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⑤④ **Pierced-ear earring locking and holding system.**

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DE-C- 31 030
FR-A- 732 726
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GB-A- 1 440
US-A-2 148 183
US-A-2 544 893
US-A-4 129 998

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Description

Background of the Invention

This invention relates to pierced-ear earrings and more particularly to a one-piece pierced-ear earring construction which is quickly, securely and easily locked in position.

For over one hundred years, women have adorned themselves with various ornaments and gems, with their ears being a principal site for such jewelry. Through the many years in which earrings have been used and have been fashioned in various configurations, depending upon the particular style and taste of the period, there have only been two basic earring configurations developed.

One configuration, with which this application is not concerned, is the clip-on type earring. The second category of earrings is the pierced ear type, and represents earring type to which this application is directed.

Although pierced earrings have been used at least since the turn of the century, little change or innovative variations has been realized in the systems used to securely mount the earring in the pierced ear of the user. The typical configuration found in pierced earrings for the last hundred years is a solid, elongated shaft or stem, to which the particular decorative portion of the earring is secured, with a locking mount or a holding nut slidably engagable along the elongated shaft for attachment thereto. Although various alternative constructions for the holding nut of this common type of pierced earring has been developed through the years, all of these holding nuts suffer from common deficiencies.

Initially, these prior art holding nuts were threadedly engaged with the shaft, thereby requiring mating threads in the holding nut and along the shaft of the pierced earring. Such a system is typified by *Huber*, U.S. Patent 799,056.

It is clearly obvious that this construction suffered from many drawbacks, principally fabrication difficulties and expense to achieve the threaded construction, as well as difficulty of quick and convenient assembly by the user. Since secure engagement of the earring could only be obtained by threadily engaging the locking nut with the threaded shaft of the pierced earring, some expert degree of manipulation and handling was required in order to achieve the threaded engagement of the locking nut on the shaft.

In order to eliminate the necessity of threaded shafts and threaded lock nuts, a straight elongated shaft and slidable lock nut, common in today's market, was developed. In this construction, the lock nut slidably engages the elongated shaft and is advanced along the shaft until securely engaging the shaft near the rear of the user's earlobe, maintaining the earring in its locked position.

Initially, these slidable lock nuts are effective but, after continuous use, the shaft engaging and holding portion formed in the lock nut begins to

wear, causing undesirable slippage of the lock nut while mounted in place. As a result, after these lock nuts have been used, undesirable and completely unwanted detachment of the lock nut from the shaft occurs, resulting in loss of the lock nut and possible loss of the entire pierced earring.

In order to eliminate this problem, various attempts have been made to provide a completely new locking system for securely mounting pierced earrings in user's ears. The only two such systems of which I am aware are found in *Driscoll* U.S. Patent 3,446,033 and *Driscoll* 3,446,034.

In *Driscoll* '033, a one-piece earring holding shaft is disclosed, but without the use of any pivoting or moving portions formed thereon. Instead, *Driscoll* '033 teaches a one-piece earring shaft construction extending from the ornament, and incorporating a combination of angular bends.

Although *Driscoll* '033 does teach a system which eliminates the difficulties presently encountered with lock nuts, the *Driscoll* '033 system requires the user to manipulate the earring in a variety of alternative positions, to insert the elongated peculiarly convoluted shaft into position, with the convoluted portions thereof performing the holding function. Due to the high degree of dexterity an unnatural manipulated movements required in order to completely insert the construction taught by *Driscoll* '033, this construction has not received popular acceptance.

In *Driscoll* '034, another holding system is taught for a pierced earring wherein two or more pendants are required and are supported by nylon filaments connected to a cylindrically-shaped toggle. The independent toggle is inserted through the pierced ear and, when one of the pendants is pulled, assumes a locking position. When removal is required, the pendant connected to the terminating end of the toggle is pulled, aligning the toggle for removal through the pierced ear.

As would be clearly obvious to one skilled in the art, this system is extremely limited in that it requires the use of flexible filaments which are positioned in the ear when the earring is worn. This is generally undesirable and unwanted by users. Furthermore, the dual-pendant construction which is required to properly operate the toggle is extremely limiting and prevents a pierced earring construction which will accommodate the majority of present-day pierced earring designs.

A very early proposal of earring is disclosed in British Patent No. 1440 of 1884 (Hemming). The Hemming patent discloses a stud earring comprising a wire one end of which is connected to the stud end and the other end has a gap formed therein for a pivoted locking bar. However, that proposal requires machining which complicates manufacture.

As is clearly apparent from this review of prior art pierced earring holding systems, there is a longfelt need, which is yet satisfied, for a pierced earring holding system which is (1) easily em-

played by the user without requiring uncomfortable and unnatural manipulative movements of the earring during the insertion process, and (2) securely locked in position without fear of loss of any locking portion or of the earring itself.

Therefore, it is a principal object of this invention to provide a pierced earring holding system which is easily and quickly inserted into the pierced ear and rapidly locked into position.

Another object of the present invention is to provide a pierced earring holding system having the characteristic features defined above which can be employed on all pierced earring designs regardless of the size or shape or construction of the visible ornamentation.

The difficulties encountered in the prior art pierced earring holding systems are substantially eliminated with the holding system of the present invention. Therefore, in accordance with the present invention there is provided an integral, locking and holding system for pierced-ear earrings comprising:

A) a shaft having a distal end and a proximal end mounted to the decorative viewable portion of the earring,

B) a locking bar pivotally engaged with the distal end of the shaft and movable between

a) a first position with the longitudinal axis of the locking bar substantially parallel to the central axis of the shaft, and

b) a second position with the longitudinal axis of the locking bar substantially perpendicular to the central axis of the shaft; and

C) pivot means integrally connecting the shaft and the locking bar, and providing the axis about which the locking bar pivots, characterised in

that shaft incorporates two portions in twisted, intertwined engagement for substantially their entire lengths with the two portions being separated at their distal ends to form a receiving zone therebetween for interengagement with the locking bar.

In this way the pierced earring holding system of the present invention is easily inserted in the pierced ear of the user, in the conventional fashion, with the pivotal portion in its first position. When the pivotal portion is in its first position, the entire shaft comprises a substantially straight elongated member, which is quickly and easily inserted into the pierced ear of the user without any difficulty being encountered by the user.

Once the major portion of the shaft has been located in the pierced ear of the user, the pivotal, terminating end portion of the shaft is quickly and easily pivoted into the second position, forming a locking arm which prevents egress of the supporting shaft from the pierced ear. In this way, the self-locking shaft of the present invention assures complete locking engagement in the pierced ear of the user, without requiring any unconventional or difficult manipulative effort by the user, while also eliminating the need for employing any independent piece which can be dislodged or lost during use.

The invention accordingly comprises an article

of manufacture possessing the features, properties, and the relation of elements which will be exemplified in the article hereinafter described, and the scope of the invention will be indicated in the claims.

The invention will now be described by way of example with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a typical pierced earring incorporating the pierced earring holding system of the present invention shown mounted in a pierced ear; and

Figures 2 to 6 show various alternative embodiments of the pierced earring holding system of the present invention.

Detailed Description

In Figure 1 a pierced earring holding system 20 of the present invention is shown mounted to a conventional earring ornamental design structure 21, for exemplary purposes only, design structure 21 is shown as a ring. In Figure 1, earring holding system 20 and its associated ring 21 is shown mounted in its securely engaged position in the pierced ear of a user.

In Figure 2, one embodiment of the locking and holding system 20 of the present invention is shown. In this embodiment, locking and holding system 20 comprises a substantially straight and elongated shaft 52, with a locking bar 53 pivotally mounted at the distal end of shaft 52, using a pivot pin 54. It will be seen that, shaft 52 comprises two individual portions 57 and 59 which have been intertwined to form a continuous, twisted, rope-like configuration, while also achieving a substantially straight shaft 52. In this embodiment, the terminating end of twisted portion 57 and the terminating end of twisted portion 59 are interengaged by pivot pin 54, with locking bar 53 mounted therebetween. As shown the locking bar 53 is preferably pivotally mounted near one of its ends, providing a secure locking structure.

It will be seen from Figure 2 that the locking bar 53 is not able to rotate through 360°. However, if desired, locking bar 53 can be mounted between the terminating ends of portions 57 and 59 with locking bar 53 pivotally engaged substantially at its midpoint. However, if locking bar 53 is pivotally engaged along its midpoint, portions 57 and 59 must be removed from intertwined secure interengagement at a position earlier than is shown in Figure 2, in order to provide a recess area 55 therebetween which will accommodate the greater length of locking bar 53. Although such a construction is clearly available if so desired, it has been found that by maximizing the intertwined engagement of portions 57 and 59, a more rigid and sturdy construction is achieved. As a result, the construction shown in Figure 2 is preferred.

The particular ornament 58 shown in this embodiment comprises a pearl, with portions 57 and 59 forming shaft 52 being directly mounted at

their proximal end to a pearl holding and receiving cup 56.

Pierced earring holder system 20 can be employed with any pierced earring design, regardless of its physical structure, by merely affixing holding system 20 to the particular design structure using present state of the art techniques employed for the conventional elongated straight shafts requiring locking nuts.

The quick, easy and efficient insertion and locked engagement of the pierced earring holding system 20 of the present invention is achieved by pivoting the locking bar into its aligned position and inserting it into the channel formed in the user's earlobe, with ease and simplicity with which pierced earring wearers have become adept.

Once the pierced earring has been fully inserted into the user's ear, the shaft of the holding system 20 is located within channel and the user can easily pivot the locking bar from its axially aligned position into its locking position, wherein the longitudinal axis of the locking bar is substantially perpendicular to the axis of shaft. Once the locking bar has been pivoted through this 90° arc of rotation, the earring is securely engaged and locked in the pierced ear of the user, completely eliminating fear of dislocation, dislodgement, or loss of any separate, removable locking portion. This securely engaged lock position is represented in Figure 1.

A unique distinction between the locking and holding system 20 and typical prior art cuff links lies in the fact that, although cuff links have long had a similar locking and holding structure, cuff links require some type of biasing system built into the cuff link structure in order to hold the cuff link in either one of its two alternate positions. Typically a spring arrangement is used for the required biasing system.

The cuff link structure requires a biasing system since a positive force is necessary to resist the various rotation-inducing forces acting upon the locking member during use of the cuff link. If any of these forces were successful, the cuff link could become dislodged from the shirt and possibly lost.

In the present invention, biasing systems are not required due to the synergistic interaction of this embodiment of the locking and holding system of the present invention with the user's ear. In use, the user elongates her ear when the earring is being inserted, by pulling downward on the ear lobe. This downward force causes the channel through the lobe to widen while also producing an overall thinning of ear.

While ear is in this elongated and thinned configuration, the locking bar is pivoted from its first, ear inserting aligned position to its second, locked position. Once the locking bar has been pivoted to its locked position, the downward force on the ear is removed, allowing the ear to return to its original length and thickness.

When the ear regains its original thickness, the ear cooperatively interacts with the locking bar to

prevent unwanted rotation of the locking bar into its first position. Since the locking bar is incapable of pivoting against the resistive force provided by the ear, unwanted loss or accidental dislodgement of the earring from the ear is eliminated without the use of biasing systems. It is believed that this unique cooperative interaction between locking and holding system 20 of this invention and the user's ear produces a synergistic effect which is not apparent from the prior art alone.

Although exact sizes and shapes for the pierced ear holding system 20 of the present invention varies depending upon the particular pierced earring structure to which the shaft is attached, it has generally been found that elongated shaft comprises an overall diameter of about one millimeter. Furthermore, the overall length of the shaft, which includes the juxtaposed facing arms would preferably be about 7/16 inches long.

Since the locking bar is pivotally engaged at the distal end of shaft and has a position wherein a portion of the locking bar is coaxially aligned with the shaft, the locking bar must have an overall thickness less than the one millimeter diameter of the shaft. Preferably, the locking bar comprises a thickness of 0.5 to 0.75 millimeters. Although locking bar may comprise a variety of lengths, it has been found that an overall length of about 5/16 inches assures secure locked engagement of pierced earring locking system 20, while also being easily handled and manipulated by the user.

It will be understood that various alternative pierced earring design structures may be employed. For example, in Figure 3, locking and holding system 20 comprises a locking bar 63 having two separate, independently pivotable sections 66 and 67.

Preferably, sections 66 and 67 are split along the longitudinal axis of locking bar 63, forming two substantially equally sized and shaped members. In this way, sections 66 are identical and can be manufactured from the same mould. This embodiment allows locking bar 63 to be pivotally engaged near one of its terminating ends, with sections 66 and 67 being arcuately pivoted about the pivot axis in opposite directions. In this way, pivotable locking bar 63 achieves a position with its longitudinal axis substantially perpendicular to the central axis of the shaft to which it is joined with locking bar 63 having substantially equal length segments extending from both sides of the shaft.

With this construction, the advantages of both the end pivotable locking bar and the centrally pivotable locking bar are realized, without the disadvantages of either. In particular, this construction achieves both the (1) enhanced structural integrity and reliability of the small, finely constructed members by eliminating unnecessary recesses extending a substantial distance along a particular shaft, and (2) added security and locked engagement by having substantially equal length segments of the locking bar extending from opposite sides of the elon-

gated shaft when mounted in a pierced ear.

In the preferred embodiment of the split locking bar construction, locking bar sections 66 and 67 also preferably incorporate at least one small boss or post 68 formed on the outer surface of each locking section 66 and 67 which may engage in recess areas or cutouts formed in the outer peripheral surface of the associated shaft.

By employing posts 68, this embodiment of locking and holding system 20 assures the biased, locked engagement of sections 66 and 67 of locking bar 63 in either of the two alternative positions, when so desired.

Although the split locking bar construction discussed above can be manufactured in a variety of ways, one of which would be to eliminate posts 68 and associated recesses, it has been found that the construction defined above for locking bar 63 with posts 68 in the preferred construction. However, as would be obvious to one skilled in the art, a variety of alternative locking systems can be employed without departure from the scope of the present invention.

In Figure 4, an alternative embodiment of pierced earring holding system 20 of the present invention is shown. In this embodiment, the integrally twisted rope configuration for shaft 52 defined with reference to Figure 2 is employed in combination with locking bar sections 66 and 67. As discussed above, elongated straight shaft 52 comprises two independent elongated portions 57 and 59, which are integrally intertwined to form a substantially straight, elongated shaft 52. Locking bar sections 66 and 67 are mounted at the terminating ends of portions 57 and 59 using pivot pin 54. If desired, biasing locking and holding posts 68 and recesses can be incorporated into this construction in order to provide the secure biased and locked positions for locking bar sections 66 and 67.

Furthermore, if desired, shaft 52 can be constructed to allow locking bar sections 66 and 67 to rotate 360° about the axis defined by pivot pin 54. This can be easily achieved by providing a recess 55 which extends from the distal end of shaft 52 forwardly a sufficient distance to accommodate the entire length of sections 66 and 67. Although this construction can be made, if so desired, the construction shown in Figure 4 is preferred, since it optimizes the integral contact between portions 57 and 59, reducing the length over which these two portions are not in integral, intertwined contact.

In Figures 5 and 6, an alternative embodiment of the pierced earring holding system 20 of the present invention is shown incorporating the integrally twisted, rope-like configuration. In this embodiment, locking and holding system 20 incorporates locking bar 23 which is pivotally mounted on a single elongated wire member 81 substantially at the midpoint of elongated wire 81.

The substantially straight elongated shaft 82, shown in Figure 6, is formed from the single

elongated wire 81 by first installing locking bar 23 on wire 81 by inserting wire 81 through hole 84 which defines the pivot axis of locking bar 23. Then, wire 81 is bent about a portion of locking bar 23 to form two substantially equal length, parallel wire segments 83 with the two terminating ends 85 of segments 83 of wire 81 in juxtaposed spaced relationship to each other. In Figure 5, wire 81 is shown with substantially equal length segments 83 having been formed but not completely bent into their substantially parallel configuration.

Segments 83 are then intertwiningly twisted to form the intertwined, twisted rope-like elongated shaft 82 shown in Figure 6. It has been found that this construction provides a quick and easy assembly procedure while also providing an extremely sturdy, well constructed embodiment for locking and holding system 20.

One important advantage of this embodiment is that locking bar 23 pivots about a portion of wire 81, thereby eliminating the necessity for use of a separate pivot pin. Furthermore, locking bar 23, as shown in Figure 6, is mounted in a manner which allows complete rotation of locking bar 23 about its pivot axis without affecting the inherent strength or rigidity of shaft 82.

If desired, locking bar 23 could be mounted near one of its ends with shaft 82 being formed with the locking bar capable of either limited pivoting or complete rotation about its axis.

The use of a single, continuous wire member 81 to form intertwined, twisted shaft 82, as well as the supporting and holding member for pivotable locking bar 23, provides an extremely unique construction. This embodiment achieves a unitary, solid construction, wherein the locking and holding is quickly and inexpensively manufactured with a minimum of parts and with minimum ease and efficiency, while also providing a locking and holding system having no member which can become dislodged, loosened, or in any way separated and lost. Furthermore, as discussed above, this embodiment cooperated with the ear to prevent unwanted rotation of locking bar 23 when mounted in the user's ear. This cooperation is important, since a biasing system could not be efficiently introduced into this embodiment.

It will thus be seen that the object set forth above, among those made apparent from the preceding description, are efficiently attained, and since certain changes may be made in the above article without departure from the scope of invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of invention which, as a matter of language, might be said to fall therebetween.

Claims

1. An integral, locking and holding system (20) for pierced-ear earrings comprising:

A) a shaft (52; 82) having a distal end and a proximal end mounted to the decorative viewable portion of the earring,

B) a locking bar (53; 63) pivotally engaged with the distal end of the shaft and movable between
a) a first position with the longitudinal axis of the locking bar substantially parallel to the central axis of the shaft, and

b) a second position with the longitudinal axis of the locking bar substantially perpendicular to the central axis of the shaft; and

C) pivot means (54; 81) integrally connecting the shaft and the locking bar, and providing the axis about which the locking bar pivots,

characterised in that said shaft incorporates two portions (57, 59; 83) in twisted, intertwined engagement for substantially their entire lengths with the two portions being separated at their distal ends to form a receiving zone (55) therebetween for interengagement with the locking bar.

2. The integral, locking and holding system defined in claim 1 wherein the locking bar (53) is pivotally mounted within the receiving zone at the distal end of the shaft substantially at the midpoint of its longitudinal axis, and the receiving zone formed in the shaft is defined as comprising an axial length slightly greater than the pivotable length of the locking bar, whereby the locking bar is free to rotate through an entire 360° about the pivot axis.

3. The integral, locking and holding system defined in claim 1, wherein the locking bar (63) is defined as being pivotally engaged with the distal end of the shaft near one end of the bar, and the locking bar comprises

c) two independent sections (66, 67), both of which are pivotable about the axis defined by the pivot pin (54), allowing each of the sections to be moved in opposite directions, to be providing a substantially continuous locking bar having a longitudinal axis perpendicular to the central axis of the shaft with said bar extending in opposite directions from the shaft.

4. The integral, locking and holding system defined in claim 3, wherein the two sections forming the locking bar are defined as being substantially identical to each other, and wherein the shaft is further defined as comprising at least two cutout portions peripherally surrounding a portion of the distal end of the shaft, with said cutout portions being positioned substantially 90° from each other, and the locking bar is further defined as comprising recess engaging posts (68) formed on the outer peripheral surface thereof for co-operative engagement with the cutout portion formed on the shaft, thereby providing a plurality of alternative locked positions wherein the locking bar is securable in the alternative positions by the engagement of the posts with the cutouts.

5. The integral, locking and holding system

defined in claim 1 wherein the shaft (82) is defined as comprising a single elongated wire member (81) foldingly bent back upon itself to form said two portions (83), which are in twisted, intertwined engagement with one another, the folded end of the wire member (81) being substantially at the midpoint thereof and providing the pivot means on which the locking bar is pivoted.

Revendications

1. Système de verrouillage et de maintien, intégral (20) pour des boucles d'oreilles, pour oreilles percées comportant:

A) un corps (52, 82) ayant une extrémité éloignée et une extrémité proche, montées au niveau de la partie apparente décorative de la boucle,

B) une tige de verrouillage (53, 63) logée de façon pivotante dans l'extrémité éloignée du corps et mobile entre:

a) une première position pour laquelle l'axe longitudinal de la tige de verrouillage est essentiellement parallèle à l'axe central du corps et

b) une seconde position pour laquelle l'axe longitudinal de la tige de verrouillage est essentiellement perpendiculaire à l'axe central du corps; et

C) un moyen de pivotement (54, 81) reliant en une seule pièce le corps et la tige de verrouillage et constituant l'axe autour duquel la tige de verrouillage pivote,

caractérisé en ce que le corps se compose de deux parties (57, 59; 83) liées de façon imbriquée et torsadée essentiellement sur toute leur longueur, les deux parties étant séparées au niveau de leur extrémité éloignée pour former une zone de réception (55) entre elles pour coopérer avec la tige de verrouillage.

2. Système de verrouillage et de maintien intégral selon la revendication 1, caractérisé en ce que la tige de verrouillage (53) est montée de façon pivotante dans la zone de réception à l'extrémité éloignée du corps essentiellement au milieu de son axe longitudinal et la zone de réception formée dans le corps est définie comme ayant une longueur axiale légèrement supérieure à la longueur de pivotement de la tige de verrouillage, la tige de verrouillage étant libre de tourner d'un angle complet de 360° autour de l'axe de pivotement.

3. Système de verrouillage et de maintien intégral selon la revendication 1, caractérisé en ce que la tige de verrouillage (63) est définie comme coopérant de façon pivotante avec l'extrémité éloignée du corps au voisinage d'une extrémité de la tige et la tige de verrouillage comporte:

c) deux sections indépendantes (66, 67) toutes deux montées pivotantes sur l'axe défini par l'axe de pivotement (54) permettant à chaque section d'être déplacée dans des directions opposées pour former une tige de verrouillage essentiellement continue ayant un axe longitudinal perpendiculaire à l'axe central du corps et la tige s'étendant dans des directions opposées par rapport au corps.

4. Système de verrouillage et de maintien intégral selon la revendication 3, caractérisé en ce que les deux sections qui forment la tige de verrouillage sont définies comme étant essentiellement identiques l'une à l'autre et le corps est en outre défini comme comportant au moins deux parties découpées entourant de façon périphérique une partie de l'extrémité éloignée du corps, les parties découpées étant positionnées essentiellement à 90° l'une de l'autre et la tige de verrouillage étant en outre définie comme formant des éléments (68) coopérant avec des cavités réalisées à la surface périphérique extérieure pour l'engagement coopérant avec la partie découpée réalisée dans le corps, en constituant ainsi un ensemble de positions de verrouillage, possibles, dans lesquelles la tige de verrouillage peut se fixer dans des positions au choix par engagement du bossage et des découpes.

5. Système de verrouillage et de fixation intégré selon la revendication 1, caractérisé en ce que le corps (82) est constitué d'un seul élément de tige (81) allongé, recourbé par pliage en arrière sur lui même pour former les deux parties (83) qui sont torsadées et imbriquées l'une à l'autre, l'extrémité repliée de l'élément de tige (81) étant sensiblement au milieu et constituant le moyen de pivotement sur lequel pivote chaque tige de verrouillage.

Patentansprüche

1. Vollständiges Halte- und Sperrsystem (20) für Ohringe für durchstochene Ohren, welches aufweist:

A) einen Stab mit einem distalen Ende und einem am dekorativen, sichtbaren Abschnitt des Ohrhings befestigten proximalen Ende;

B) einen drehbar am distalen Ende des Stabes gelagerten Sperrstift (53, 63), der zwischen

a) einer ersten Position, bei der die Längsachse des Sperrstiftes im wesentlichen parallel zur Mittelachse des Stabes verläuft und

b) einer zweiten Position, bei der die Längsachse des Sperrstiftes im wesentlichen senkrecht zur Mittelachse des Stabes verläuft, bewegbar ist und

C) eine den Stab und den Sperrstift vollständig verbindende Schwenkeinrichtung (54; 81), die die Achse bietet, um die sich der Sperrstift dreht;

dadurch gekennzeichnet, daß der Stab zwei Abschnitte (57, 59; 83) umfaßt, die sich in verdrehter, miteinander verschlungener Verbindung über im wesentlichen ihre gesamten Längen befinden, wobei die zwei Abschnitte an ihren distalen Enden voneinander getrennt sind, um einen

Aufnahmebereich (55) zum In-Eingriff-Kommen mit dem Sperrstift zu bilden.

2. Vollständiges Halte- und Sperrsystem, wie in Anspruch 1 definiert, wobei der Sperrstift (53) schwenkbar im Aufnahmebereich am distalen Ende des Stabes, im wesentlichen am Mittelpunkt seiner Längsachse, angebracht ist, und die im Stab ausgebildete Aufnahmezone so definiert ist, daß sie eine etwas größere axiale Länge als der schwenkbare Längsabschnitt des Sperrstiftes aufweist, wodurch der Sperrstift sich frei um vollständige 360° um die Schwenkachse drehen kann.

3. Vollständiges Halte- und Sperrsystem, wie in Anspruch 1 definiert, wobei der Sperrstift (63) so definiert ist, daß er schwenkbar am distalen Ende der Stange in der Nähe eines Endes der Stange angebracht ist, und der Sperrstift aufweist:

c) zwei unabhängige Abschnitte (66, 67), die beide um die durch den Drehbolzen (54) definierte Achse schwenkbar sind, wodurch es jedem der Abschnitte ermöglicht wird, sich in entgegengesetzte Richtungen zu bewegen, um einen im wesentlichen gleichförmigen Sperrstift mit einer senkrecht zur Mittelachse des Stabes gerichteten Längsachse zu bilden, wobei sich der Stift vom Stab aus in entgegengesetzte Richtungen erstreckt.

4. Vollständiges Halte- und Sperrsystem, wie in Anspruch 3 definiert, wobei die beiden den Sperrstift bildenden zwei Abschnitte so definiert sind, daß sie im wesentlichen identisch sind, und wobei die Stange ferner dadurch definiert ist, daß sie mindestens zwei Ausschnitts-Abschnitte aufweist, die ein Teil des distalen Endes des Stabes umfangsmäßig umgeben, wobei die Ausschnitts-Abschnitte im wesentlichen um 90° voneinander angeordnet sind, wobei der Sperrstift ferner dadurch definiert ist, daß er mit dem auf dem Stab gebildeten Ausschnitts-Abschnitt zum zusammenwirkenden Eingriff ausgebildete Vorsprünge (68) aufweist, wodurch mehrere alternative Verriegelungspositionen geschaffen werden, bei denen der Sperrstift durch In-Eingriff-Kommen der Vorsprünge mit den Ausschnitten in den alternativen Positionen sicherbar ist.

5. Vollständiges Sperr- und Haltesystem, wie in Anspruch 1 definiert, wobei der Stab (82) so definiert ist, daß er ein einzelnes längliches Drahtteil (81), das unter Knickbildung auf sich selbst zurückgebogen ist, aufweist, um die beiden in verdrehter, miteinander verschlungener Verbindung vorliegenden Abschnitte (83) zu bilden, wobei das geknickte Ende des Drahtteiles (81) sich im wesentlichen an dessen Mittelpunkt befindet und die Schwenkeinrichtung, auf der sich der Sperrstift dreht, bereitstellt.

FIG. 1

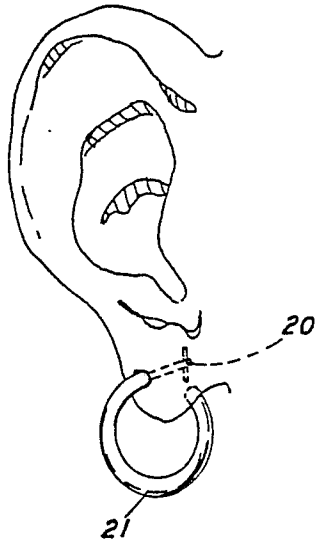


FIG. 2

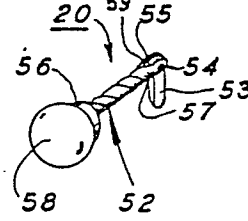


FIG. 4

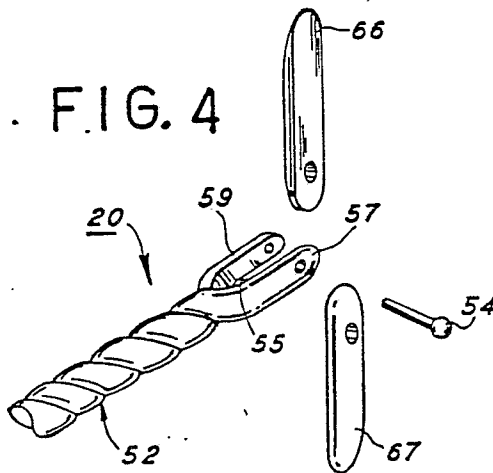


FIG. 3

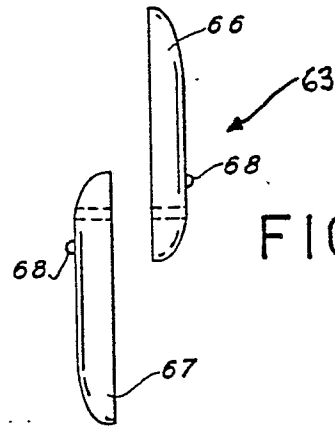


FIG. 5

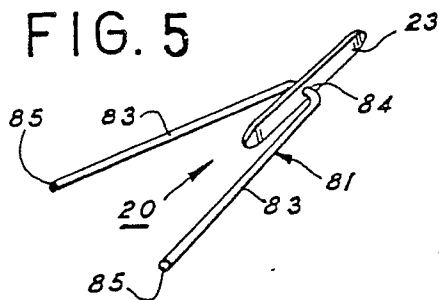


FIG. 6

