283, HEATING,
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No. 870,740. PATENTED NOV. 12, 1907.

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HAIR DRYING APPARATUS.

APPLICATION FILED JAN. 11, 1907.

Fig. 1.

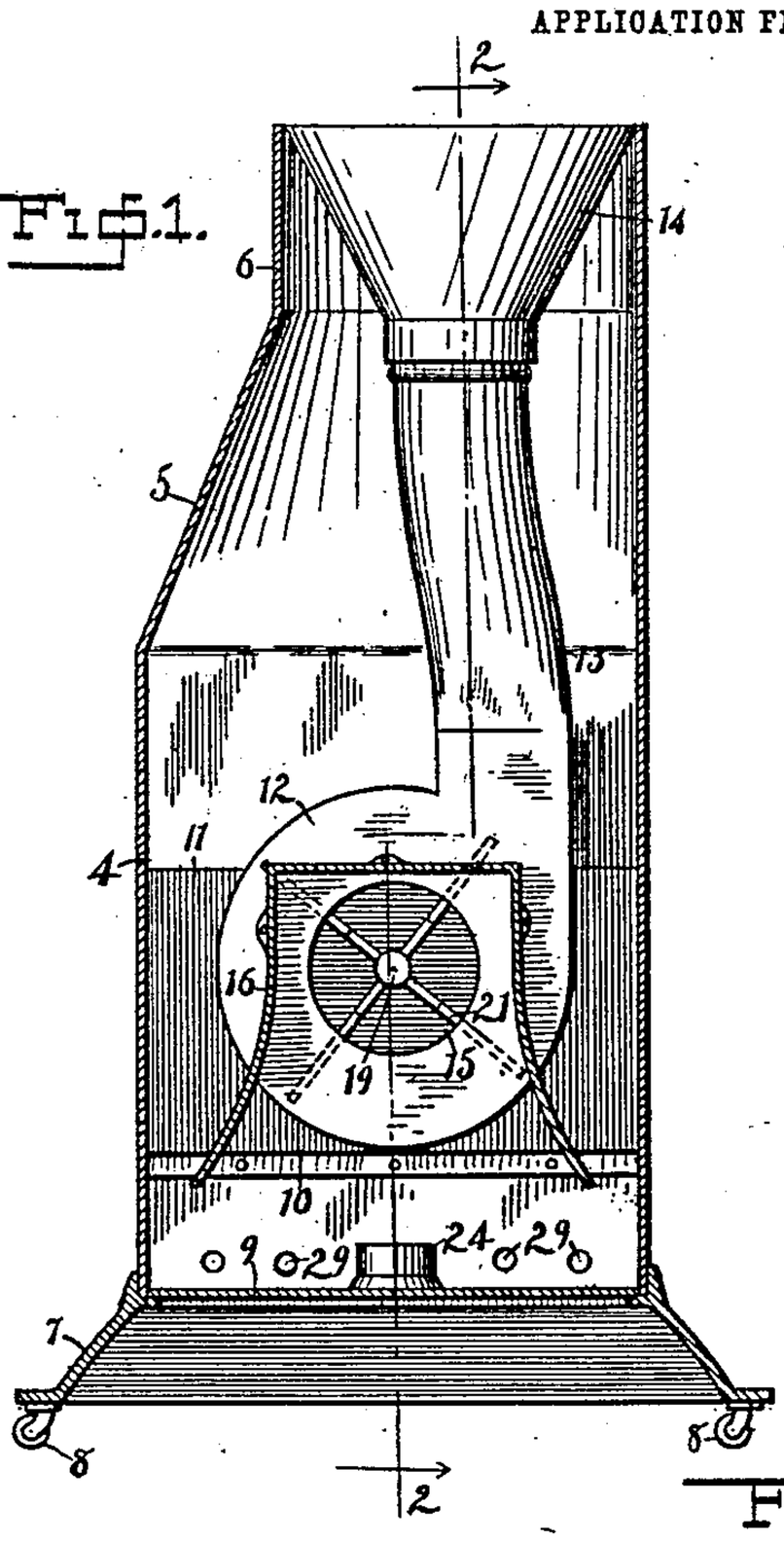


Fig. 2.

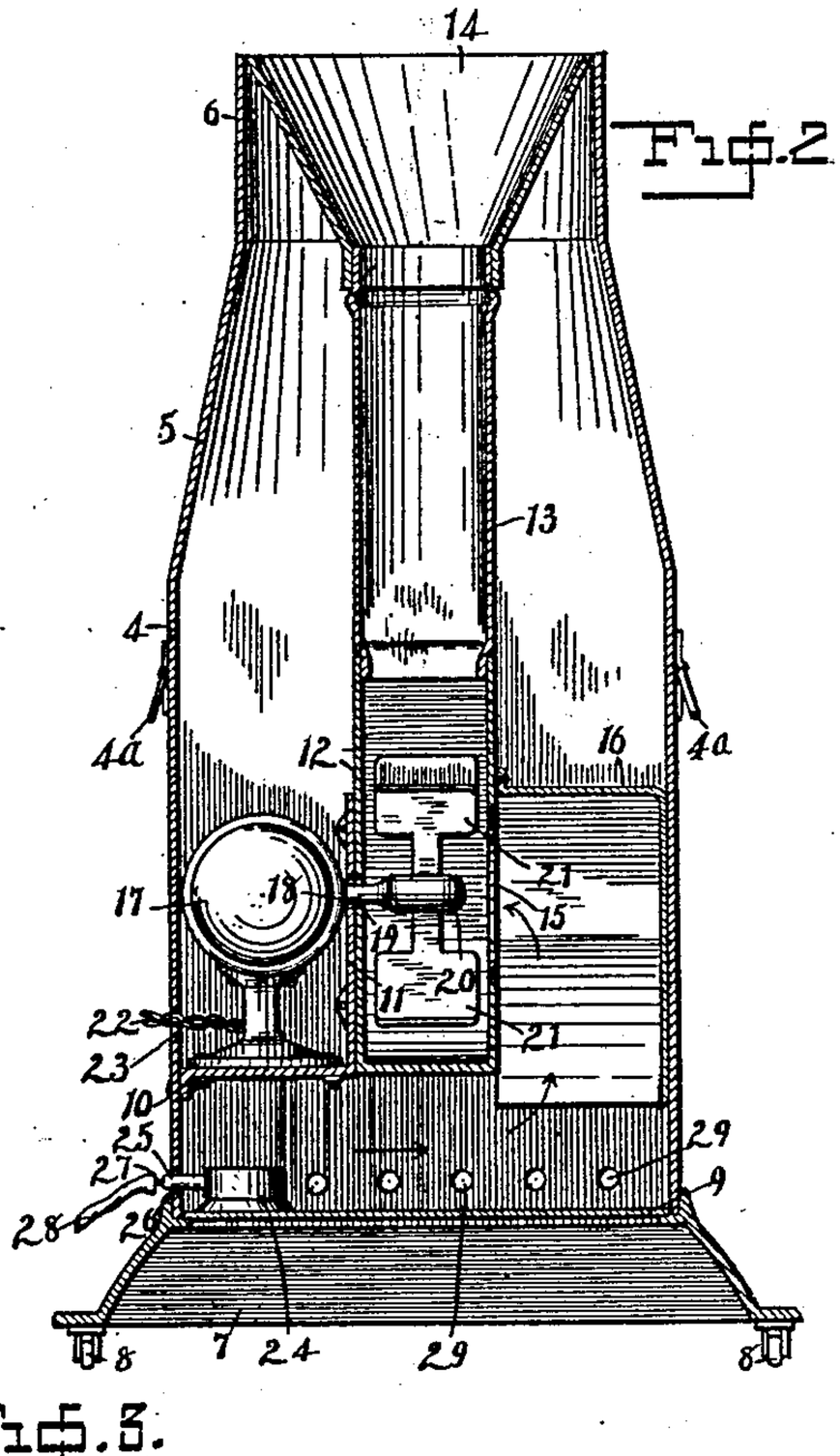
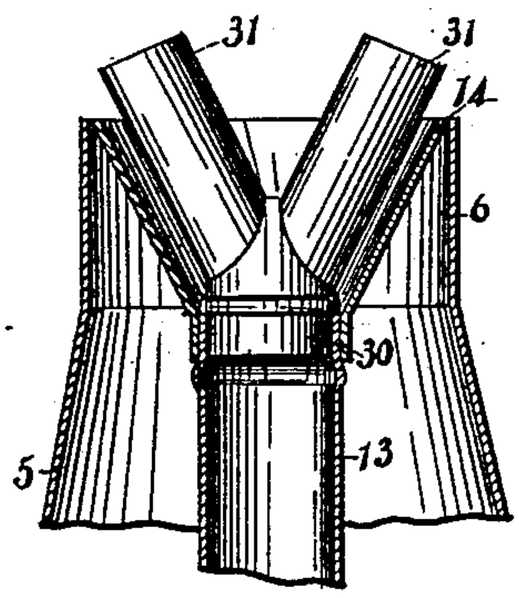


Fig. 3.



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EVANDER McIVER AND JOHN WIDUA, OF CHICAGO, ILLINOIS; MARGARET McIVER ADMINISTRATRIX OF SAID EVANDER McIVER, DECEASED.

HAIR-DRYING APPARATUS.

No. 870,740. Specification of Letters Patent. Patented Nov. 12, 1907.

Application filed January 11, 1907. Serial No. 351,739.

To all whom it may concern:

Be it known that we, EVANDER McIVER and JOHN WIDUA, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hair-Drying Apparatus, of which the following is a specification.

Our invention relates to appliances designed to utilize heated air for drying purposes, and its chief objects are to furnish improved apparatus for raising the temperature of air and forcing a current of the air thus heated, through a suitable conduit directly upon the article to be treated; to produce a device for the purpose stated that will accomplish the desired result in a minimum length of time; to conserve in a highly efficient manner the agencies employed; to render the entire apparatus portable; to produce means for applying several currents of heated air from a single source; and to provide a device that will be simple and therefore economical to construct, and that will be readily understood and easily operated.

Our improved apparatus has special utility in the application of a current of heated air to the human hair for the purpose of removing the superfluous moisture after washing or shampooing.

The accompanying drawing which forms a part of this application illustrates our improved dryer adapted to be used for that purpose, but it is obvious that the apparatus may be employed for drying a variety of articles and we do not wish, therefore, to be limited in its use to the precise application herein set forth.

In the drawing to which reference has been made: Figure 1 is a side elevation of the apparatus designed for drying hair with the casing broken away to disclose the internal parts; Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1, with the parts in that figure restored, and Fig. 3 is a fragmentary view, partly in section to show the method of assembling the removable extension.

Referring to the drawing, 4 indicates the body of a sheet metal casing rectangular in cross section, having an upper contracted portion 5, which terminates above in a circular collar 6. The body is furnished with a base 7 supported upon rollers or casters 8. The said body has a bottom plate 9 and is supplied with handles 4^a and secured to the interior of the body a short distance above the bottom, is a shelf 10 having an upwardly extending portion 11 which forms a semi partition to which is fastened a fan-casing 12, which communicates with a pipe 13 leading upward to the collar 6 where it terminates in a truncated cone shaped portion 14. Upon one side, the fan-casing is provided with an inlet opening 15 and surrounding this inlet on three sides, and connecting the said fan-casing with the side wall of the body 4 is a hood extension 16 which serves to form a chamber for confining the air around the opening and to direct the air currents into said inlet 15.

Supported upon the shelf 10 is an electric motor 17, its spindle 18 projecting through an aperture 19 in the fan-casing, where it is provided with a hub 20 to which are affixed radiating fan-blades 21 in the usual manner. A cable 22 containing the electric conductors for the motor pass through an opening 23 in the wall of the main casing and are attached to any convenient source of electric energy.

Below the shelf 10 and supported on the bottom plate 9, is an ordinary gas burner 24 furnished with a supply pipe 25 which passes through a hole 26 in the casing wall and terminates in a nipple 27 for attaching one end of a flexible tube 28, its other end being in connection with any available gas supply. Air inlets 29 are located near the bottom of the casing upon three sides, the holes being omitted on the rear wall to prevent the entrance of air into the fan-casing before it has become heated.

In order to divide the air current into several streams and so distribute the heat to various points, I provide an extension in the form of a Y, the stem so adapted to slip within the upper end of the pipe 13, and having duplicate branches 31. This Y is used as a coupling for attaching suitable tubes (not shown) for the purpose of drying the hair of several persons simultaneously.

The method of using the apparatus is as follows:—The electric conductors having been attached to a source of electric supply and the gas tube connected with a gas main, the gas is lighted in the burner and the current switched on to the motor which will set the fan in motion. This will force a steady stream of heated air upward through the tube 13 and bell 14, a continuous supply finding entrance through the holes 29. The person whose hair is to be dried sits or stands near the apparatus and allows the locks of hair to fall in a mass within the orifice of the bell where it will be thoroughly permeated by the heated air. The degree of temperature of the air current may be easily regulated at the burner, the latter being placed beneath the shelf where it is protected from the full force of the air currents which are liable to extinguish the flame when the burner is placed in a position more exposed to the main air stream.

Having thus described our invention what we claim is:—

1. A drying apparatus including a casing having air inlets, an air confining chamber arranged in said casing, an air-conduit arranged in said casing, communicating with said chamber and having a flaring outlet of relatively large area, means for creating a current of air in said conduit, and means for heating the air in said casing.

2. A drying apparatus including a casing having air in-

lets, an air confining chamber in said casing, an air conduit leading from the chamber to the exterior of the casing and terminating in an expanded opening of relatively large area, a fan located in said passage, means for operating said fan, and means for heating the air in said casing.

3. A drying apparatus including a casing, an air confining chamber, an air conduit leading from the chamber to the exterior of the casing and having an outwardly flaring outlet of relatively large area, a fan situated in the air conduit, a motor for actuating the blower, and means for heating the air in said casing.

4. A drying apparatus comprising an outer casing, having air inlets, an air conduit arranged in said casing, an air confining chamber, communicating with said casing and with said conduit, and a fan arranged in said conduit.

5. A drying apparatus comprising an outer casing adapted to admit air at its lower end, an air-conduit arranged in said casing, a fan mounted in said conduit, and tubular branch conduits communicating with said air-conduit and diverging therefrom.

6. In a device of the class described the combination with a casing having an air inlet at the base thereof, a shelf supported in the casing, a heater beneath the shelf, a motor on said shelf, a fan thereon and above said inlet, a receptacle in the top of said casing at one side thereof, a flue within the casing extending from the fan upwardly to said receptacle and means for deflecting air from the inlet into the fan.

7. In a device of the class described the combination with a main casing having an air inlet at the base thereof, a shelf in said casing extending from the front to a point over said inlet, a heater beneath the shelf, a motor supported on said shelf, a fan on said motor, a fan casing therefor opening towards the rear wall of the main casing, a deflector above said opening, a receptacle in the top of said main casing adjacent the rear side thereof and a flue extending upwardly from the fan casing to the receptacle.

8. In a device of the class described the combination with a casing having an air inlet at the base thereof, of a shelf in said casing, a motor on said shelf, a fan on said motor, a flue contained within the casing and extending upwardly from said fan, a plate adapted to direct a current of air into said flue, a receptacle at the top of said flue and a heater beneath said shelf.

9. In a device of the class described, the combination with an outer casing having an air inlet at the base, of a fan casing supported above said inlet, a fan therein, a motor adapted to operate said fan, a flue leading upwardly from the fan casing to the top of the outer casing, means in the upper end of said flue for connecting a flexible hose and a heater in the bottom of the casing adapted to heat the air before admission to the fan.

In testimony whereof we affix our signatures in presence of two witnesses.

EVANDER McIVER.
JOHN WIDUA.

Witnesses:
F. BENJAMIN,
C. B. BENJAMIN.