E. E. KEEFE.

COMB.

APPLICATION FILED SEPT. 10, 1909.

959,866. Patented May 31, 1910.

Fig. 1.

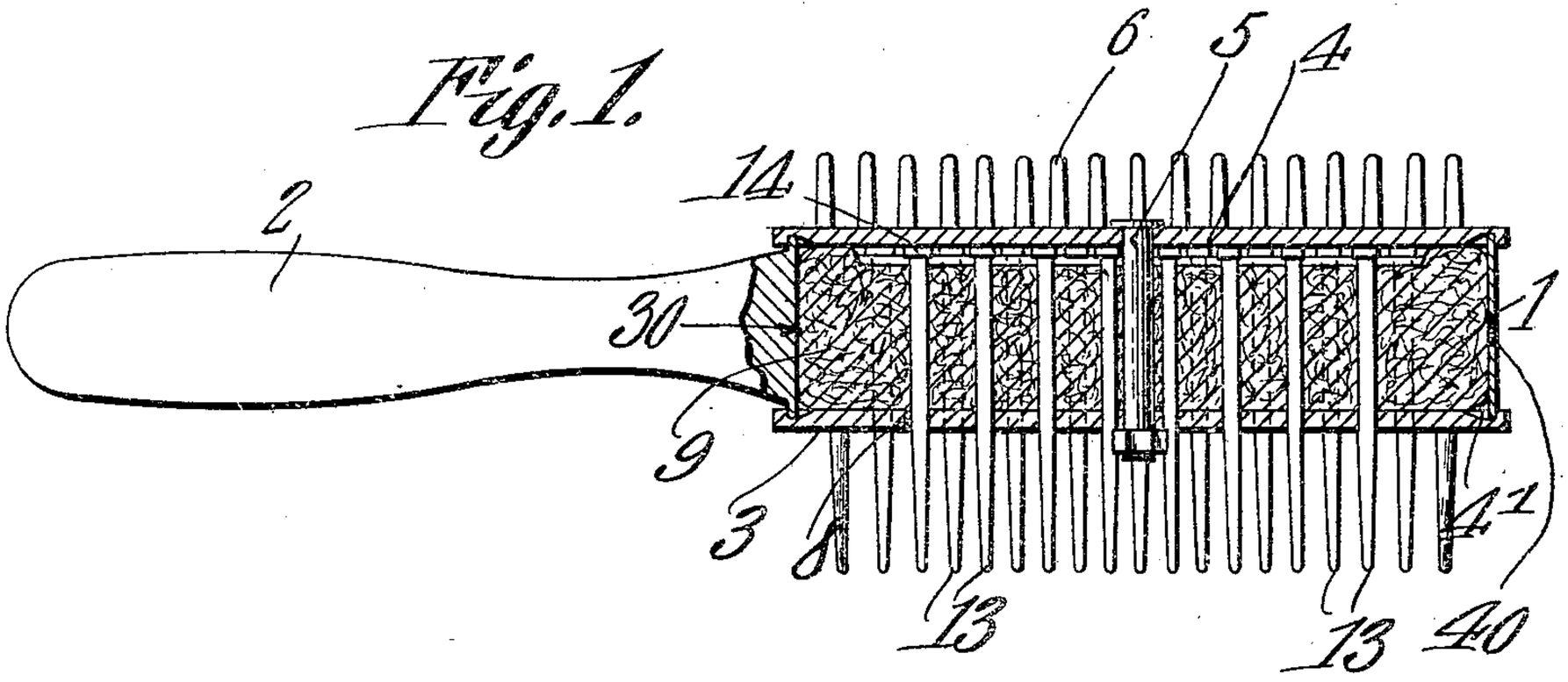
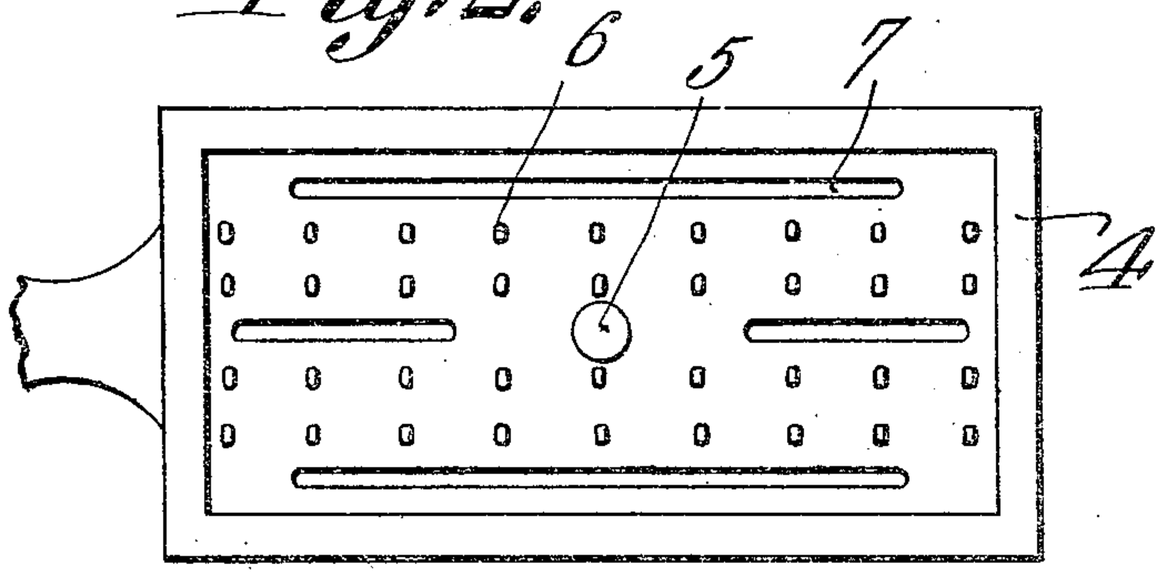


Fig. 2.



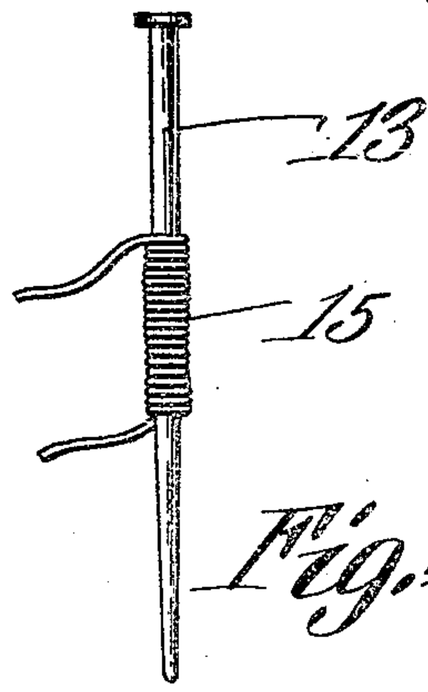
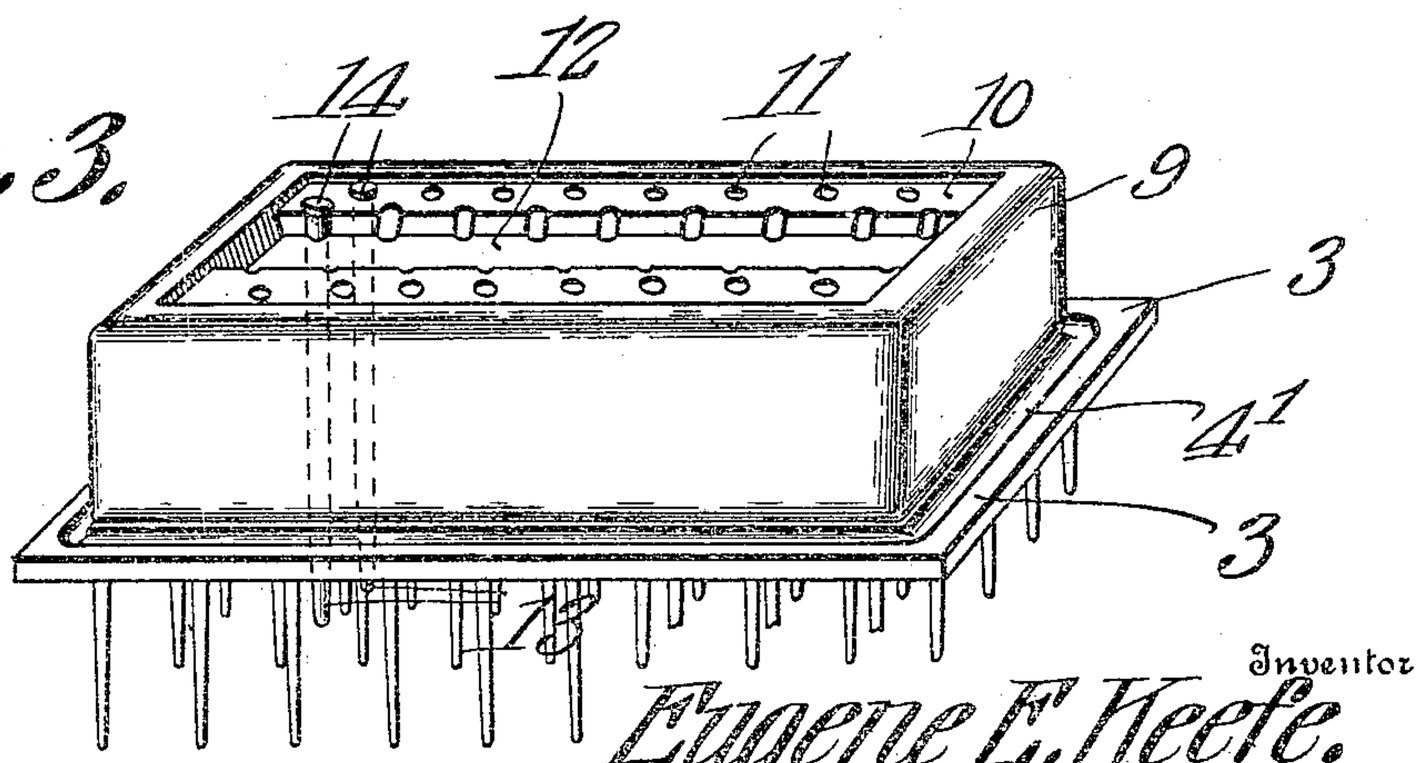


Fig. 4.

Fig. 3.



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959,866. Specification of Letters Patent. **Patented May 31, 1910.**

Application filed September 10, 1909. Serial No. 517,082.

To all whom it may concern:

Be it known that I, EUGENE E. KEEFE, a citizen of the United States, residing at Bellows Falls, in the county of Windham and State of Vermont, have invented a new and useful Comb, of which the following is a specification.

This invention relates to means for drying and crimping the hair, one of its objects being to provide a simple device of this type which can be manipulated in the same manner as a brush or comb and which has novel means whereby the teeth constituting a portion of the device can be thoroughly heated.

Another object is to provide a hair drier and crimper, the parts of which can be readily separated for the purpose of cleaning and repairing them.

Another object is to provide a compact device which can be easily manipulated and will not readily get out of order.

With these and other objects in view the invention consists in certain novel details of construction and the combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawing the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a longitudinal section through the hair drier constituting the present invention. Fig. 2 is a plan view of the head thereof. Fig. 3 is a perspective view of the heating block and one of the plates used in connection therewith. Fig. 4 is a detail view of a tooth having modified means for heating it.

Referring to the figures by characters of reference, 1 designates a frame of suitable contour and preferably formed of metal, there being a handle 2 formed integral with this frame or fastened to it in any suitable manner whereby the entire device is conveniently manipulated.

The frame 1 is designed to be closed at the top and bottom thereof by means of plates 3 and 4 respectively, each of these plates being provided in its inner face with a continuous channel or groove 4 so arranged as to receive the adjoining edges of the frame. A bolt 5 or other suitable removable fastening device is extended through the centers of the plates 3 and 4 and is designed, when tightened, to clamp the said plates upon the opposed edges of the frame and thus form a closed casing. The plate 4 has a parallel series of teeth 6 extending perpendicularly therefrom and located at suitable points within this plate are elongated openings 7 for the purpose hereinafter set forth. The teeth 6 are preferably formed integral with the plate 4. Openings 8 are formed in the opposed plate 3 and are disposed in the same relation to one another as are the teeth 6.

Removably mounted within the frame 1 and against the opposed plates 3 and 4 is a heating block 9 formed preferably of a mixture of cement and grit, the parts being so proportioned as to readily absorb oil such as alcohol, to be used as a fuel. The block 9 is provided in its upper face with a recess 10 and openings 11 extend through the block and are designed to register with the openings 8 in the plate 3. A trough or channel 12 is formed in the bottom of the recess 10 and constitutes means for holding alcohol or other inflammable fluid while the same is being absorbed by the block 9. The openings 11 are designed to receive elongated teeth 13 having heads 14 at one end which are so proportioned as to contact with the plate 4, the thickness of each head being substantially equal to the depth of the recess 10. The other ends of the teeth project through the openings 8 and beyond the plate 3, these projecting portions being shaped similarly to the teeth 6.

In using the device herein described alcohol or other suitable inflammable fluid is poured through the openings 7 and onto the block 9, the recess 10 and trough 12 serving to hold the liquid until it has been completely absorbed by the block. After this absorption has taken place, the oil contained within the block can be ignited and the combustion will result in the thorough heating of the teeth 13 and the transmission of a portion of the heat through the heads 14 to the plate 4 which will in turn result in the heating of the teeth 6. After the various teeth have been thoroughly heated in this manner and the flame extinguished, the teeth can be drawn through the hair and will, obviously, quickly dry it. The channels 4 not only constitute means for receiving the edges of the frame 1 but also serve as drip troughs for receiving any surplus fluid which might pass through the block 9 prior to being consumed.

Should it be desired to separate the several parts for the purpose of cleaning or repairing them, it merely becomes necessary to remove the fastening device 5, where-

upon all of the parts can be separately handled.

Instead of utilizing a block of absorbent material for the purpose of heating the teeth by means of an ignited oil or the like, they may be extended through resistance coils such as shown for example at 15 in Fig. 4. It is not necessary to insulate the coils from the teeth for the reason that the current will be shut off when the device is in use. By then connecting the various resistance coils to a source of electricity the temperature of the various teeth can be quickly raised. If desired, the handle 2 may be spaced from the block 9 by a refractory lining 30, and suitable vent holes 40 of which there may be one or more, may be provided.

It is of course to be understood that various changes may be made in the construction and arrangement of the parts without departing from the spirit or sacrificing the advantages of the invention as defined by the scope of the appended claims.

What is claimed is:—

1. A device of the class described including a casing, teeth extending therefrom, and means within the casing for generating heat, and teeth extending through said heat generating means.

2. A device of the class described including a casing, heat generating means therein, oppositely extending teeth upon the casing, one set of teeth extending through the said heat generating means and beyond the casing, said set constituting means for transmitting heat to the other teeth.

3. A device of the class described including a casing, an apertured block removably mounted therein for absorbing liquid fuel, and teeth extending through the block and beyond said casing.

4. A device of the class described including a frame, plates detachably mounted upon opposed portions of the frame, teeth integral with and outstanding from one of the plates, a fuel absorbing block mounted within the frame and between the plates, and teeth extending through the block and beyond one of the plates, said latter teeth contacting with the plate on which the first mentioned teeth are mounted.

5. A device of the class described including a frame, an apertured block therein for absorbing liquid fuel, plates detachably mounted upon opposite portions of the frame and constituting means for holding the block within the frame, said block having a fuel receiving recess in one face, teeth extending from and integral with one of the plates, the other plate having apertures therein, and teeth extending through the block and the apertured plate and contacting with the toothed plate.

6. A device of the class described including a frame, a block therein for absorbing liquid fuel, plates detachably secured upon opposed portions of the frame for holding the block therein, teeth integral with one of the plates, the other plate having apertures therein, teeth extending through the block and the apertures in the plate, said teeth having heads bearing upon the remaining plate, and means for detachably securing the plates and blocks together.

7. A device of the class described including a structure, means connected thereto for absorbing liquid fuel, and teeth extending through said means, and beyond the structure.

8. A device of the class described including a toothed structure, and a non-combustible plastic block separate from and contacting with said structure, said block constituting means for absorbing liquid fuel and holding the fuel while burning to heat the toothed structure.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EUGENE E. KEEFE.

Witnesses:
CHARLES E. CAPRON,
ZINA H. ALLBEE.