Nov. 2, 1948. I. G. WAGLE 2,452,814

HAIR CLAMP

Filed Oct. 8, 1945

Fig. 1.

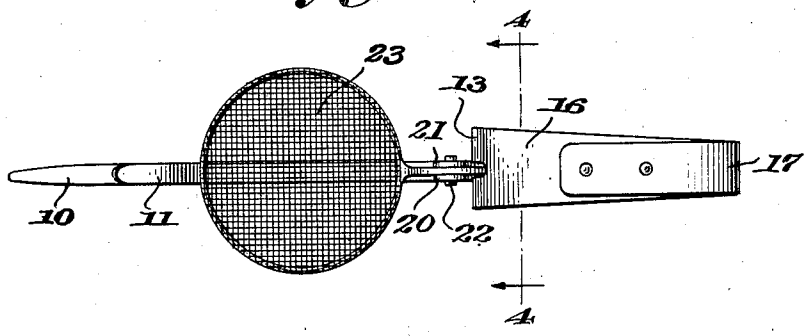


Fig. 2.

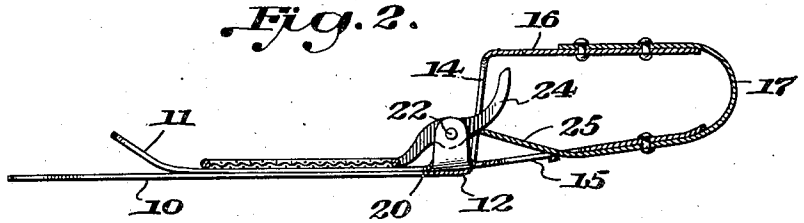


Fig. 3.

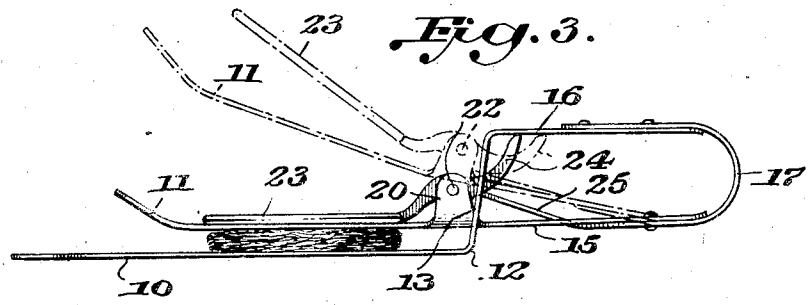
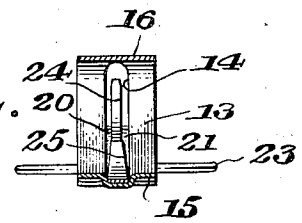


Fig. 4.



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HAIR CLAMP

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14 Claims. (Cl. 132—46)

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This invention relates to improvements in hair clamping devices commonly used to retain masses of hair in tightly coiled relation immediately following a hair curling operation.

It is a principal object of this invention to provided an improved form of hair clamp that will greatly facilitate the application or removal of the hair clamp from the newly-formed hair curl and which is further improved over conventional well-known hair clamps in that the clamp also functions to protect and hold down the entire hair curl while in the hair clamping relation so as to eliminate the necessity of wearing a hair net. After the conventional known types of hair clamps are applied to a newly-formed curl, it has been necessary that a hair net be applied in order to hold all of the curls in their tightly coiled form and preventing the loosening and straightening-out of individual strands or clumps of hair. The use of a hair net is disadvantageous in that the net often becomes entangled around various ones of the hair clamps or pins so that, when first removing the net to thereafter remove the clamps many of the hair clamps are prematurely and improperly removed from the hair curl causing the curl to be damaged or ruined.

This invention has as an object the provision of a combined hair curl clamp and net device so that each hair curl can be clamped and provided with an individual net or protecting surface in one operation.

It is a further object of this invention to provide a combined hair clamp and net device having means to facilitate the application or removal of the device by a simple yet effective combination of resilient devices having a lost motion connection which permits the clamping member to be moved into or out of clamping relation before the net device is lowered or raised to or from its operative position and thus enables the operator to reach the curl and place his fingers on the curl until it is positively gripped by the clamping members.

Further objects and advantages will be apparent by reference to the following specification and drawing in which,

Figure 1 is a top plan view of the combined hair clamp and net device.

Figure 2 is a side view partly in section of the device shown in Figure 1,

Figure 3 is another side view similar to Figure 2, but showing in the solid lines the device in the normal operative relation to a hair curl and also in dotted lines the position of the parts when

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the clamp is to be applied to a hair curl, and

Figure 4 is a section on the lines 4—4 of Figure 1.

As will be seen in the drawings the hair clamp is comprised of the clamping members 10 and 11 which in the preferred embodiment may be metal strip material bent to the general configurations shown. The clamp member 10 is provided with a right angle bend at 12 and generally widened to form the surfaces 13 having the cut-out portion 14 through which the end 15 of the clamp member 11 extends. The end 16 of clamp member 10 is attached through the substantially U-shaped spring 17 to the end 15 of the clamp member 11 so that the clamp members will be normally urged towards each other in clamping relation to a substance such as a hair curl that is to be clamped or held between their surfaces. It will be noted that the generally widened surfaces 15 and 16 provide adequate area for gripping the device between the operator's fingers so that by squeezing the ends 15 and 16 together the clamp members 10 and 11 will move to their open position.

The upper clamp member 11 is provided with the upstanding lug members 20 and 21 (as shown) upon which is pivoted at 22 a net-like member having an enlarged net surface 23 at the end adjacent the clamp 11 and the bell crank or lever 24 at the other end. A second resilient means comprised of the flat spring 25 is positioned as shown to engage the under surface of the bell crank 24 in a manner to normally urge the net surface 23 into engagement with the clamp member 11. The spring 25 in the specific construction is shown to be an extension of one end of the spring 17 but it should be understood that a separate spring means may be used although in either case it is preferable that the spring 25 be of less resilience than the spring 17. It will also be noted that the end of the bell crank 24 does not quite extend into contact with the end surface 16 when the parts are in the position shown in Figure 2 and this results in a form of lost motion which permits the clamp members and net to be moved to the solid line position of Figure 3 without moving the net 23 out of operative relation to the hair curl. A further movement of the end surfaces 15 and 16 towards each other causes the net member 23 and the clamp 11 to be moved to the dotted line position of Figure 3 with the net member 23 entirely removed from the field of operation.

The use of the hair clamp and net of this invention should be readily apparent upon refer-

ence to the foregoing description and it will be seen that the lost motion arrangement providing for the previously described relative movements of the clamping members and the net is particularly advantageous when applying the device to a newly formed hair curl since the clamping action on the hair curl is secured before the net is lowered into operative position, covering the curl. Obviously the net 23 may take various forms and shape without departing from the scope of the invention.

I claim:

1. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to one of said clamp members, and a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected.

2. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to the attached end of said clamp members, and a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected.

3. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to one of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, said first resilient means adapted to be manually opposed to move said pivotally connected clamp members from their normal position.

4. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to the attached end of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, said first resilient means adapted to be manually opposed to move said pivotally connected clamp members from their normal position.

5. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to one of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position.

6. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to the attached end of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position.

7. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to one of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position, said first resilient means adapted to be manually opposed to move said pivotally connected clamp members from their normal position.

8. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to the attached end of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position, said first resilient means adapted to be manually opposed to move said pivotally connected clamp members from their normal position.

9. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to one of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position, said net member moving means including a lost motion connection to allow a predetermined pivotal movement of said clamp means prior to the opposition of said second resilient means.

10. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to the attached end

of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position, said net member moving means including a lost motion connection to allow a predetermined pivotal movement of said clamp means prior to the opposition of said second resilient means.

11. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to one of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position, said net member moving means including a lost motion connection to allow a predetermined pivotal movement of said clamp means prior to the opposition of said second resilient means, said first resilient means adapted to be manually opposed to move said pivotally connected clamp members from their normal position.

12. A hair clamp comprising in combination a first clamp member, a second clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a net-like member pivotally connected to the attached end of said clamp members, a second resilient means connected between one of said clamp members and said net member for normally urging said net-like member towards the clamp member to which it is pivotally connected, means for opposing said second resilient means and for moving said net-like member from its normal position upon movement of said clamp members from their normal position, said net member moving means including a lost motion connection to allow a predetermined pivotal movement of said clamp means prior to the opposition of said second resilient means, said first resilient means adapted to be manually opposed to move said pivotally connected clamp members from their normal position.

13. A hair clamp comprising in combination a first clamp member, a second clamp member overlying said first clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a third member overlying said first and second clamp members pivotally connected to one of said clamp members, and a second resilient means connected between one of said clamp members and said third member for normally urging said third member towards the clamp member to which it is pivotally connected.

14. A hair clamp comprising in combination a first clamp member, a second clamp member overlying said first clamp member attached through resilient means to one end of said first member, said resilient means normally urging together said clamp members, a third member overlying said first and second clamp members pivotally connected to the attached end of said clamp members, and a second resilient means connected between one of said clamp members and said third member for normally urging said third member towards the clamp member to which it is pivotally connected.

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