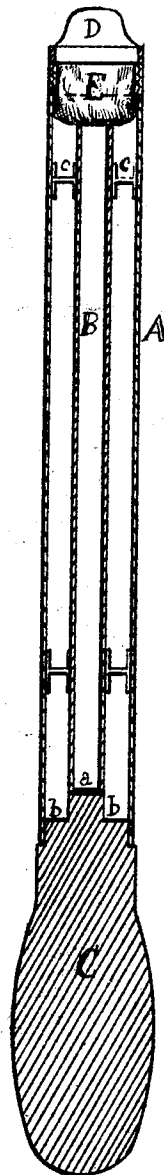


L. ROSENSTEIN & S. FEDER.
Curling-Irons.

No. 141,079.

Patented July 22, 1873.

Fig 1



Witnesses.

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UNITED STATES PATENT OFFICE.

LEO ROSENSTEIN AND SIGMOND FEDER, OF MEMPHIS, TENNESSEE.

IMPROVEMENT IN CURLING-IRONS.

Specification forming part of Letters Patent No. **141,079**, dated July 22, 1873; application filed June 4, 1873.

To all whom it may concern:

Be it known that we, LEO ROSENSTEIN and SIGMOND FEDER, of Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Hair-Curling Iron; and we do hereby declare that the following is a full, clear, and exact description thereof, that will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to that class of hair-curling devices which are heated by hot water; and consists of two or more metallic tubes arranged the one within the other, so as to be concentric, the inner tube or tubes being held in place by means of a rim and supports, the tubes being closed hermetically at one end, and at the other by a movable stopper provided with a gum or cork plug.

Referring to the drawing, Figure 1 is a longitudinal sectional view of our invention, in which A is the outer or larger, and B the inner or smaller, tube. C is the handle; D, the stopper with the gum plug E. The outer tube A is made about one and a half inch longer than the inner tube B, and the two are so arranged that half an inch of the further end of the outer tube is left for the reception of the stopper D, and one inch of the nearer end for the insertion of the handle C. The nearer end of the tube B is hermetically closed at *a*, leaving a small portion of the tube for the insertion of an extension of the handle C. Soldered around the end of this tube is the rim *b*, which is cut so as to exactly fit within the tube A, to which it is soldered at the proper distance from the end, and thus hermetically closing the nearer end of the curling-iron, and forming a socket for holding the handle. The outer end of the tube B is held in place by the equal braces *c*, placed on opposite sides thereof, and soldered to the tube A. The two tubes thus arranged are concentric.

When more than one inner tube is used they are made all of same length, their nearer ends closed and supported by the rim *b*, their further ends supported—each to its immediate outer tube—by similar braces as are used in supporting a single tube, and all so arranged as to be concentric with the outer tube A.

The stopper D is provided with an extended rim or flange, forming a tubular socket, which fits neatly into the tube A. Within this socket is secured a piece of cork or prepared gum, E, of such dimensions as to fit closely the tube A, and so arranged that when the stopper is inserted flush with the end of said tube A said gum will extend to, and tightly close the outer end of the tube B.

The stopper may be held within the tube by a suitable thread on its periphery, moving in a corresponding thread on the inner periphery of the outer tube, or may be held by the friction of the closely-fitting gum plug E.

It will be seen that when the tubes are filled with hot water flush with the outer end of the inner tube B, and the stopper D with its gum plug inserted, there can be no communication whatever between the water in the separate tubes, and that in the agitation of said water consequent upon handling the curling-iron, that in the inner tube cannot be brought in contact with the inner surface of the outer tube, where the heat would be rapidly extracted, and so a high degree of heat is longer preserved by the water in said inner tube, and as a result a higher degree of heat will longer be maintained in the curling-iron, than if it were composed of a single tube, and the concentric arrangement causes an equal distribution of heat from the inner to all parts of the outer tubes.

We do not confine ourselves to making the tubes straight, as shown in the drawing, as one or all of them may be made tapering; nor do we confine ourselves to any particular relative dimensions in their manufacture.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A curling-iron composed of two or more concentric tubes, arranged substantially as and for the purposes specified.

2. In a curling-iron, the combination, with the tube A, of the tube B, braces *c*, rim *b*, stopper D, and plug E, when arranged substantially as and for the purposes described.

In testimony that we claim the foregoing we have hereunto set our hands this 22d day of May, 1873.

LEO ROSENSTEIN.
SIGMOND FEDER.

Witnesses:

JAMES HALL,
J. G. CROOKHAM.