May 15, 1923. 1,455,238

H. J. BOSCH

DRYING APPLIANCE

Filed Dec. 7, 1920 2 Sheets-Sheet 1

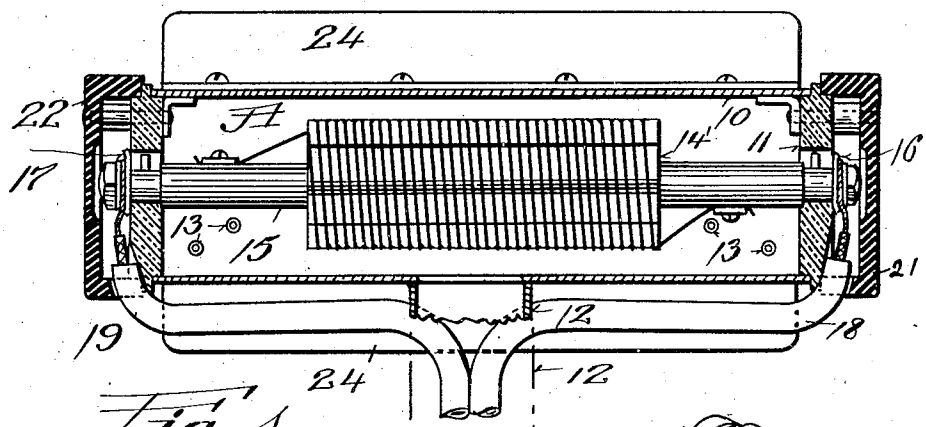


Fig. 1.

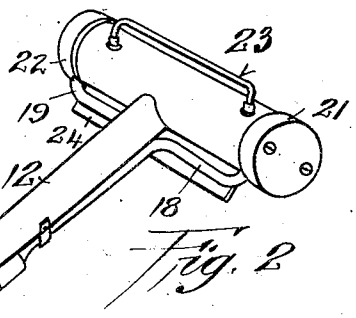
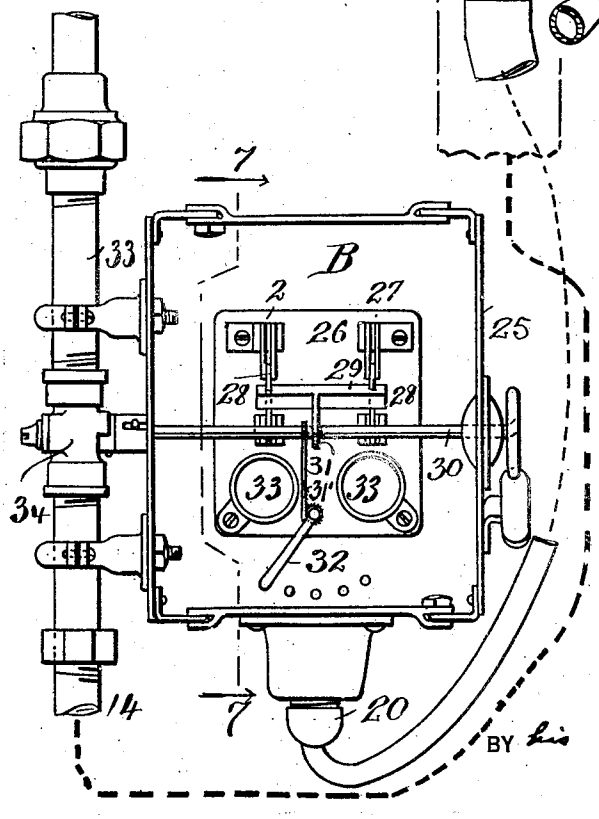
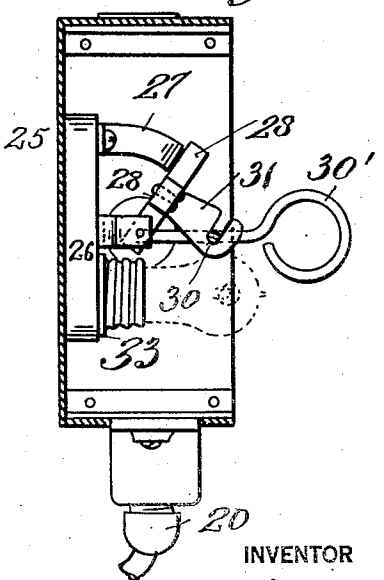


Fig. 2

Fig. 7.





INVENTOR

Herman J. Bosch

BY his ATTORNEYS

Darby & Darby

May 15, 1923. 1,455,238

H. J. BOSCH

DRYING APPLIANCE

Filed Dec. 7, 1920 2 Sheets-Sheet 2

Fig. 3.

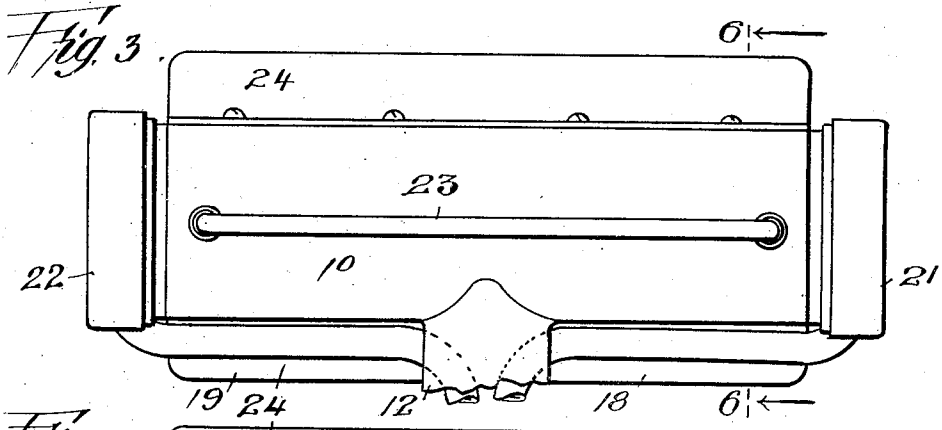
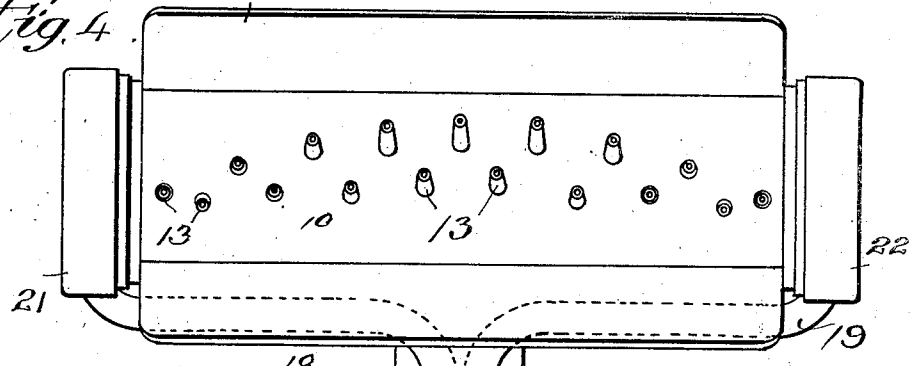


Fig. 4.



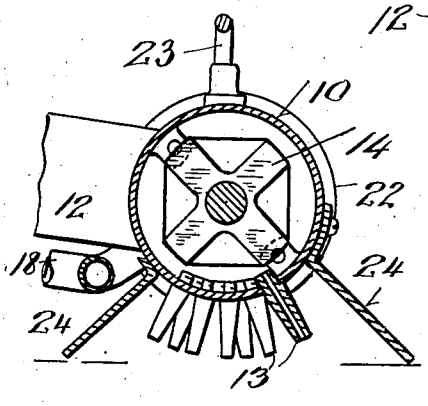


Fig. 6.

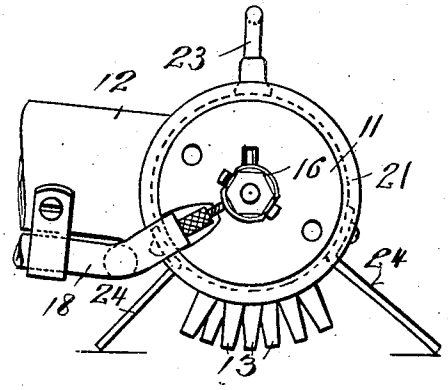


Fig. 5.

INVENTOR

Herman J. Bosch

BY ATTORNEYS

Darby & Darby

Patented May 15, 1923. 1,455,238

UNITED STATES PATENT OFFICE.

HERMAN J. BOSCH, OF NEW YORK, N. Y.

DRYING APPLIANCE.

Application filed December 7, 1920. Serial No. 428,848.

To all whom it may concern:

Be it known that I, HERMAN J. BOSCH, a citizen of the United States, residing at New York, in the county of New York, State of New York, have made a certain new and useful Invention in Drying Appliances, of which the following is a specification.

My invention relates to improvements in drying appliances which are useful for drying hair and for other purposes.

The objects of my invention include the provision of apparatus which is provided with outlets for directing streams of relatively dry and heated air to any place, and which outlets are remote from a motor or source of air, but which are in close proximity to means for heating the air.

Another object of my invention includes the provision of means whereby air may be safely and readily rendered effective for drying and for other purposes in close proximity to its use or application.

A still further object of my invention includes means whereby the degree of heating medium is regulated simultaneously with the volume of air supplied to thereby ensure safety against over-heating.

A still further object includes the provision of means whereby the heating and drying appliance is safe-guarded against direct contact with objects, thereby ensuring safety against accidental damage by over-heating.

Other objects will appear more fully hereinafter.

I attain the objects of my invention by the device represented in the accompanying drawing, in which—

Fig. 1 represents a plan view of my appliance with the covers removed, and in which A represents the heating and drying or air directing appliance, and B the supply and regulating device;

Fig. 2 represents a perspective view of the air heating and directing appliance;

Fig. 3 represents a top plan view thereof;

Fig. 4 represents a bottom plan view of the same;

Fig. 5 represents an end view of said appliance with the protecting cap removed;

Fig. 6 represents a section on lines 6—6, Fig. 3; and

Fig. 7 represents a section on line 7—7 of Fig. 1 B.

Similar numerals refer to similar parts of the several view

Referring now to the drawing, my invention embraces an air heating and air directing appliance which is composed of a main tube 10, having supporting ends 11, of insulating material, and being supplied with an air inlet duct 12, and air distributing spray ducts 13. The air duct 12 is connected to any suitable source of supply as pipe 14, for the purpose hereinafter more fully stated. Within the air heating or air directing appliance there is provided a suitable heating device, which specifically may be an electrical coil represented at 14'. This coil is properly supported on a central bar 15, and suitably connected to conductor wires at 16 and 17. The conductor wires 16 and 17 are led in through proper conduits 18 and 19, and are connected to a suitable regulating device by a socket 20, as will be more fully explained hereinafter. The ends of my air heating and air directing appliance are protected by suitable insulating caps 21 and 22. For further protection, the heating and air directing appliance is also provided with a bar 23, and side wings 24. These latter devices are for the purpose of guarding the device against coming in contact with surfaces, and thereby causing damage when heated.

For regulating the supply of air and the heating medium, I provide a specialized valve and switch construction represented in general at B in Fig. 1. This construction consists of a support 25, provided with an electric switch 26, for regulating the current supply. This switch consists of elongated arc shaped contacts 27, and switch blades 28. Switch blades 28 are operated in unison by a cross member 29, which is connected by a link 31 to an operating bar or lever 30 having a handle 30'. The current supply may further be regulated, if desired, by a suitable rheostat represented at 32, which may be operated by hand, or it may, preferably, be operatively connected with lever 30, by any suitable connections as a lever and ratchet 31', to thereby regulate the current supply simultaneously with the air supplied as may be indicated at 32. The air supply is obtained from any desired source, as from a motor, or compressed air tank, through a pipe or duct 33'. Within this duct at 34, there is provided a suitable air valve which is directly operated by the operating lever 30, as stated above. It is ap-

parent from the arrangement of my regulating device at B, that I can simultaneously regulate the current and air supply in my air heating and air directing appliance at A, by simply adjusting the lever 30 to the position desired.

This arrangement affords the advantage of protection against accidentally turning on the current without turning on the air supply and thereby over-heating and injuring the device, and while I have, for the purpose of illustration, shown and described a specific embodiment of my invention, I wish it to be understood that I do not thereby limit myself, as obviously various modifications embracing the spirit and scope of my invention will occur to those versed in the art.

By my arrangement of the heating coil in the air directing appliance, it is possible to attain the great advantage of having the air relatively dry and heated as it is needed, without any material loss of heat units. I have also the advantage of readily applying the heated air by the specific construction of my device wherein the extension of the air duct 12 forms a convenient handle for manipulation.

When the supply and regulating switch is closed, the indicator lamps in sockets 33 light up and air is forced through the supply tubes into the chamber at A, where it is heated and forced out in fine sprays through the air distributing spray ducts 13. This affords a convenient means for drying hair, fabric, and for other purposes.

I also have the advantage by my arrangement of having a heating device which is remote from the motor, and, therefore, annoying and disturbing noises are absent.

Having now set forth the objects and nature of my invention, what I claim as new and useful and of my own invention, and desire to secure by Letters Patent, is:

1. In a drying appliance, the combination of means for simultaneously supplying air and a heating medium to a heating and distributing appliance remote from the source of air supply, and means for directing and distributing sprays of heated and relatively dry air.

2. In a drying appliance, the combination of means for simultaneously supplying and regulating air and a heating medium, means for directing said air and heating medium to an air heating and distributing appliance remote from the source of air supply, means for heating said air in close proximity to its use, and means for directing and distributing sprays of heated air as described.

3. The combination in a drying appliance of means for simultaneously regulating drying and heating media together with means for utilizing said media at a point remote from its source.

4. The combination in a drying appliance of means for simultaneously regulating drying and heating media together with means for utilizing said media at a point remote from its source, said means including a heating device in a container and air spray distributing outlets.

5. The combination in a electric appliance of means for simultaneously regulating an air supply and an electric current supply, means for electrically heating said air supply remote from the source of supply, and means for forming and directing sprays of heated air as described.

6. In an air heating and air directing appliance, the combination of a tubular container having a centrally located air inlet duct and a series of air distributing spray ducts and end supports, and means within the container supported by the end supports for heating the air as it passes through said device.

7. In an air heating and directing appliance, the combination of a tubular support having end supports and protective caps, and an electrically heated coil held within said container, and protective guards on said container.

In testimony whereof I have hereunto set my hand on this 17th day of November, A. D., 1920.

HERMAN J. BOSCH.