(No Model.)

E. J. BRAND.

CURLING IRON.

No. 540,947. Patented June 11, 1895.

Fig. 1.

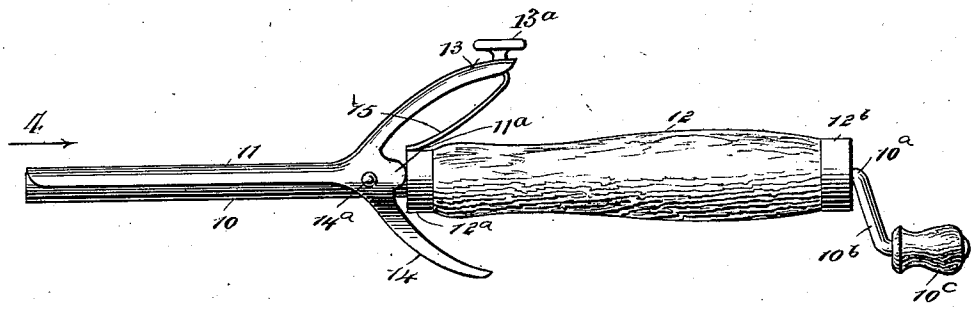


Fig. 2.

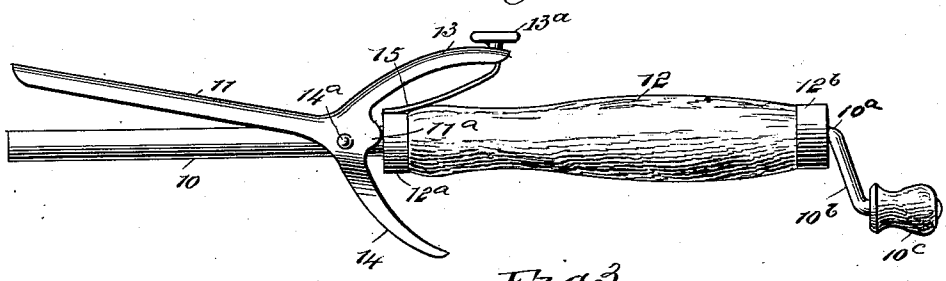


Fig. 3.

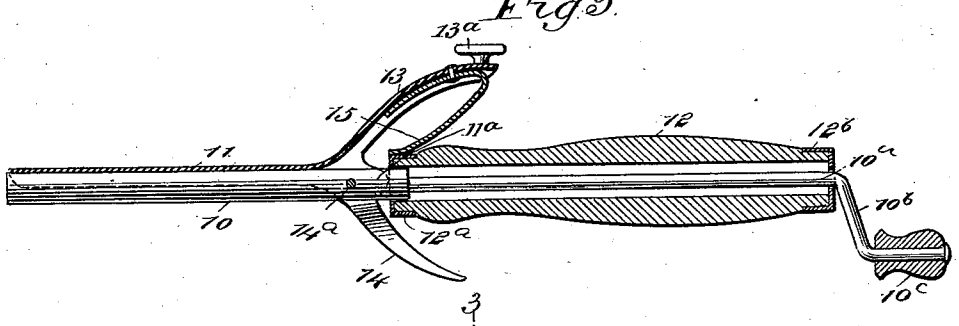
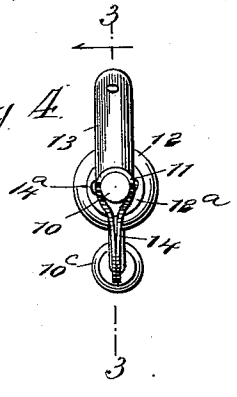


Fig. 4.



WITNESSES:

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CURLING-IRON.

SPECIFICATION forming part of Letters Patent No. 540,947, dated June 11, 1895.

Application filed March 13, 1895. Serial No. 541,558. (No model.)

To all whom it may concern:

Be it known that I, EDWARD J. BRAND, of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Curling-Iron, of which the following is a full, clear, and exact description.

This invention relates to an improved device used for the curling of human hair, and has for its object to provide a hair curling device which will be of simple and inexpensive construction, be convenient to use, and afford means for the revolution of the heated cylindrical iron, at the rear end of the handle of the device, thereby avoiding liability to burn the fingers of the operator while using the instrument.

A further object is to provide certain novel details of construction for the hair curling device, which will afford a guard for the hair as it is wrapped on the hot iron, and also afford a support for the instrument while receiving heat from a lamp, within the chimney of the latter.

The invention consists in the construction and combination of parts as hereinafter described and indicated in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side view of the instrument, showing parts in folded adjustment. Fig. 2 is a side view representing the curling-limbs diverged. Fig. 3 is a longitudinal sectional view substantially on the line 3 3 in Fig. 4, and Fig. 4 is an end view of the device in the direction of the arrow 4 in Fig. 1.

Two limbs 10, 11, are provided, which where they engage with hair to curl it are afforded the usual shape, the limb 10 being cylindrical and the limb 11 concavo-convex in cross section, and the said limbs are pivoted together near one end of each limb, as usual. A suitable length is afforded the limbs 10, 11, which in service approach each other and may impinge, the limb 10 as shown in Fig. 3, being preferably reduced in diameter, so as to provide a cylindrical shank 10^a at one end near the pivot connection of the limbs.

A handle piece 12, formed of wood or other good non-conductor of heat is furnished, which is substantially cylindrical and of such a diameter as will adapt it for effective service as a handle, said piece being axially perforated to loosely slide on the shank 10^a.

A cupped ferrule 12^a is fitted on one end of the handle piece 12 and centrally perforated to receive the rear end of the cylindrical limb 10, that slightly projects into the ferrule, and also engages the bore of the handle piece to prevent objectionable wear on the ferrule, which may be formed of comparatively thin sheet metal struck into form. The opposite end of the handle piece 12 is protected by a cupped ferrule 12^b that may be similar to the ferrule 12^a, and has a central perforation for the shank 10^a to rotate in, the said shank having a crank formation 10^b produced on it exterior of the ferrule 12^b, and a knob 10^c is preferably located on the crank, which knob should be formed of a non-conductor of heat.

The limb 11 is furnished with two guard wings 13, 14, which are preferably bent so as to curve them edgewise, and they are oppositely produced or secured on the end portion of the concavo-convex limb, near its end that in service is adjacent to the handle piece 12.

For convenience in manufacture, and to cheapen the production of the instrument as well as lighten it, the limb 11 and wings 13, 14 are integrally formed of a sheet metal piece having a suitable thickness, the planchet after it has been cut into correct form, being bent by proper dies, so that the wing 13 will be suitably arched, and also be formed concavo-convex in cross section, the concave side being lowermost when parts of the instrument are assembled and it is held in the position indicated in the drawings. The other guard wing 14 is composed of two members which are adapted to loosely embrace the limb 10 near the handle piece 12, and said members are pivoted to the cylindrical limb as shown at 14^a and provides the pivot connection for both limbs as before mentioned. Below the pivot 14^a the separate members of the guard wing 14 are bent toward each other, and then in nearly parallel planes so that they laterally impinge each other, producing a substantial wing piece that is curved edgewise, the degree of arched curvature for the two wings being the same, or nearly so.

Between the guard wings 13, 14, two similar projections or ears 11^a are produced on

the limb 11, these projections being outwardly curved on their edges, and the degree of projection afforded said ears rearwardly of the pivot 14^a, is sufficient to cause their curved edges to loosely impinge the metal face of the cupped ferrule 12^a, and it will be seen that the bend of the crank 10^b that is nearest to the ferrule 12^b, will together with the impinging ears serve to prevent a longitudinal movement of the handle piece 12, while its free rotation is permitted.

A spring 15, preferably formed of an elastic strip of metal, is bent to adapt it to occupy the position plainly shown in Fig. 3; one portion of said spring being attached to the wing 13, and its opposite end caused to bear on the ferrule 12^a, between the two members of the guard wing 14, or junction of the same with the upper guard wing 13, the force of the spring normally pressing the latter named wing away from the handle piece 12, and the free end of the limb 11 upon the limb 10, the spring also serving to prevent the handle 12 from turning too easily, so that the lock of hair is held in place while being curled. Preferably a button 13^a, which is a non-conductor of heat, is secured on the wing 13, as shown, to protect the hand of the operator from the heated limb when the device is in use.

Preparatory to using the device, it is first heated to a proper degree, by application to fire in a stove, or an ignited gas jet, or it may be hung in the chimney of a lighted lamp so as to dispose the limbs 10, 11 above the flame of the lamp, the wings 13, 14 holding it in position, and thus raise the temperature of said limbs. After the instrument has been sufficiently heated, the operator takes hold of the handle piece 12 and applies pressure to the wing 13, thus elevating the channeled limb 11 at its free end. The instrument is made to grip a lock of hair which is to be curled, and this may be at or near the free ends of the two limbs which are forced toward each other by the spring 15. When the hair has been gripped in the usual manner near the free end of the lock, the handle 12 is held with one hand and the knob 10^c is taken hold of with the other hand, so as to permit the operator to rotate the crank 10^b and thus revolve both limbs of the hair curling device.

It will be seen that the wings 13, 14 from their shape and relative position, serve to prevent hair from being entangled with the spring 15 or drawn tightly between said spring and the handle, so that the curling iron can be instantly released from a clamped engagement with the curled lock of hair, and the latter be removed from the limbs as soon as the wrapping is completed if desired, which may be necessary in case the limbs have been made so hot as to endanger the burning of the hair by continuing its contact with the hot curling iron any considerable length of time.

It is evident that the limb 11, and wings 13, 14, may be cast together from any suitable metal, and that by an obvious change in construction within the scope of the invention, a spiral spring may be substituted for the plate spring, to press the wing 13 away from the handle piece 12. Furthermore the wings 13, 14 may be separately formed and each attached to the limb 11. Hence it is not desired to strictly confine the construction of these parts of the device to the exact forms and method of production hereinbefore described, providing the several features of the device are furnished and are adapted to perform their functions as specified.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a curling iron, the combination with a longitudinally perforated handle, of two limbs pivoted together, one of said limbs being provided with a shank extending through the perforated handle and projecting from its rear end, and a crank handle on the projecting end of the shank for rotating said limbs, substantially as described.

2. In a curling iron, the combination with two limbs pivoted together near one end of each, a shank extending from one of said limbs, and a handle loosely mounted on said shank, the shank projecting through the handle at its rear end of two opposite wings on one of said limbs near one end of the handle, and means for rotating both of the limbs from the end of the shank that projects through the handle, substantially as described.

3. In a curling iron, the combination with two limbs pivoted together near one end of each, one of said limbs being cylindrical and the other concavo-convex in cross section, of two opposite wings on the concave limb near the pivot connection of said limbs, a shank extending from one end of the cylindrical limb, a longitudinally perforated handle the said shank extending through said handle and projecting therefrom at its rear end, and means for rotating the limbs from the end of the shank that projects through the handle, substantially as described.

4. In a curling iron, the combination with two limbs pivoted together near one end of each, one of said limbs having a shank extension and the other limb being provided with two opposite wings near the pivot connection of said limbs, and also provided with two ears having rounded edges and projected from between the wings, of a longitudinally perforated handle through which the shank projects, and a crank handle on the projecting end of the shank, the crank and ears preventing end motion of the shank in the handle, substantially as described.

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Witnesses:
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