for drying purposes. The heated air is supplied by a motor driven blower 15 which forces air through an electric air heater 16, the discharge from which is to a main air duct 17. The construction of blower 15 and air heater 16 is not described in detail as they are old and well known in the art. The operation of the blower and air heater is controlled by means of a push button switch 18 mounted on the inside of stall 11. Volumetric control of the air flow in main air duct 17 may be regulated by means of a damper 19 which is shown in an open position in FIGURES 1 and 2.

Diffuser heads 20—26 for directed air to various portions of a person's body, are supported inside the stall 11 and are connected to main air duct by means of branch ducts 27—33. The flow of air through each branch duct, and hence through each diffuser head is controlled by means of branch line dampers 34—46, the latter all being shown in their open positions in FIGURES 1 and 2.

As seen in FIGURE 1, the diffuser heads are arranged at varying heights and on each side and at the top of the stall 11. In this manner, the diffuser heads 20—26 may discharge the heated air in a wide area which effectively covers substantially the entire body of a person standing within the stall.

The diffuser heads 20—26 are adjustable with respect to the branch ducts 27—33 on which they are mounted. In this manner the diffuser heads may be swiveled to various positions to suit the convenience and requirements of the user. The foregoing is illustrated in FIGURE 3. Referring now in detail to FIGURE 3, the diffuser head 20 has a bell-shaped head portion 41 and a ball-shaped neck portion 42. The neck portion 42 of diffuser head 20 fits over the ball-shaped end portion 43 of branch duct 27. The balance of branch duct 27 is of square cross section as best seen in FIGURE 4. Diffuser head 20 is, therefore, free to swivel upwardly, downwardly, sidewise, etc., with respect to branch duct 27, this freedom of movement being possible by reason of the ball joint connection. Once such position of diffuser head 20 is shown in broken lines in FIGURE 4.

In operation:

Let us assume that a person has taken a bath or a shower and wishes to dry their body. The person enters stall 11 and stands in the position shown in FIGURE 1. Since presumably the entire body is to be dried, the person will check to see that all branch line dampers 27—33 are in an open position and further will check the positioning of each diffuser head 20—26 to make sure that they are arranged to discharge a pattern of heated air which will cover the whole body. The person will then merely press button switch 18 to start up blower 15 and air heater 16. Immediately, a supply of heated air will flow through the air ducts and out of the diffuser heads. After a sufficient period of time and when the person has dried his body, he merely presses push button switch 18 to turn off the drier.

If for good reason, the person wishes to turn off one or more of the diffuser heads as, for example, diffuser head 23, since he may desire to dry the head and face separately, it is only necessary to close branch duct damper 37. Similarly, if it is desired to dry only the person's head in the case of a hair shampooing or rinse, all the branch duct dampers except damper 37 may be closed and heated air will be directed only to the region of the person's head. Obviously, any combination of diffusers may be used at will depending on the person's choice, etc.

The drier of the present invention is suitable for use in the home, hotel, club, etc. The stall enclosure 11 may be located in the bathroom or shower room and the blower-heater unit in a more remote location. It is only necessary to provide proper controls for starting and stopping the flow of heated air from the unit. The drier
of the present invention offers the advantage of being economical in use, eliminates the need for supplying and laundering towels and is sanitary to use.

While there is above disclosed but one embodiment of the drier, it is possible to produce still other embodiments without departing from the scope of the inventive concept herein disclosed.

What is claimed is:

A drier for drying a person's body, said drier comprising in combination: a pair of parallel spaced side walls, and a back wall interconnecting said side walls, said back wall and said side walls constituting a stall enclosure wherein a person may stand; a source of heated air; a main air duct connected with said source of heated air and extending around said stall enclosure; a first series of branch air ducts extending from said main air duct and extending through one of said side walls, said branch air ducts being arranged in vertical alignment with each other; a second series of branch air ducts depending from said main air duct and extending through the other one of said side walls, each of the branch air ducts in said second series being aligned with one of the branch air ducts in said first series; an additional branch air duct depending from said main air duct and extending through said back wall, said additional branch air duct being located above the uppermost branch air duct in each of said side walls, the terminal portion of said additional branch air duct extending vertically downwardly; an air diffuser swingably supported on each of said branch air ducts for varying the direction of flow of air flowing from said branch air ducts; and means for controlling the volume of air flowing through said branch air ducts.

References Cited in the file of this patent

UNITED STATES PATENTS

1,530,022 Van Dusen Mar. 17, 1925
1,758,115 Kelly May 13, 1930
1,786,969 Rousseau Dec. 30, 1930
1,998,924 Crook et al. Apr. 23, 1935
2,260,687 Lasha Oct. 28, 1941
2,344,561 Pupil Mar. 21, 1944
2,440,157 Van der Heuel Apr. 20, 1948
2,978,738 Jonsson Apr. 11, 1961