July 22, 1952 A. S. ROBB 2,604,103

BOBBY PIN

Filed Nov. 13, 1950

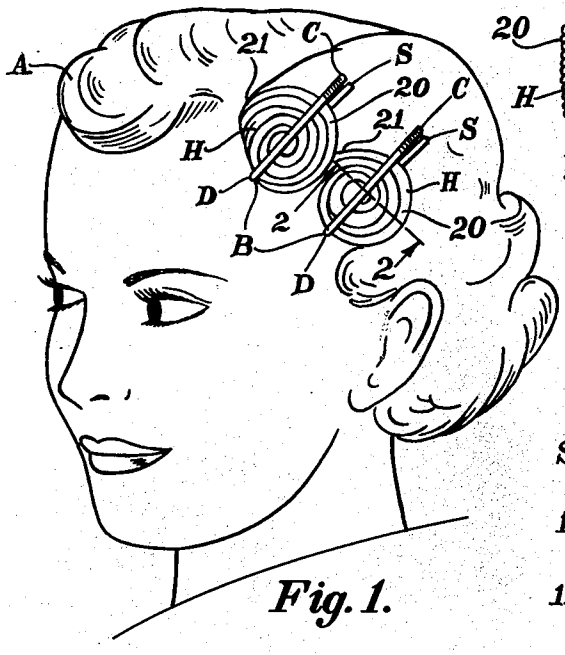


Fig. 1.

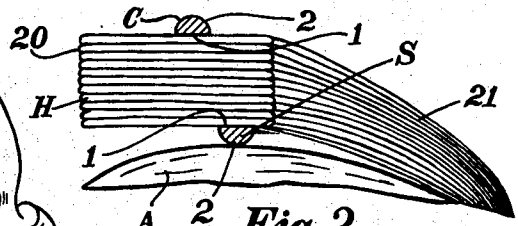


Fig. 2.

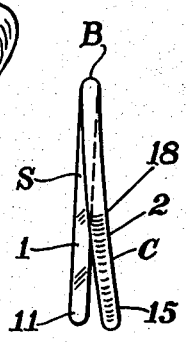


Fig. 3.

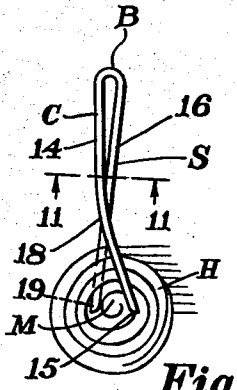


Fig. 4.

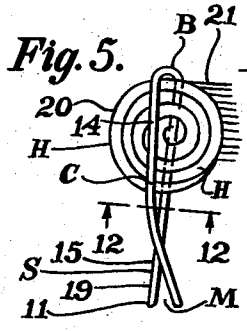


Fig. 5.

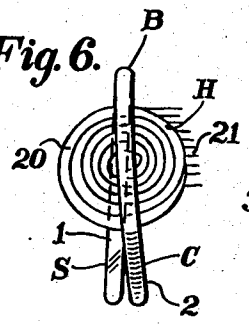


Fig. 6.

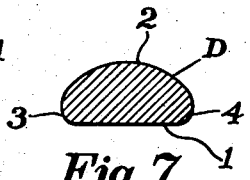


Fig. 7.

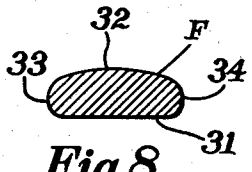


Fig. 8.

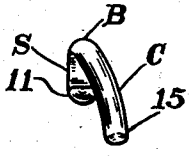


Fig. 10.

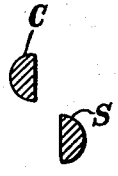


Fig. 11.

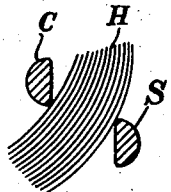


Fig. 12.

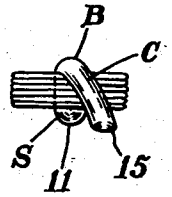


Fig. 13.

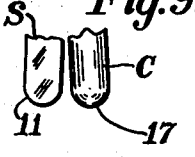


Fig. 9.

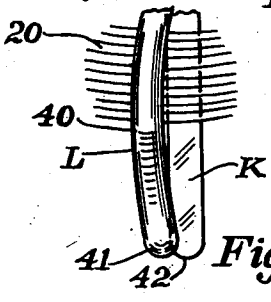


Fig. 14.

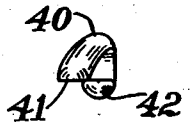


Fig. 15.

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BOBBY PIN

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4 Claims. (Cl. 132—50)

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This invention relates to what are known commercially as bobby pins such as are used to hold pin curls in place.

It is not what is generally known as a curler which is a device upon which the hair is wound and then held in place by some sort of movable member, and it differs from the old-fashioned hair pin which was simply a wire, generally round, bent near the middle so as to have a bow there and arms projecting therefrom.

In dressing hair to form what are known as pin curls, a lock of hair is generally moistened, then wound around the finger, the finger removed and the curl flattened out but with a part of the lock extending back to the head so that the curl is not what is known as a tight curl.

The purpose of such pins is to permit the hair of the wearer to be done up when wet or moist and held in place by means of bobby pins which are often worn overnight. Its principal purpose is to provide such a pin which will have no point, no rough part and no joint or hinge which might irritate the scalp of the wearer.

Many such pins now in use require that the user should open the arms with the thumb nail to put it in place and many are so bent that the points will engage and irritate the scalp of the wearer.

To separate the members to get the curl between them, many pins now in use require two hands each holding one member or one hand holding one member, while the other member is held between the teeth. When separated, the members must be held apart while the device is pushed on to the curl.

Such pin curls are usually made while the hair is wet or damp and after my device is put in place, the hair dries quickly and easily. My pin has an open mouth and after the curl is made and held by the left hand, the pin is picked up with the right, and the open mouth pushed on to the curl, between the edges of the free ends of the fingers and, on account of the bend of the bent finger at or near where it crosses the straight finger to form one jaw of the mouth, as it is pushed on to the curl between the flat faces of the fingers, this not only opens the fingers but turns the pin 90°, bringing the flat faces into parallel planes. It can and must turn one way only and when the flat faces are parallel and adjoining, the curl is firmly held in place by the contact or closeness of the finger tips but can be released and reset by pulling it off from the pin curl.

My device is made of a strip of flat springy

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metal, preferably of half round shape, the faces between parallel edges being of greater width than the thickness of the metal. For convenience, I will speak of length as lengthwise, width as crosswise and thickness as flatwise.

The strip is medially bent flatwise to form a loop with its inner flat faces adjacent and its members converging and becoming two fingers, one being straight and the other bent and crossing the first finger diagonally crosswise and preferably being spaced from the first finger and also being bent again at its end flatwise to form a free end spaced from and diverging flatwise and crosswise from the free end of the straight finger to form a mouth to receive a curled strand of hair which may be wet or moist.

The fingers where they cross preferably do not touch, but the flat faces adjoin each other and the construction is such that when a strand of hair is pushed or forced in and through the mouth between the ends of the fingers and between their edges and the flat faces so that it spreads the fingers apart, the strand is held in a substantially flat position while the flat, wide faces of the tips of the free ends of the fingers are parallel and in substantially the same plane while the rounded faces of the fingers are on the exterior, whereby there is little, if anything, to catch the hair or to irritate the scalp.

Instead of half round wire, I can use a wire with a cross section of flattened ellipsoidal form, at least one long face being substantially flat.

The strip of flat face springy metal can be so bent that when the curl of hair is of such thickness that, when it is forced into the mouth formed by the crossed free ends of its fingers and the tip of the bent finger is inside the flat face of the other finger, the tip of the bent finger will spring crosswise around the edge of the tip of the straight finger until part of the flat faces of the tips of both fingers engage, leaving only round or curved surfaces on the outside.

I am aware that there are various types of so-called hair pins such as shown in the patents to Summa, No. 839,791 of December 25, 1906, and Carlisle, No. 1,357,271 of November 2, 1920.

These are made of round wire with parts which will irritate the scalp as is also true of Durand of August 3, 1926, No. 1,594,933, and Reimann of May 15, 1928, No. 1,669,535, which is made of non-resilient round wire to be bent into shape.

My bobby pin can be put on while the hair is wet and can easily be taken off, but will hold the hair firmly in place during the night or while the hair is drying. It can be easily taken off by a

light lengthwise pull and as it is of springy wire, it can be used many times.

However, it is of such a character that if suitably ornamented or of a suitable color, it can be worn on the street and it will not be objectionably conspicuous.

The device is preferably formed of a half round strip of springy metal of substantially the same width throughout between parallel edges, the width crosswise between the edges being greater than the thickness of the metal.

It is also shown as of the same width and thickness throughout its entire length.

The normal or usual position of the free ends of the fingers is diverging with their edges almost but not quite touching where they cross and with the mouth open to receive a curl and the ends spring back into that position when the curl is pulled out from between them. The ends are not locked but the curl is held in place by the pressure of the fingers and it can be pushed through or pulled out of the mouth without prying the finger ends apart and the mouth automatically opens with very slight pressure from the curl going in or coming out.

In the drawings,

Fig. 1 is a diagrammatic view showing my device holding and locking a pin curl in place between the flat or inside faces of a straight finger and of a bent finger.

Fig. 2 is a cross section as on the line 2—2 of Fig. 1.

Fig. 3 is a view as from the outside or rounded side of the bent finger with no hair in place and with the relative width of the finger or fingers somewhat exaggerated.

Fig. 4 is a view as from the right or edge of Fig. 1 showing a pin curl being introduced into the mouth of the device between the edges of the jaws of the mouth of the device showing the fingers before they are pressed apart by the introduction of the hair, and before they are turned 90° as shown in Fig. 6.

Fig. 5 is a view similar to Fig. 4, but showing the fingers pressed apart by the introduction of a thick curl up to the middle bend and before such pushing turns the device 90° as shown in Fig. 6.

Fig. 6 is a view as from the left of Fig. 5, showing a curl in place, and the device turned ninety degrees.

Fig. 7 is a cross section of the preferred kind of springy wire of which the device is made.

Fig. 8 is a view similar to Fig. 7 of an alternative form.

Fig. 9 is a detail of the tips of the straight and bent fingers.

Fig. 10 is a view exaggerated in width as from the bottom of Fig. 3.

Fig. 11 is a cross sectional view as on the line 11—11 of Fig. 4.

Fig. 12 is a cross sectional view as on the line 12—12 of Fig. 5.

Fig. 13 is a view as from the bottom of Fig. 6.

Fig. 14 is a view similar to Fig. 6, of a modification, and

Fig. 15 is a view as from the bottom of Fig. 14.

In the drawings, A represents the head of a human being and H represents a well known type of pin curl including a coil 20 attached to the head as by an extension by the root part 21. Such pin curls are usually made by winding the curl around the finger into a spiral and then collapsing the spiral so that it is a coil of substantial thickness as 20.

The device is formed of a piece of springy wire indicated generally by D which is bent at B to form a loop, the members of which extend as a straight finger S, part of which at 16 is spaced from but nearly parallel with or converges toward the part 14 of the other finger C which is again bent flatwise at 18, preferably in a smooth curve with a substantially straight free end indicated at 15. The free end of straight finger S is indicated by 19.

These two fingers S and C are extensions of the members of the loop B and as shown in Fig. 4, are substantially parallel or converge at 14 and 16, leaving a space between in which the pin curl H is finally locked, as shown in Figs. 5, 6, and 13.

As shown in Fig. 2, the coil 20 of the curl H is forced between the flat faces 1, 1, of the free ends 15 and 19 which form a receiving mouth M, Figs. 4 and 5. If made in the preferred construction of a half round strip such as shown in Fig. 7, the edges 3 and 4 are preferably rounded but the inside face of both, indicated by 1, is substantially flat so that there is a relatively wide contact with the coil 20.

On the other hand, the rounded face 2 is always nearest the head A.

The tips 11 of finger S and 17 of finger C are both preferably rounded in the manner shown in Fig. 9, and the bend 18 of finger C is such that when, as shown in Fig. 5, the straight parts 14 and 16 are pressed apart, while the hair H forms a coil 20, the tips 11 and 17 of the fingers C and S will lie in substantially the same plane, as shown in Fig. 13.

As shown in Figs. 4 and 11, the coil 20 of the pin curl H is introduced between the adjoining edges of fingers C and S and between the flat faces 1, 1 of the mouth M, Figs. 4 and 5, or the device is pushed on a coil by the fingers.

I find that when this occurs, either automatically or by a slight twist of the fingers, the device turns about ninety degrees so that instead of the edges 3 and/or 4 being next to the scalp of the wearer, the rounded face 2, either of the straight or bent fingers will be next to the scalp, depending on the way in which the device is held when put in place. In any event, the rounded tips 11 and 17 will be in substantially the same plane and there is nothing to irritate the scalp.

In Fig. 8 is shown a wire F which is of a flattened ellipsoidal cross section with a long face 31 which preferably is substantially flat, rounded edges 33 and 34 and a flattened rounded curved face 32.

If the springy metal is so bent at a loop 40, as shown in Fig. 14, with reference to the straight finger K, that the tip 41 of finger L extends down past the edge of finger K, but so that the stock tends to spring back crosswise with its edges very nearly parallel with those of the straight finger, as when a thick curl 20 forces the tip 41 of the bent finger to pass inside the flat face of the tip 42, the flat face of tip 41 will rest partly on the flat face of tip 42 and only the rounded faces of the fingers will be outside, as shown in Fig. 15.

I claim:

1. A bobby pin for pin curls, such pin being formed of a substantially half round strip of springy metal of uniform width, the faces between parallel edges being of greater width than the thickness of the metal, one face of the strip being flat and the other rounded, the strip being medially bent flatwise to form a loop with its inner flat faces adjacent and its members converging and becoming two fingers which extend diagonally crosswise at a very acute angle, one

finger being substantially straight with a free end terminating in a rounded tip and the other finger being bent, the bent finger being spaced from and crossing the straight finger diagonally and being bent flatwise to form a free end terminating in a rounded tip, the bent finger crossing the plane of the flat face of the straight finger and being spaced crosswise therefrom and diverging flatwise and crosswise from the free end of the straight finger to form a mouth between edges of and the faces of the free ends of sufficient size to receive a curled strand of hair large enough to enter between the fingers and to force them apart thereby to make the flat faces of the tips of the free ends of the fingers lie in substantially the same plane.

2. A bobby pin for pin curls, such pin being formed of a substantially half round strip of springy metal of uniform width, the faces between parallel edges being of greater width than the thickness of the metal, one face of the strip being flat and the other rounded, the strip being medially bent flatwise to form a loop with its inner flat faces adjacent and its members converging and becoming two fingers which extend diagonally crosswise at a very acute angle, one finger being substantially straight with a free end terminating in a rounded tip and the other finger being bent, the bent finger being spaced from and crossing the straight finger diagonally and being bent flatwise to form a free end terminating in a rounded tip, the bent finger crossing the plane of the flat face of the straight finger and being spaced crosswise therefrom and diverging flatwise and crosswise from the free end of the straight finger to form a mouth between edges of and the faces of the free ends of sufficient size to receive a curled strand of hair large enough to enter between the fingers and to force them apart thereby to make the flat faces of the tips of the free ends of the fingers lie in the same plane one overlapping the other.

3. A bobby pin for pin curls, such pin being formed of a substantially half round strip of springy metal of uniform width, the faces between parallel edges being of greater width than the thickness of the metal, one face of the strip being flat and the other rounded, the strip being

medially bent flatwise to form a loop with its inner flat faces adjacent and its members converging and becoming two fingers which extend diagonally crosswise at a very acute angle, one finger being substantially straight with a free end terminating in a rounded tip and the other finger being bent, the bent finger being spaced from and crossing the straight finger diagonally and being bent flatwise to form a free end terminating in a rounded tip, the bent finger crossing the plane of the flat face of the straight finger and being spaced crosswise therefrom and diverging flatwise and crosswise from the free end of the straight finger to form a mouth between edges of and the faces of the free ends.

4. A bobby pin for pin curls, such pin being formed of a strip of springy metal of uniform width, the faces between parallel edges being of greater width than the thickness of the metal and the edges being rounded, one face of the strip being flat, the strip being medially bent flatwise to form a loop with its inner flat faces adjacent and its members converging and becoming two fingers which extend diagonally crosswise at a very acute angle, one finger being substantially straight with a free end terminating in a rounded tip and the other finger being bent, the bent finger being spaced from and crossing the straight finger diagonally and being bent flatwise to form a free end terminating in a rounded tip, the bent finger crossing the plane of the flat face of the straight finger, being spaced crosswise therefrom and diverging flatwise and crosswise from the free end of the straight finger to form a mouth between edges of and the faces of the free ends.

ALVIN S. ROBB.

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