

April 20, 1937.

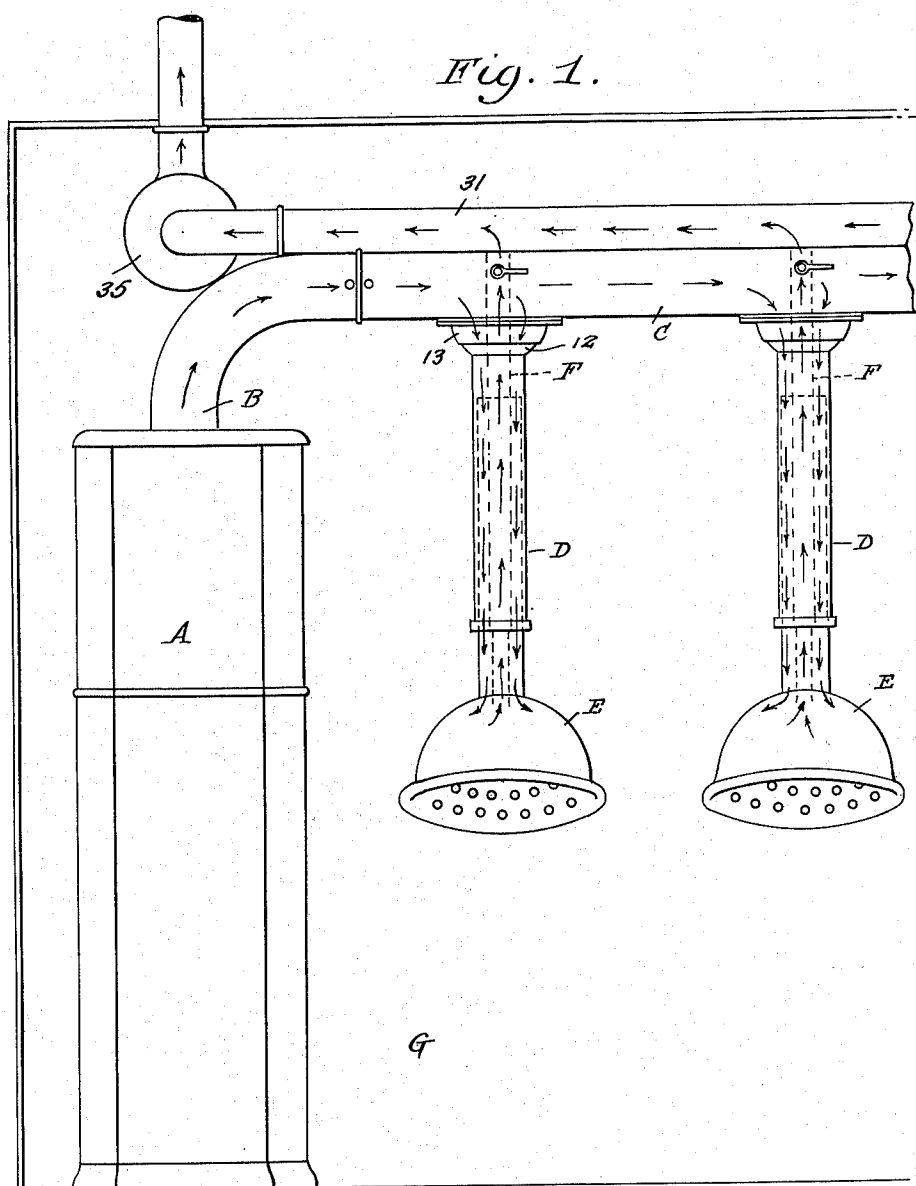
A. E. ZINGONE

2,078,047

HAIR DRYING DEVICE

Filed May 2, 1935

2 Sheets-Sheet 1



INVENTOR.
ANTHONY E. ZINGONE

BY

Clark & Ott
ATTORNEYS

April 20, 1937.

A. E. ZINGONE
HAIR DRYING DEVICE
Filed May 2, 1935

2,078,047

2 Sheets-Sheet 2

Fig. 2.

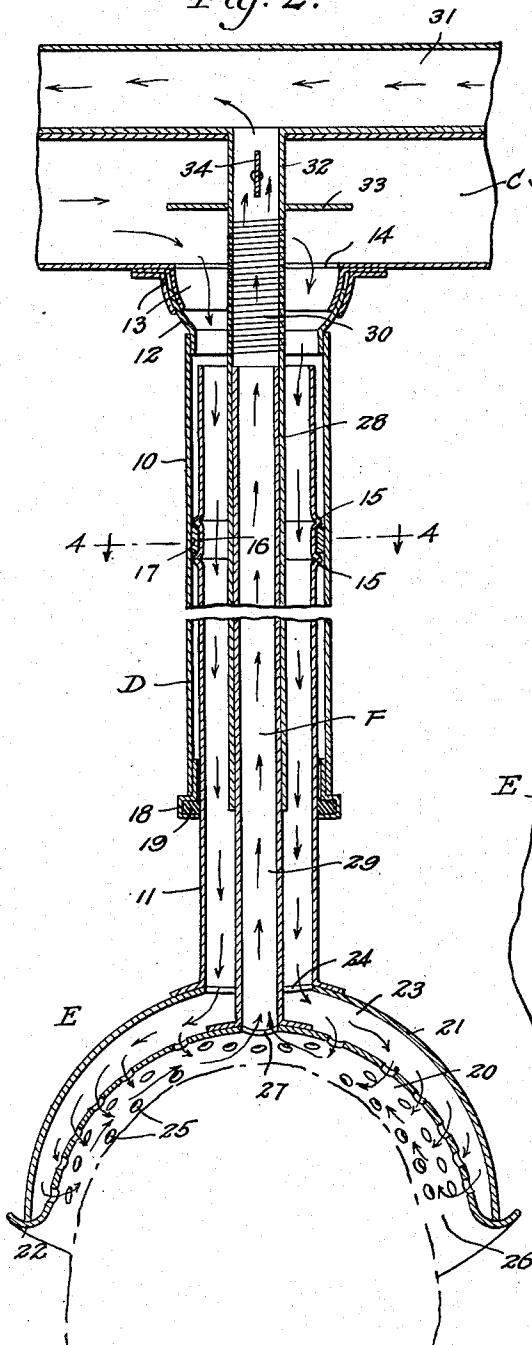


Fig. 3.

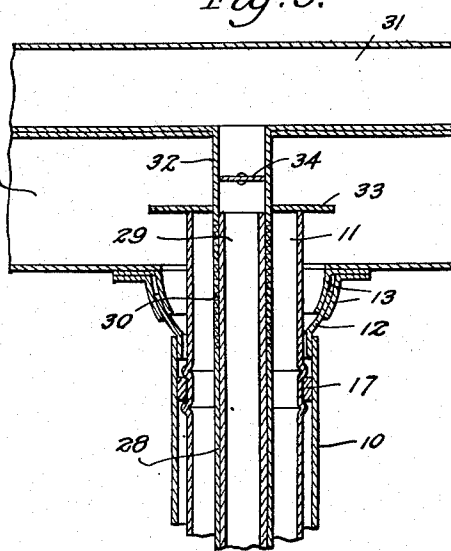
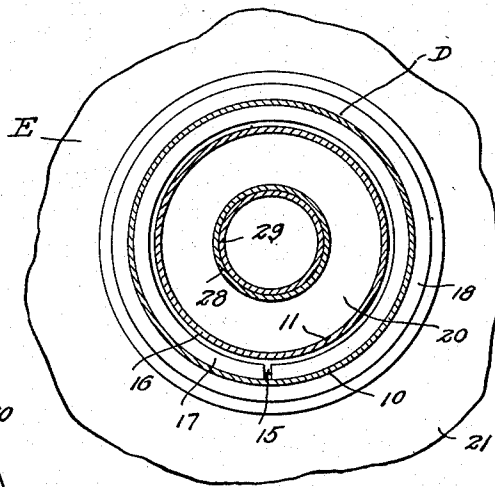


Fig. 4.



INVENTOR.
ANTHONY E. ZINGONE

BY

Clark & Ott
ATTORNEYS

UNITED STATES PATENT OFFICE

2,078,047

HAIR DRYING DEVICE

Anthony E. Zingone, New York, N. Y.

Application May 2, 1935, Serial No. 19,334

4 Claims. (Cl. 34—26)

This invention relates to hair drying devices and contemplates certain improvements in apparatus of the type which include a common air heating and blower unit with a hot air duct leading therefrom, having a plurality of branch pipes communicating with individual hoods or helmets, such as disclosed in my prior United States Letters Patent, No. 1,931,339.

In hair drying devices of this type, which are now in general use, the heated air, after acting upon the head, discharges into the room which is an undesirable feature, particularly in warm weather and warm climates, as obviously, it effects a substantial increase in the room temperature. Air conditioning systems for cooling the air are now being contemplated and installed in beauty parlors and other similar establishments where hair dryers are used, so as to in part, counteract this undesirable feature, and it has been estimated that it will require one-third of a ton of refrigeration to counteract the amount of heat discharged from a single hood during its average daily use.

The invention therefore broadly comprehends an improved hair drying apparatus including means communicating with the head receiving space of each helmet which functions to convey away and discharge outside of the room the heated air after the same has acted upon the head in order to avoid the raising of the room temperature, while, at the same time, making for a more rapid and efficient drying operation by continuously carrying away the moisture laden air from the head receiving space and thereby making way for the incoming fresh air.

The invention also provides, in an apparatus of this character, a distensible conduit leading from the hot air duct to the helmet, which conduit consists of telescopically adjustable sections with an improved means for automatically retaining said sections in relative adjusted position against accidental or unintentional movement.

The invention further resides in an improved means for cutting off and establishing communication between the hot air supply manifold and the individual conduits leading to the helmets.

Other objects of the invention are to provide an improved hair drying apparatus of the specified type, which is comparatively simple in its construction and mode of operation, which may be produced economically and which is highly efficient for its intended purpose.

With the above enumerated and other objects

in view, reference is made to the following specification and accompanying drawings in which there is set forth a preferred embodiment of the invention, while the claims cover variations and modifications thereof falling within the scope of the invention.

In the drawings:

Fig. 1 is a fragmentary front view of a multiple hair drying apparatus.

Fig. 2 is an enlarged fragmentary vertical sectional view through one of the helmets and the ducts.

Fig. 3 is a view similar to Fig. 2, illustrating the lower section of the distensible conduit in its uppermost position to cut off the supply of hot air to the helmet.

Fig. 4 is a horizontal sectional view taken approximately on the line 4—4 of Fig. 2.

In the drawings, A designates a common air heating and blower unit having an outlet B communicating with a hot air supply duct or manifold C leading therefrom and preferably extending horizontally and located overhead. The duct or manifold C has connected thereto, communicating therewith, and depending therefrom, conduits, designated generally by the reference character D, which communicate at their lower ends with dryer hoods or helmets, generally designated by the reference character E. Each conduit D consists of upper and lower telescopically associated tubular sections 10 and 11, the former being provided at its upper end with a semi-spherical flange 12 which is mounted for universal movement between spaced semi-spherical flanges 13 secured to the duct or manifold C and framing the outlet opening 14 thereof. This provides a connection between the duct or manifold C and the conduit D which permits of limited universal swinging movement of the conduits with reference to the duct or manifold, while establishing communication therebetween. The lower section 11 of the conduit D, which is telescopically slidable within the upper section 10, is formed with vertically spaced annular beads 15 or otherwise provided with an external peripheral groove 16 within which a split resilient ring 17 is arranged to exert a frictional engagement of its periphery with the inner periphery of the upper section 10. The split ring 17 functions as an automatic means for retaining the section 11 in vertically adjusted relation to the section 10, while permitting of the manual sliding movement of the section 11 in the section 10 to adjust the helmet with reference to the head of the patron.

In order to seal and guide the section 11 with reference to the section 10, the lower end of the latter has secured thereto an annular channeled gasket support 18 within which a yieldable gasket 19 is arranged with its inner periphery in contact with the outer periphery of the section 11.

The hood or helmet E which is substantially of the conventional type, includes inner and outer dome-shaped walls 20 and 21 which are connected at their marginal edges at 22 and spaced apart throughout the remainder of their areas to provide an air chamber 23 communicating with the lower end of the section 11 of the conduit B through an opening 24 formed centrally of the outer wall 21. The inner wall 20 of the head or helmet E is provided with perforations 25 constituting hot air outlets distributed over the area of the head receiving space 26 formed by the concavity defined by the inner wall 20.

The inner wall 20 is formed with a central outlet opening 27 connected with a vent conduit, designated generally by the reference character F, and which conduit preferably extends centrally upward through the supply conduit D, and is of lesser diameter than the conduit D to provide a hot air supply passage between the conduits. The vent conduit F includes telescopically associated upper and lower sections 28 and 29, the former having a flexible section 30 in the region of the universal joint between the supply duct or manifold C and the supply conduit D. The vent conduit F extends upwardly through the duct or manifold C and communicates with a superposed vent manifold 31. The upper portion 32 of the vent conduit F, lying between the flexible portion 30 and the vent manifold 31, is rigid and supports an annular horizontally disposed flange 33 which constitutes an abutment and closure for the upper end of the lower section 11 of the supply conduit D when the lower section is moved to its uppermost position. When in this position, communication between the hot air supply duct or manifold C and the section 11 of the supply duct D is cut off so that the operator automatically shuts off the flow of hot air to the hood by merely raising the hood or helmet to the limit of its movement. A valve 34 may be located in the vent conduit F for cutting off or regulating communication between the same and the vent manifold 31, if it is desired to permit the hot air to be discharged from the hood or helmet into the room.

The vent manifold 31 is connected with an outlet which discharges outside of the room G and a suction may be created therein either by natural draft from a stack or by means of a suction fan 35.

What is claimed is:

1. In a hair drying apparatus, a helmet adapted to receive the head and having walls defining an air distribution chamber and openings through one of said walls for distributing air from said chamber to the head, a hot air supply duct and a distensible conduit leading from the duct to the distributing chamber of the helmet, said duct comprising telescopically associated tubular sections, means connecting one of said sections to the duct for universal swinging movement with reference thereto, one of said

sections being provided with a peripheral groove in confronting relation to the other section, and a resilient split ring arranged between said sections within said groove to frictionally retain the sections in relative adjusted position while permitting of the manual telescopic sliding of the sections.

2. In a hair drying apparatus, a helmet adapted to receive the head and having inner and outer walls defining an air distribution chamber and openings through the inner wall for distributing air from said chamber to the head, a hot air supply duct, a vent duct, a distensible hot air conduit comprising telescopically associated tubular sections, one of said sections being rigidly affixed to the outer wall of the helmet, means of connection between the other section and the hot air supply duct to permit of relative swinging movement of said latter section with respect to said duct; and a distensible vent conduit located within the hot air conduit comprising telescopically associated tubular sections, one of said sections being rigidly affixed to and opening through the inner wall of the helmet and the other of said sections being connected to the vent duct.

3. In a hair drying apparatus, a helmet adapted to receive the head and having inner and outer walls defining an air distribution chamber and openings through the inner walls for distributing air from said chamber to the head, a hot air supply duct, a vent duct, a distensible hot air conduit comprising telescopically associated tubular sections, one of said sections being rigidly affixed to the outer wall of the helmet, means of connection between the other section and the hot air supply duct to permit of relative swinging movement of the latter section with respect to said duct; a distensible vent conduit located within the hot air conduit comprising telescopically associated tubular sections, one of said sections being rigidly affixed to and opening through the inner wall of the helmet and the other of said sections being connected to the vent duct, and means located between the sections of the hot air conduit for automatically retaining both of said conduits in relative adjusted position, while permitting of the manual telescopic sliding movement of the sections.

4. In a hair drying apparatus, a helmet adapted to receive the head and having inner and outer walls defining an air distribution chamber and openings through the inner wall for distributing air from said chamber to the head, a hot air supply duct, a vent duct, a distensible supply conduit comprising upper and lower telescopically associated tubular sections, the lower section being rigidly affixed to the outer wall of the helmet, the upper section being connected to the hot air supply duct, a distensible vent conduit located within the supply conduit comprising upper and lower telescopically associated tubular sections, the lower section being rigidly affixed to and opening through the inner wall of the helmet and the upper section being connected to the vent duct, and means on said latter section with which the upper end of the lower section of the supply conduit is adapted to engage for cutting off the hot air supply to the helmet.

ANTHONY E. ZINGONE.