Dec. 15, 1931. B. CAHN 1,836,899

HAIR CLASP, ESPECIALLY FOR MAKING CURLS

Filed March 12, 1931

Fig. 1.

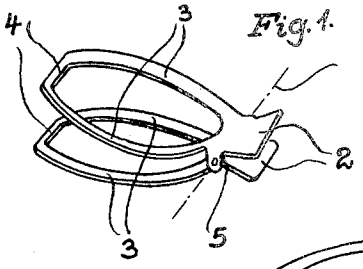
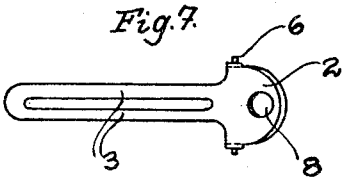


Fig. 7.



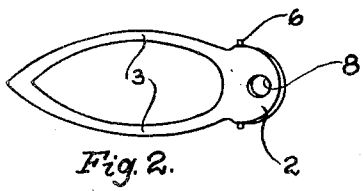


Fig. 2.

Fig. 3.

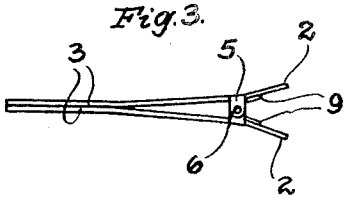


Fig. 4.

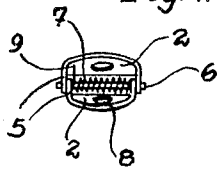


Fig. 5.

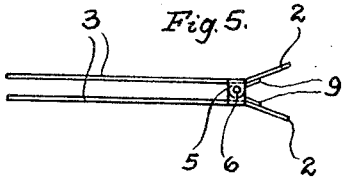


Fig. 8.

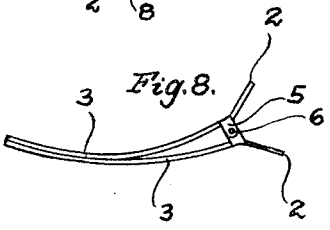
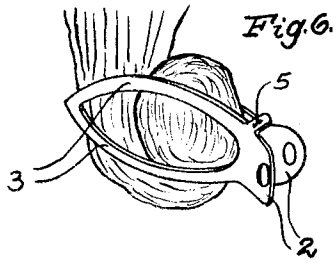


Fig. 6.



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UNITED STATES PATENT OFFICE

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HAIR CLASP, ESPECIALLY FOR MAKING CURLS

Application filed March 12, 1931, Serial No. 522,101, and in Germany August 11, 1930.

This invention relates to a hair clasp, which is particularly suitable for the flat curls over the ears, but may also be used for other purposes.

Various means have already been produced for holding flat curls. For example hair pins have been employed which were pinned through the curl. These holding means however are open to the objection, on the one hand that they slip out of the curl comparatively easily and, on the other hand, do not hold the flat curl sufficiently securely in its winding plane. For the same purpose narrow clamping pins are employed, of which however two or more are always required, in order to give sufficient hold in the curling plane. A further securing means for flat curls consists of rings, hingedly connected and covered by plaiting, held together by a bow or the like at a point opposite the hinge. This device offers a secure hold for the curl in the curling plane, but is difficult to fix on the curl.

The hair clasp according to the invention consists of two clamping arms with handles attached thereto pressed together by springs. Such hair clasps are known in different construction. Thus for example moustache clasps are known with two clamping arms of substantially arcuate cross section. One of these arms, namely the narrower one, lies in its closed position in the cavity of the wider arm so that the hair clamped between the arms receives a bend or curvature. Such clasps can however evidently not be employed for flat curls, as they must be held flat. Other pins, in which the arms themselves are resilient hairpins or hairpin-like constructions, that is bifurcated, are employed chiefly for water waves, but these do not afford sufficient support for flat curls.

The invention has for its object to construct the hair clasp so that, whilst being simple and quick to operate, it affords the necessary reliable support in the coil plane, especially for a flat curl. According to the invention the two resilient clamping arms are so constructed that they contact in closed condition each with a front portion in such a manner, that these front portions of the two clamping arms lie flat the one on the other, whereas the contacting of the two clamping arms merely occurs in a continuous surface.

Four embodiments of the invention are illustrated by way of example in the accompanying drawings, in which:—

Fig. 1 shows in perspective the first form of construction with the clamping arms open.

Fig. 2 shows the second form of construction in top plan view.

Fig. 3 is a side elevation of Fig. 2, the clasp being in closed position.

Fig. 4 is a rear view of Fig. 3.

Fig. 5 is a similar view to Fig. 3, the arms being in open position.

Fig. 6 shows in perspective view the clasp in position of use.

Fig. 7 shows in top plan view the third form of construction.

Fig. 8 is a side elevation of the fourth form of construction.

In the form of construction illustrated in Fig. 1 two parts are hingedly connected by a pivot pin 1 and consist each of a handle 2 and of a clamping arm 3. The handles 2 form a short lever arm, but offer a comparatively large gripping surface. The clamping arms 3, which have an aperture in the middle form a much larger lever arm and extend from the inner end of the handles 2, their outer circumferential lines in top plan view first diverging in a curve and subsequently converging towards the free end of the arms, where each arm has a transverse part 4. The boundary of each clamping arm in top plan view forms a line, which commences on one side of the clamping arm on the inner end of this arm and only returns on the other side to the inner end of the arm. In this manner the clamping arms 3, 4 extend in curve shape from the inner end of the arm and return to the starting point. The pivot 1, which consists of a wire or thin pin, connects the one with the other, lugs 5 provided at the inner end of the handles and bent downwards at right angles to the handles 2. A spiral spring, not shown in the drawings, is wound around the wire or pin so that its ends press against the handles 2 and tend to force

the clamping arms 3 the one against the other. The handles 2 are bent outwards relative to the clamping arms 3 from their inner ends so that, when the clasp is closed, they are at a certain distance apart.

In the example described the clamping arms are substantially of oval shape.

Instead of being provided with an aperture, each clamping arm may be formed of a solid part.

The form of construction illustrated in Figs. 2 to 6 shows practically the same construction as that of the first example. In this instance, particularly in Fig. 4, the manner of hinging the two parts of the hair clasp is illustrated. 6 is a wire which connects the lugs 5. 7 is a spiral spring wound around the wire 6, the ends 9 of said spiral spring bearing against the inner sides of the handles 2.

In this form of construction the handles 2 have holes 8 and the clamping arms 3 extend in curve shape from and returning to their inner ends, having however a pointed outer end so that the clasp is of lancet-shape, which facilitates the fitting of the clasp on the curl.

The handles 2 and clamping arms 3 situated one on each side of the pivot 1, are in the two forms of construction described each formed of a thin piece of sheet metal, which is itself resilient, namely by being stamped in such a manner that a strip remains extending from the base of the clamping arm and returning in an uninterrupted curve to the other side of the base (Figs. 1 and 2).

In the plan view shown in Fig. 2, the two clamping arms are of like shape.

If the clasp is released, the spring 7 forces the handles 2 apart and the free ends of the clamping arms together in such a manner that the front parts of these arms contact. Owing to the spring action the clamping arms 3 bear flatly the one on the other for a certain portion of their length, as shown in Fig. 3. Whereas in the first described pins with bifurcated hairpin-like clamping arms the contacting of the two clamping arms occurs in two mutually separated faces, the contacting of the two clamping arms in this instance occurs solely in a continuous face. This contacting surface of the two clamping arms has in the present instance the shape of an arrow head. During the moving together of the handles 2, the hair clasp being preferably held between the thumb and index finger, a slackening of the spring effect of the clamping arms 3 takes place at first and after the free ends have moved apart, the clamping arms 3 assume provisionally a parallel position the one to the other (Fig. 5).

For the purpose of using the hair clasp, the strains of hair which are to form a flat curl, are brought into this shape by hand, after which the hair clasp is slipped over the curl in open condition so that the curl lies between the arms 3. The handles 2 are then released. The clasp then bears on the hair strain, even if the curl to be held is comparatively thick, so that consequently the clamping arms in their clamping position assume a position substantially as illustrated in Fig. 5, the hair clasp holding the lock of hair tightly in its curl form, owing to its good clamping effect, obtained along the entire length of the clamping arms 3 (Fig. 6). Whereas with needles having bifurcated arms, the curl is not securely held between the points of the clamping arms, so that it can lose its shape, the clasp according to the invention clamps the curl also at the point so that it is absolutely securely held.

Owing to the fact, that the clamping arms 3 extend from and return to the base in a curve, a great stability is on the one hand imparted to the arms, so that their spring effect and consequently their clamping effect is increased. On the other hand, this shape facilitates the fitting of the hair clasp on the curl, as the entire curl can be gripped more reliably between the arms.

Whereas the pins with bifurcated clamping arms only exert a slight clamping effect at the points of the fork arms, it is possible with the clasps described and illustrated to tightly grip and reliably hold thin points only with the point of the clasp.

The clamping arms may also be narrower than shown in Fig. 2 and the aperture in the clamping arms might be omitted or made of a different shape.

The shape of the hair clasp might also be other than that of the two forms of construction described by way of example. Thus, as shown in Fig. 7, the clamping arm parts 3 might extend close together parallel the one to the other. Also in this instance the aperture in the clamping arms may be omitted, the clamping arms being then formed of a solid piece of sheet metal or the like. The clamping arms may however be narrower than illustrated in the drawings, so that the bearing surface of the metal parts on the hair is reduced as much as possible.

Moreover the hair clasps may, as shown in Fig. 8, be adapted to the shape of the head by bending the clamping arms in a plane vertical to the pivot axle.

The hair clasps illustrated in the drawings are merely practical forms of construction of the invention, which may be varied within wide limits, without departing from the scope of the invention.

I claim:—

1. A hair clasp, comprising in combination a pivot pin, two like-shaped clamping arms of sheet metal arranged mutually oscillatable on said pin the boundary line of said clamping arms extending in a curve on one side

from the pivot point of said clamping arms and returning in a curve on the other side from the point to the other side of the pivot point of said clamping arms, and a spring near said pivot pin engaging in said clamping arms adapted to press the front portions of said clamping arms flatly the one against the other the bearing surface of said clamping arms lying in one continuous plane.

2. A hair clasp, comprising in combination a pivot pin, two like-shaped clamping arms of sheet metal mutually oscillatable on said pin the boundary line of said clamping arms extending in a curve from one side of the pivot point to the front end of said arms and returning in a curve from the front end to the other side of the pivot point, said arms having apertures, and a spring situated near the pivot point of and engaging with said arms adapted to press the front portions of said clamping arms flatly the one against the other, the bearing surface of said clamping arms being situated in one continuous plane.

3. A hair clasp, comprising in combination two like-shaped clamping arms of resilient material each having an aperture leaving a narrow boundary edge, lugs on each side at one end of each of said clamping arms, bent at right angles thereto and having a hole, the boundary line of said clamping arms extending in a curve from the lugs on one side of said arms to the front ends of said arms and returning in a curve to the lugs on the other side of said arms, a pivot pin inserted through the holes in said lugs forming the pivot axis of said clamping arms, short wide projections on said clamping arms, extending beyond said pivot pin forming handles bent outwardly from the plane of said clamping arms, and a spring wound on said pivot pin adapted to spread with its ends said handles and to press the front portions of said clamping arms flatly the one against the other, the bearing surface of said clamping arms lying in one continuous plane.

4. A hair clasp, comprising in combination two similarly-shaped clamping arms of resilient material, having the shape of the human head, each arm having an aperture defining narrow boundary edges, lugs on each side of each clamping arm adjacent one end thereof and bent at right angles to said arms, each lug having an opening therein, the boundary line of said clamping arms extending in a curve from the lugs on one side of said arms to the front ends of said arms and returning in a similar, opposed curve on the other side of said arms, a pivot pin extending through the holes in the said lugs and forming the pivot axis of said clamping arms, short wide projections on said clamping arms at the ends having the lugs, and extending outwardly beyond said pivot pin, forming handles bent outwardly in opposite directions from the plane of said arms, and a spring wound on said pin and having its ends bearing the said handles to spread the same and to press the front portions of the said clamping arms flatly one against the other, the bearing surface of said clamping arms lying in a single continuous plane.

In testimony whereof I affix my signature.

BENJAMIN CAHN.