

Jan. 31, 1967

E. HOFFMANN

3,301,266

HAIR HOLDER

Filed May 22, 1964

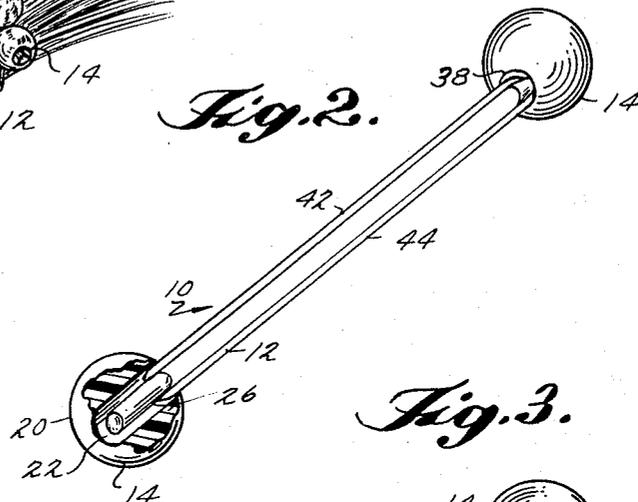
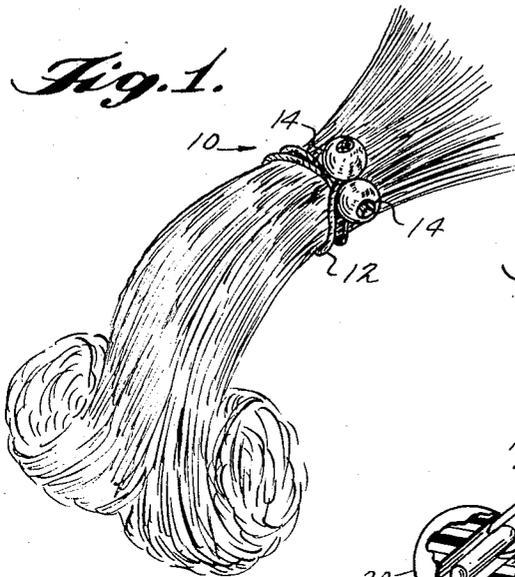


Fig. 3.

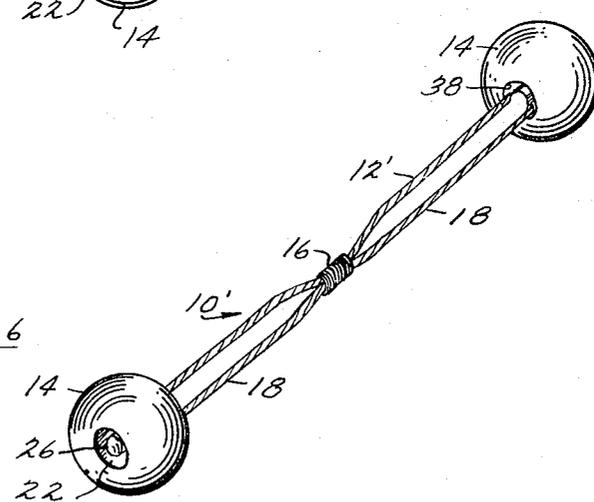


Fig. 4.

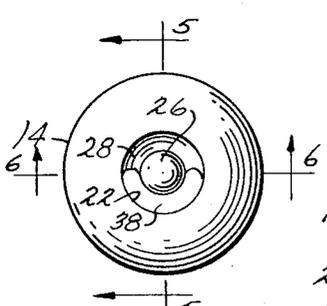


Fig. 5.

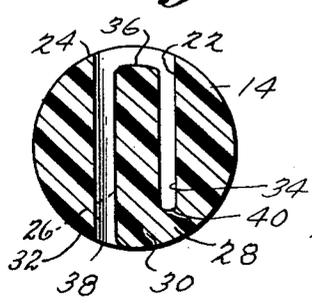
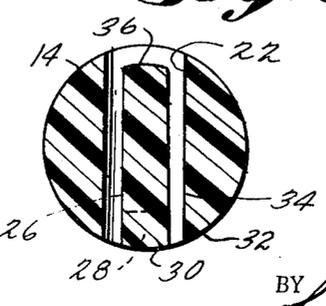


Fig. 6.



INVENTOR

ERNEST HOFFMANN

BY *Cushman, Darby & Cushman*
ATTORNEYS

1

3,301,266
HAIR HOLDER

Ernest Hoffmann, Omaha, Nebr., assignor to Tip-Top Products Company, Omaha, Nebr., a corporation of Nebraska

Filed May 22, 1964, Ser. No. 369,537
10 Claims. (Cl. 132-46)

The present invention relates to hair holding devices and more particularly to an improved bead for a ponytail holder or the like.

Various women's hair arrangements, particularly those known as ponytails, pigtails or braids a plurality of adjacent long hairs are grouped together in a generally cylindrical body and retained so associated by encircling the body at some point along its length with a compressive band or tie. In the case of a ponytail, the retaining encirclement is generally effected at a point close to the subject's head, whereas in a braid the point is customarily spaced along the hairs toward their terminal region.

Traditionally, such hair arrangements were held in place by a ribbon or a similar elongated cloth piece tied about the elongated hair body, but inasmuch as these easily became loosened and dissociated from the hair body, allowing the hair to become disarranged, the tie form of hair retaining means has been substantially replaced.

One type of retainer, replacing the ribbon type has been a common rubber band which has been utilized by stretching it and wrapping it over upon itself several times around a point on the hair body. The rubber band type holder has been found to be generally satisfactory insofar as retaining the desired hair arrangement is concerned, however, two disadvantageous features have somewhat limited its usage.

Firstly, the rubber band in and of itself is not usually considered aesthetically appealing when seen unadorned in a hair arrangement and secondly, it has been found to be quite difficult to remove such bands without painfully pulling many hairs which have become entangled with the stretched and wrapped sections of the band.

To overcome the first disadvantage, many wearers improve the appearance of the rubber band by tying a ribbon around the hair body over the band after the rubber band has been associated with the hair body. However, this decoration does not mitigate the pain involved in removing the band from the hair. This method is also relatively expensive because of the usage of both ribbons and contractile bands and therefore not entirely satisfactory, especially where the subjects are small children who will quickly wear out such ribbons as by fraying or soiling them while playing.

Various easily dissociable hair holders have been proposed to alleviate some of the disadvantages of ordinary contractile bands as noted above, but in general they have had too high a unit cost to be widely usable and have necessarily included sharp-cornered contractile band end retaining means into which subject's hairs can become wedged during ordinary usage of the devices with the attendant painful removal of the device as noted hereinbefore with respect to ordinary contractile bands.

Accordingly it is a prime object of the present invention to provide a hair body retaining device having a low unit cost and which is easily associated and dissociated from the wearer's hair while retaining the hair body arranged as desired during the interim.

A further object of the invention is to provide an attractive improved bead for an endless contractile hair holding band which enhances the appearance of the hair arrangement.

Yet another object of this invention is the provision of an improved bead for a hair holding band which can be secured to the band without extraneous fasteners or tools

2

of any variety and which does not require a deformation of the bead itself.

It is also an object of the invention to provide a bead of the type described which can easily be removed from a worn out band and replaced on a new band by the user.

The accomplishment of the above mentioned objects and other objects of the invention will become more readily apparent during the course of the following detailed explanation in which specific reference is made to the embodiments of the hair holding device shown in the accompanying drawing which illustrate the principles of the invention.

In the drawing:

FIGURE 1 is a perspective view of an elongated hair body retained in its arranged condition by a holder embodying principles of this invention;

FIGURE 2 is a perspective view of the holder of FIGURE 1, one of the beads being partly broken away to expose the band anchor pin therein;

FIGURE 3 is a perspective view of a holder according to the invention having a modified band;

FIGURE 4 is an end elevation view of a bead according to the invention;

FIGURE 5 is a sectional view taken along line 5-5 of FIGURE 4; and

FIGURE 6 is a sectional view taken along line 6-6 of FIGURE 4.

Now with specific reference to the drawing, the hair holder 10 according to the invention preferably comprises an endless, preferably contractile elongated band 12 with which have been associated a pair of novel decorative beads 14. The band may comprise a conventional rubber band as shown in FIGURE 2 or alternately an elastic cord decoratively braided fabric covered strand 12' which has been joined intermediate the beads 14 by wrapping 16 of thread or the like as illustrated in FIGURE 3. The wrapping 16 preferably separates the endless strand 12' into two adjoining lobes 18 each carrying a bead 14 thereon at the furthest distance along the lobe from the wrapping 16.

Each bead 14 includes an enlarged body 20 having a generally smooth exterior. Although the bead exterior has been shown generally spherically curved it should be understood that it may present a faceted or otherwise ornamentally configured appearance as desired providing that no adjoining surfaces are configured so as to possibly wedgelyly entrap or entangle hair strands.

A generally cylindrical socket or well 22 is formed in the bead 14 and opens outwardly of the bead at the front 24 thereof. An anchor pin 26 is located generally centrally in the well 22 and is attached to the bead 14 by an arcuate bridge 28 extending between the base 30 of the pin 26 and the bead near the rear 32 thereof. As shown the bead well 22 side wall 34 surrounds the pin 26 a short distance radially outwardly therefrom. The pin 26 is preferably shorter than the depth of the well 22 so that the rounded outer end 36 of the pin is considerably recessed with respect to the front 24 of the bead.

That portion of the annulus between the pin 26 and the well wall 34 not occupied by the arcuate bridge 28 defines an arcuate opening or slot 38 through the bead rear 32. As best seen in FIGURE 5, the bridge 28 upper surface 40 may be concave upwardly to provide a wedging means for purposes more fully set forth hereinafter.

In order to assemble a hair holder 10 according to the invention a loop of an endless band such as a rubber band 12 or two lobe decorative braided bands 12' is inserted from the rear 32 of a bead 14 through a slot 38. Utilizing a pencil or similar elongated device the band loop is directed over the anchor pin 26 and a tug given to the band strands protruding outwardly of the slot 38, thereby seating the band loop around the pin 26 and in

the channel-like surface 40. Because the surface 40 is relatively narrow and the band 12 preferably expansible and contractile, a further tug on the band will reduce its cross section in the portion of the band lying within the channel 40. When the band is released, the band will elastically recover until the band wedges and frictionally engages the surfaces 34 and 40 and the pin 26.

This frictional engagement under compressive stress is quite adequate to hold the bead in place on the band.

According to the preferred embodiments shown a second bead 14 is assembled with the band similarly to the first at a point spaced along the band preferably so that the strands 42, 44 are generally of equal length.

Should the user wish to replace a band 12 or 12' it is only necessary to cut or break the band at a point adjacent each bead 14 and pull on the band until it is freed of the particular bead. A new band may then be substituted utilizing the process above set forth.

The beads 14 including the pins 26 and bridges 28 are preferably each molded as an integral unit from a suitably colorful plastic material such as vinyl chloride-vinylidene chloride copolymers, polyethylene, polystyrene or the like. Because of this single piece construction, the beads 14 are advantageously inexpensive so that wearers can easily afford to have several sets to match their clothing accessories. Additionally, because no portions of the bead need to be pinched together or otherwise assembled or deformed, there are no sharp edges or undercut portions which can wedgingly catch the wearer's hair as is possible with constructions of the prior art.

As illustrated in FIGURE 1 the hair holder 10 is preferably associated with the user's hair by wrapping the band 12 or 12' about the hair body and inserting one bead 14 between the strands 42, 44 adjacent the other bead. The band then compressively encircles the hair body and may be disassociated therefrom simply by directing the one bead back through the space between the strands 42, 44.

In the case of holders including two lobed bands 12' as shown in FIGURE 3, each bead 14 can be inserted through each opposite lobe to associate the band around the hair body.

Although the well 22, pin 26, bridge 28 and slot 38 have been shown generally cylindrically curved it should be obvious that they may be otherwise smoothly curved without departing from the principles of the invention.

Similarly many other modifications of the hair holder embodiments shown may be made without departing from the principles of the invention as set forth herein and for this reason the extent of the invention should be understood as encompassing all such modifications as are within the spirit and scope of the following claims.

I claim:

1. A hair holder comprising an enlarged bead, means defining a well extending into said bead normal to the surface of the bead; an anchor pin extending axially into said well and means for mounting said pin in said well adjacent the surface of the bead; said mounting means defining an opening in said bead communicating with the well; and an elongated elastic band having a portion thereof entering said opening, looping around said pin, and departing through said opening.

2. A hair holder as set forth in claim 1 wherein the well is defined by a curved side wall and a bottom wall; said pin being positioned centrally of said bottom wall and said opening extends through said bottom wall partially encircling the base of said pin.

3. A hair holder as set forth in claim 2 wherein the well bottom wall is concave toward said well side wall.

4. A hair holder as set forth in claim 3 wherein the well bottom wall is narrow relative to the unstressed width of said band and said band portion within the bead is frictionally compressively retained in the channel defined by the well side wall, the well bottom wall and the pin.

5. A hair holder as set forth in claim 1 additionally comprising a second enlarged bead mounted on said band at a point thereon substantially spaced from the first mentioned enlarged bead.

6. A hair holder as set forth in claim 1 wherein the bead is molded of plastic material.

7. A bead for a hair holder comprising an enlarged body having an elongate well extending into said bead normal to the surface thereof, and a pin axial of said well and mounted therein by means adjacent the surface of the bead, said pin and said well thereby defining an opening in said bead surface.

8. A bead as set forth in claim 7 wherein the pin mounting means is integrally formed with the well wall and the opening partially encircles the base of the pin.

9. A bead as set forth in claim 8 wherein the pin is substantially shorter than the depth of the well.

10. A bead as set forth in claim 7 wherein the bead including the pin is integrally, essentially composed of molded plastic material.

References Cited by the Examiner

UNITED STATES PATENTS

2,969,070	1/1961	Todfield	132—46
3,099,271	7/1963	Dubelier	132—46

RICHARD A. GAUDET, *Primary Examiner.*

R. L. FRINKS, *Assistant Examiner.*