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HAIR CURLER OVEN AND METHOD OF CURLING HAIR

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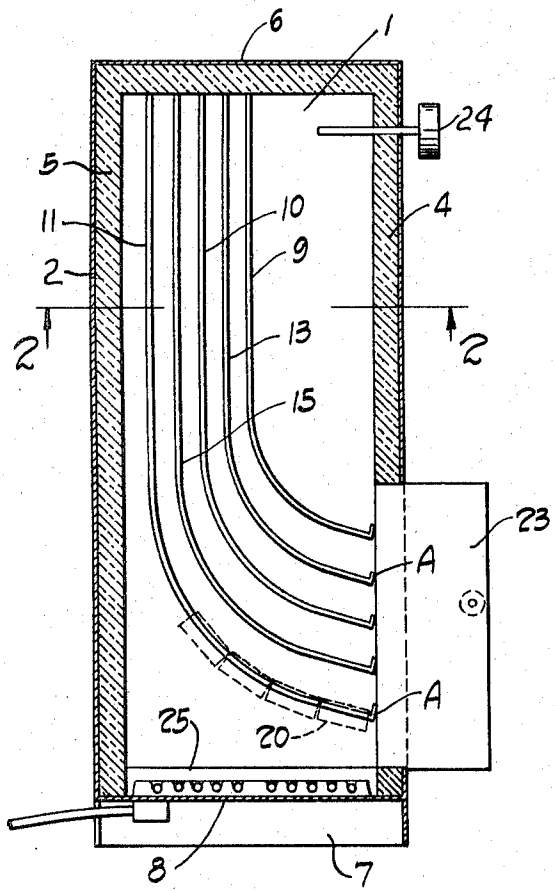



Fig. 1

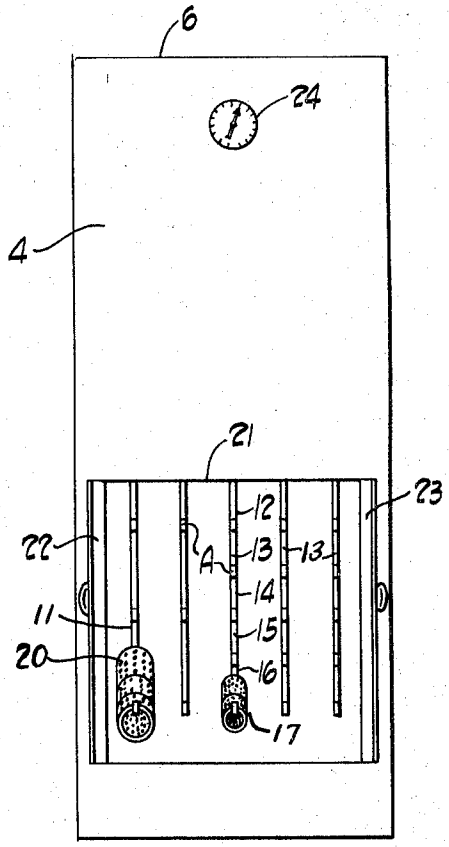



Fig. 3

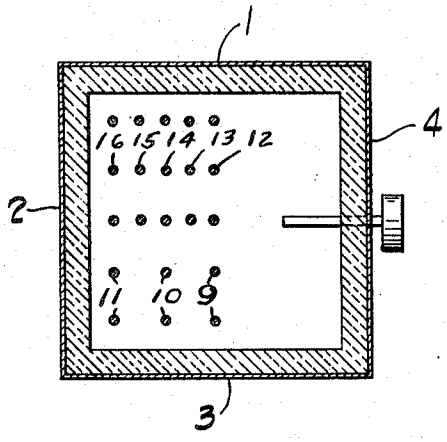



Fig. 2

INVENTORS
C. L. KEMP
I. L. KEMP
D. J. HARTWICK
G. J. HARTWICK

BY Robb & Robb attorneys

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# HAIR CURLER OVEN AND METHOD OF CURLING HAIR

Charles L. Kemp and Ingrid L. Kemp, both of 10251 Chesterfield Drive, Parma Heights, Ohio 44129, and Donald J. Hartwick and Gloria J. Hartwick, both of 15324 Holland Road, Brookpark Village, Ohio 44142

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## ABSTRACT OF THE DISCLOSURE

This invention discloses a method of curling hair which depends upon the preliminary heating of a hair roller or series of rollers to a temperature which is substantially above body temperature, thereafter rolling the strands of hair around each of the rollers, and since the rollers are hollow in this contemplation, same are subsequently subjected to treatment by passing warm air therearound while the hair is rolled on the rollers so that the hair dries during the course of such treatment, resulting in improved curls provided, and in addition the oven in which the rollers are heated is disclosed as including a series of downwardly depending rods of substantial length upon which a series of rollers may be supported in end-to-end relationship, the oven having means therein to heat the interior and circulate air—and by reason of the position of the heating elements in the oven, effect uniform heating of the rollers. The rollers are positioned so as to be removed one at a time from a suitable opening in the oven through which access may be had to the end of each of the rods upon which such rollers are supported.

This invention relates to a method of curling hair and to certain instrumentalities used in connection with the same, the general contemplation hereof being to substantially reduce the amount of time heretofore required for hair curling whether by professional or home methods.

As will be readily apparent, the problem in respect of curling hair has been reduced in some aspects by recent improvements, but in any event the time required for this operation has remained substantial, in many cases requiring upwards of 45 minutes to an hour depending upon the quality and quantity of hair involved to accomplish the drying of the hair during curling operation.

The method hereof involves certain known instrumentalities but manipulation thereof is effected in accordance with the method developed so that the ultimate result is not only improved but the time within which such result is attained is very much reduced in the overall consideration.

The contemplation of the method is that the commonly used rollers whether the same be plastic, magnetic, or of other composition, may be used in carrying out the method but they are treated in accordance with the concept hereof so as to effectively increase the drying action on hair in which the strands are wound or rolled on the various rollers.

It is a particular object of the invention to reduce the time involved in the hair drying operation whether it be performed at any given time or place, but particularly in commercial or professional handling of hair since it will be clear that if the time required to dry, curl or set hair is reduced, the number of persons who may be thus treated is substantially increased for any given quantity of facilities available for the purpose.

With the foregoing in mind, and with the requirement to provide certain improvements in the method, mechanism or apparatus for assisting in carrying out the method is another object of this invention and results in increased facility for handling the rollers commonly used and in handling them in accordance with the method hereof, an oven has been devised which will effectively perform the necessary function to enable the method to be carried out rapidly and successfully.



In summary therefore, the method hereof is a vastly improved method of curling hair residing in the increased rapidity with which hair may be dried and thus reducing the time required therefor, the broad improvement residing in heating the curling roller so that when applied to the hair it will begin to dry the hair rolled thereon from what may be termed the inside outwardly and in conjunction with the usual dryers provided, substantially reduce the time required for such drying operation.

Other and further objects of the invention will be understood from a consideration of the specification attached hereto, and disclosed in the drawing in reference to the oven useful in carrying out the method wherein:

FIGURE 1 is a vertical sectional view illustrating the interior of an oven useful in heating rollers hereof and likewise illustrating certain other of the mechanical features.

FIGURE 2 is a sectional view taken about on the line 2—2 of FIGURE 1 looking in the direction of the arrows.

FIGURE 3 is a front view of the oven of FIGURE 1 further illustrating certain features thereof.

Referring now to FIGURE 1 to describe the oven useful in heating the hair curlers or rollers, the disclosure illustrating a generally rectilinear housing with sides **1**, **2**, **3** and **4** being formed by inner and outer walls between which suitable insulation generally denoted at **5** is emplaced.

The top of the oven is denoted at **6** and similarly formed to the sides and being provided with insulation likewise, and at the bottom denoted **7**, suitable electric heater unit **8** is provided within the housing so that heat generated thereby will rise upwardly within the housing.

Supported within the housing, are a series of rods, these in turn being provided in two different positions, the rods being designated **9**, **10** and **11** in one series, and **12** through **16** for the other series.

The series of rods designated **9**, **10** and **11** are spaced as indicated in FIGURE 3 at the left hand portion of the oven interiorly thereof as indicated, so as to support relatively large diameter rollers generally designated **20** thereon and to permit circulation of the hot air there around so that a thorough heating of the rollers **20** takes place.

As will be observed, there are two series of rollers **9**, **10** and **11**, being formed by the six rods so designated, the series designated **12** through **16** being supplied in a series of three rows, there being five rods in each row, these being used for smaller diameter rollers **17** to effectively provide for heating thereof.

At the end of each of the rods **9** through **16**, there is provided a stop in each case designated A, since they are all identical and perform the same function for each rod.

As is indicated or suggested in FIGURE 1, in dotted lines, a series of rollers is shown as being supported on the rod **11**, with the end of the roller designated **20** being in contact with the stop A of such rod **11**.

As will be understood from a consideration of FIGURE 1, the rollers **20** are in each case arranged so that they surround the rod and the action of gravity will cause the same to move toward the stop A of each rod as any particular roller is removed therefrom, the stop being so proportioned as to permit the roller to move thereover during such removal operation.

It is understood that rollers on all the rods will be similarly arranged and similarly moved downwardly in

response to gravity as the one adjacent the stop A in each case is removed.

The number of rollers which are intended to be supported within the oven in this instance will be such that probably two or three heads of hair so-to-speak may be curled or treated as suggested herein without requiring that the quantity of rollers be replenished.

It will be understood from the foregoing that the rods **9** through **16** are supported in any preferred manner below the top **6** of the oven and the ends are arranged so that they extend to a position adjacent an access opening designated **21**, which opening is adapted to be closed by a pair of doors **22** and **23**. The doors **22** and **23** are suitably hingedly connected to the front **4** of the oven so that they may be opened into the position shown in FIGURE 3.

A suitable heat indicator **24** may be provided to indicate the temperature within the oven, since under some circumstances rollers of different materials may be heated to higher temperatures than others and it is desirable to control the temperature within reasonable limits and to be aware of the condition within the oven as would be indicated by the thermometer or indicator **24**.

It is understood that the heating unit **8** may be equipped with a suitable thermostat so that the temperature within the oven can only be raised to a certain point but in any case the temperature is desirably raised to a point substantially greater than the body temperature of the person whose hair is to be curled by use of the method hereof.

As indicated previously, the various types of rollers are adapted to be used in the method hereof, it having been found that the so-called magnetic rollers and the fiber rollers are probably the best and will retain the heat the longest for the purposes hereof.

Assuming therefore that the apparatus hereof is as indicated or provided and that rollers therewithin have been heated to the proper temperature therefor, they are available for the practice of the method by opening the doors **22** and/or **23** so that a roller may be removed therefrom.

The hair of the individual whose hair is to be curled is suitably dampened or otherwise treated and the heated roller **20** for example is removed from the rod A and usual manipulation of the hair therearound is resorted to so that the curling process is initiated.

Successive rollers are removed, be they large or small, and in accordance with the skill of the operator applied to the head of the person whose hair is being curled in a given pattern or sequence which may be varied or otherwise modified but still using the heated roller for each strand or strands of hair to be curled.

When the rollers have all been applied in their heated condition the balance of the usual hair treatment process is effectuated as by placing the individual's head under a dryer so that the usual warmed air may be passed thereover and through the rollers to effect the drying operation more completely.

It has been found as a result of use of the method under controlled circumstances that the time required for drying a head of hair in most cases has been reduced at least 50%, and in some cases substantially more by providing heated rollers and having them accessible for ready application by means of an oven such as is here illustrated.



It is contemplated that the bottom of the oven **7** may have a suitable plate **25** therein upon which individual snap curlers may be rested so that they in turn may likewise be heated.

The temperature within the oven is adapted to be raised to any given temperature that will not deform or otherwise destroy the rollers, in most cases the temperature of 160 to 180 degrees Fahrenheit being useful for carrying out the purpose and also of course depending upon the ability of the operator to handle the rollers without damaging either the hair of the individual whose hair is being curled or her hands by reason of the temperature of the roller which must be handled as before generally outlined.

It is of course apparent that any other mechanism which will provide rollers heated in accordance with the herein described method may be resorted to, the disclosure of the oven herein being one form for providing rollers readily accessible for use in carrying out the method hereof.

We claim:

**1.** In a curler heater, in combination, a housing, a series of elongated rods on which a plurality of hair rollers are supported in end-to-end relationship, said rods supported in said housing by connection of one end therewith, access means for said housing, the free ends of the rods extending theretowards, stop means on said free ends to retain said hair rollers on the rods, and means to heat the interior of said housing thereby heating said rollers.

**2.** The combination as claimed in claim **1**, wherein the rods extend generally vertically in the housing, the free ends being lowermost, and the access means comprise doors adjacent the free ends referred to.

**3.** The combination as claimed in claim **2**, wherein the rods are spaced to provide circulation therearound, and the heating means are near the lower ends of the rods.

**4.** The combination as claimed in claim **1**, wherein the rods extend downwardly from the top of the housing, the free ends curve toward the access means, and the access means comprise doors which are operable to facilitate removal of the hair rollers from the ends of the rods, gravity causing successive rollers to move into place against the stops mentioned.


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LOUIS G. MANCENE, *Primary Examiner.*

GREGORY E. McNEILL, *Assistant Examiner.*