

United States Patent

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 [33] **France**
 [31] **145,445**

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[54] **HEATING CLIPS FOR PERMANENT WAVING OF THE HAIR**
1 Claim, 4 Drawing Figs.

[52] U.S. Cl. 132/36R
 [51] Int. Cl. A45d 2/36
 [50] Field of Search 132/36,
 36.2, 37, 33

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ABSTRACT: The invention relates to improvements to heating clips for permanent waving, of the type comprising two halves connected by a spring forming the clip hinge, each half being provided with a heating lining into which a metal rod is inserted and acts as heat storage means. The invention is characterized in that each end of each of the two halves has a longitudinal retaining stop for the heating lining, each stop has an opening in which the metal rod of the lining engages by one of its ends to ensure that the lining is retained in the transverse direction.

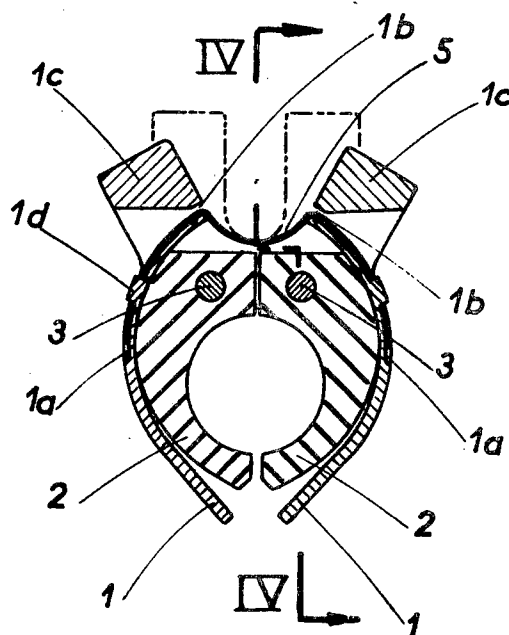


Fig :2

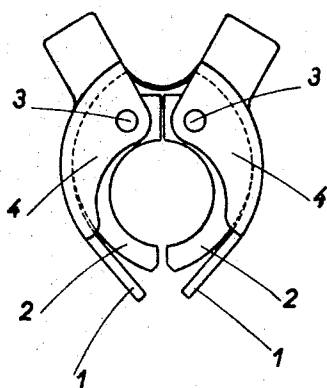


Fig: 1

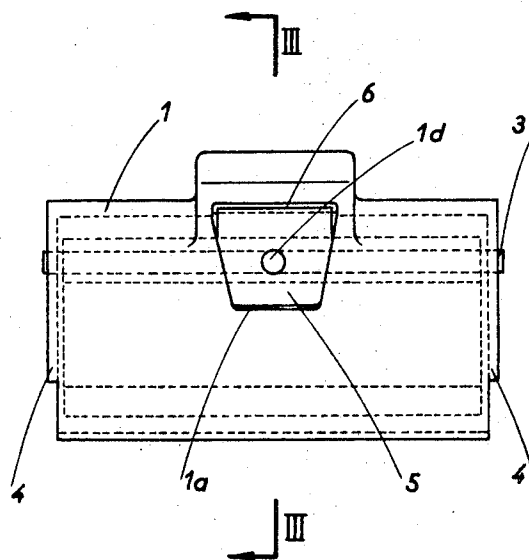


Fig : 3

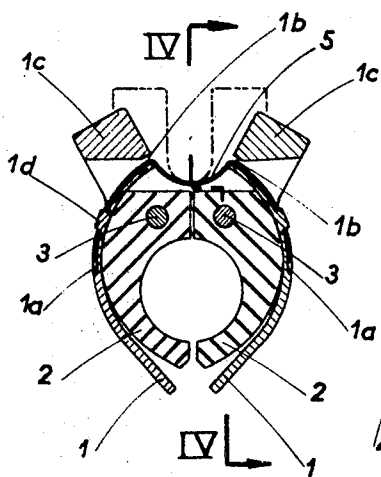
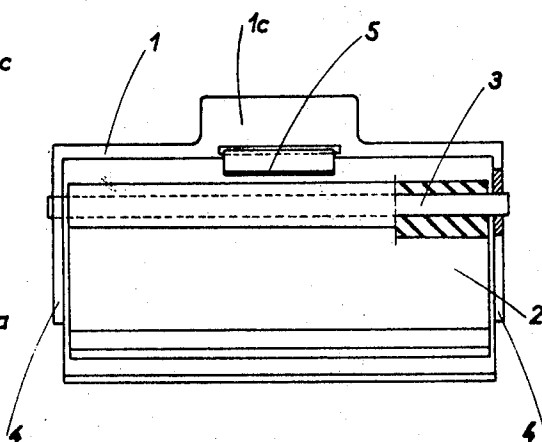


Fig: 4



HEATING CLIPS FOR PERMANENT WAVING OF THE HAIR

This invention relates to improvements to heating clips for permanent waving of the hair.

The invention relates more particularly to heating clips consisting of two halves each provided with a heating lining of rubber or similar material, into which a metal rod acting as a heat storage means is inserted, the said two halves being connected by a spring which forms a hinge and ensures that the clip provides resilient clamping.

The improvements according to the invention have enabled a heating clip of this type to be produced in a simplified design and usage without any fixed connection between the various constituent parts of the clip.

According to the invention, each end of each of the two halves has a longitudinal retaining stop for the heating lining, each stop has an opening in which the metal rod of the lining engages by one of its ends to ensure that the lining is retained in the transverse direction, and the spring forming the hinge for the two halves and consisting of a W-shaped strip bears on the periphery of each of the halves and engages, on each half, in a radial and longitudinal retaining slot formed on the half.

The invention will be described in greater detail hereinafter with reference to one specific embodiment given by way of example and illustrated in the accompanying drawing.

FIGS. 1 and 2 are respectively a side and end view of the clip.

FIG. 3 is a section on the line III-III in FIG. 1.

FIG. 4 is a section on the line IV-IV in FIG. 3.

Each of the two halves 1, which are made of a plastic material, of the clip bears a heating lining 2 into which a metal rod 3 is inserted and acts as a heat storage means. Each end of each half 1 has a radial flange 4 which may be moulded integrally therewith and which forms a longitudinal stop for the linings 2; the metal rod 3 of each of the linings 2 engages by its two ends in coaxial holes in the two flanges 4 of the corresponding half and thus retains the lining in the transverse direction.

The two halves 1 are connected by a spring which acts as the clip hinge.

The spring 5 consists of a metal strip or a plurality of superposed metal strips forming a W, the two arms of which bear with some prestressing against two zones 1a formed on the halves 1. The spring is retained in its assembly position on each of the two halves by a slot 1b provided at the base of the handle 1c, a lug being provided, if required, to form a projection on the half for engagement purposes. This system of assembly also ensures that the two halves are retained in the longitudinal direction.

The retention of the spring 5 on the halves may be completed by providing the latter with projections 1d adapted to engage in corresponding apertures formed in the spring arms.

It will be apparent that the heating clip constructed in this way contains no fixed connecting element between the various members. Consequently, manufacture and assembly are greatly simplified while each of the component parts is fully interchangeable.

Of course the invention is not limited to the above-described embodiment which may be modified as regards detail without thereby departing from the scope of the invention.

I claim:

1. A demountable heating clip for the permanent waving of hair comprising two separate half clips, a heating lining removable mounted in each of said half clips, a metal rod passing longitudinally through each of said linings, a flange on each end of each of said half clips, an opening in each of said flanges receiving the adjacent end of the adjacent one of said rods, a handle on each of said half clips, a slot in said handle adjacent said half clip, a W-shaped spring, arms for said spring passing through said slots of adjacent ones of said half clips, and bearing on the surfaces of said half clips whereby said spring forms a hinge for said half clips and said heat linings are readily removable from said half clips.

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