March 9, 1971 A. R. SACCOCCIO ET AL 3,568,271

EARCLIP

Filed Aug. 18, 1969

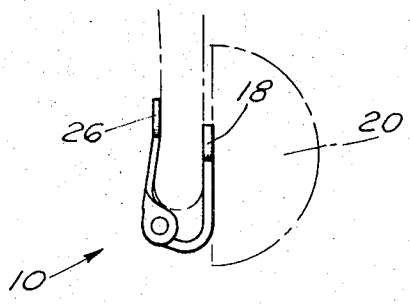

FIG. 1

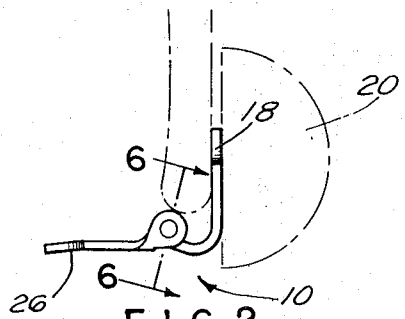

FIG. 2

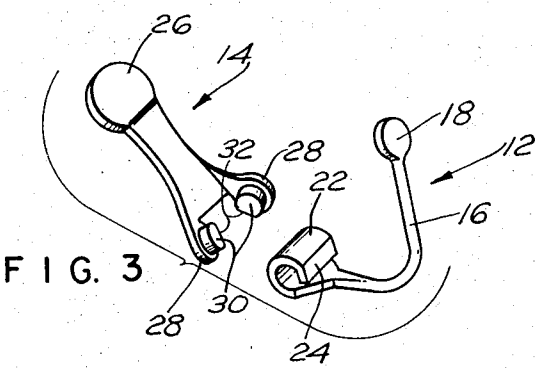

FIG. 3

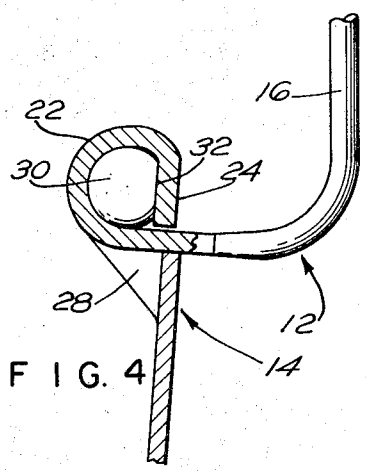

FIG. 4

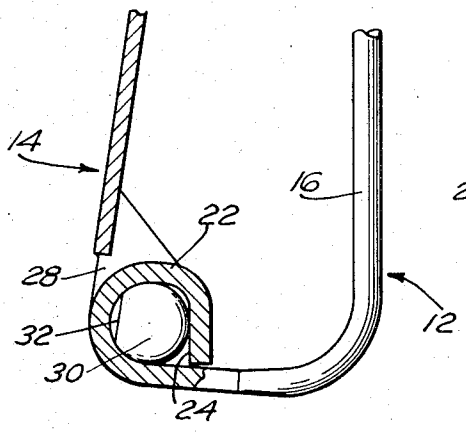

FIG. 5

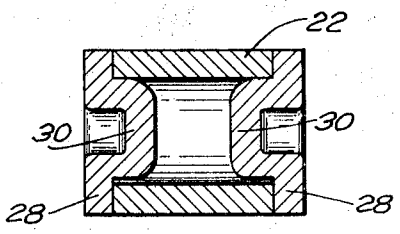

FIG. 6

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EARCLIP

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U.S. Cl. 24—248 6 Claims

ABSTRACT OF THE DISCLOSURE

An earclip for use in earrings and the like comprising a pair of pivotally connected members, each of which has a portion adapted to engage opposite sides of a wearer's lobe to effect a clamping grip thereon, one of said members having a pair of integral pintles in alignment with but spaced from each other, and the other member having a rolled portion extending around said pintles to effect the aforesaid pivotal connection, said pintles and said rolled portion being configured and dimensioned so that a frictional drag is imparted as one member is pivoted with respect to the other, said frictional drag serving to maintain said members in any desired position of adjustment.

BACKGROUND OF THE INVENTION

This is a modification of the invention disclosed in our copending application Ser. No. 754,547 filed Aug. 22, 1968, now Pat. No. 3,462,808 issued Aug. 26, 1969.

Earclips involving a swingable clamping arm are old and well known in the art; but traditionally clips of this type, known in the art as "pressure clips," are spring loaded, whereupon the clamping arm resiliently grips the ear lobe of the wearer. Earclips of this type have been found to have many disadvantages. First of all, the spring pressure of the clamping arm against the wearer's lobe frequently causes discomfort and pain to the wearer. On the other hand, after repeated usage, the spring loaded clip frequently loses its resiliency, whereupon the clip does not securely engage the wearer's lobe. Attempts have been made to overcome these problems by providing spring loaded pressure clips wherein the spring tension can be adjusted, but these attempts have been only partially successful and, furthermore, result in an earclip that is more complicated and expensive to manufacture.

Applicants' aforesaid copending application shows a pressure clip that involves the same basic concept as the instant invention but differs in that the clip disclosed therein embodies three basic components, namely, the mounting bracket, the swingable clamping arm, and the shaft that is nonrotatably supported by the bracket and that pivotally receives the clamping arm. Although this prior clip of applicants has proven satisfactory in operation, from a manufacturing standpoint certain disadvantages exist. First of all, three separate parts have to be manufactured; and, secondly, the assembly operation of these parts does not readily lend itself to automatic machinery, and particularly the assembly of the shaft to its mounting bracket.

SUMMARY OF THE INVENTION

The instant invention relates to an earclip comprising only two parts, namely, a first part having a pair of integral pintles in alignment with but spaced from each other, and a second part having a rolled portion that extends around the pintles to effect the desired pivotal connection between the parts. Said pintles and said rolled portion are configured and dimensioned so that a frictional drag is imparted as the parts pivot with respect to each other, which frictional drag serves to releasably maintain the parts in any desired position of relative adjustment. Since no separate shaft member is employed as in applicants' aforesaid copending application, there are only two basic components in the instant clip, which components readily and economically lend themselves to automatic manufacture and assembly.

It is therefore a primary object of the instant invention to provide an earclip wherein the clamping arm moves smoothly and without excessive pressure being applied thereto, but wherein the clamping arm is nevertheless maintained in any desired position of adjustment by frictional interaction between the clamping arm and the pintles on which it is mounted.

Another object of this invention is the provision of an earclip that may be easily adjusted by the wearer to a position of maximum comfort but which, when so positioned, will remain firmly in place on the wearer's lobe.

A further object is the provision of an earclip embodying only two working parts, thus resulting in a construction that is economically feasible to manufacture and assemble.

Another object is the provision of an earclip of the character described that is durable and effective in use and which, if desired, may be of relatively small construction, thus enhancing the aesthetic appeal of the device.

Other objects, features and advantages of the invention will become apparent as the description thereof proceeds when considered in connection with the accompanying illustrative drawings.

DESCRIPTION OF THE DRAWINGS

In the drawings which illustrate the best mode presently contemplated for carrying out the present invention:

FIG. 1 is a side elevational view of an earclip constructed in accordance with the instant invention in operative position on a wearer's lobe;

FIG. 2 shows the earclip of FIG. 1 in open position;

FIG. 3 is an exploded perspective view showing the two members that make up the instant clip;

FIG. 4 is an enlarged fragmentary view, partly in section, showing the relative positions of the members during assembly;

FIG. 5 is an enlarged fragmentary view, partly in section, showing the earclip in the same position as shown in FIG. 1; and

FIG. 6 is an enlarged section taken on line 6—6 of FIG. 2.

DESCRIPTION OF THE INVENTION

Referring now to the drawings, an earclip constructed in accordance with the instant invention is shown generally at **10** and comprises a first member or bracket shown generally at **12** and a second member or clamping arm shown generally at **14**. Both the bracket **12** and the clamping arm **14** are of metallic construction, although for reasons hereinafter to be set forth, one of the elements is constructed of a harder metal than the other. Thus, for example, the clamping arm might be constructed of steel or nickel silver and the bracket of brass, or vice versa.

As will be noted, the bracket **12** comprises an elongate wire-like portion **16** having a mounting disc **18** at one extremity thereof, which disc is adapted to receive thereon, by any suitable means, such as soldering or the like, an ornamental member **20** as shown in FIG. 1. At its opposite extremity, the bracket **12** has a rolled portion **22** that is generally circular but that terminates in a flat or straight portion **24**.

The clamping arm **14** has an ear lobe engaging pad **26** at one extremity thereof and at its opposite extremity is

provided with a pair of spaced, substantially parallel lugs **28**, each of which integrally carries a pintle member **30**. As will be seen most clearly in FIGS. 3 and 6, the pintles **30** are actually cup-like projections that extend integrally and inwardly from the lugs **28**, said pintles being in alignment with each other but being in spaced relation. Each of the pintles **30** has a flat portion **32**, said flat portions **32** being in alignment with each other and generally corresponding to the aforesaid flat portion **24** on bracket **12**.

It will be understood that clamping arm **14** is pivotally connected to bracket **12** by virtue of the fact that the rolled portion **22** of the latter surrounds pintles **30** of the former. With the parts so assembled, movement of the clamping arm with respect to the bracket will result in a frictional drag being imparted. This is because the distance from flat **24** to the diametrically opposite point of rolled portion **22** is less than the diameter of the circular portion of the pintles **30**. Thus, as the clamping arm is rotated with respect to the pintles, the rolled portion of the bracket will frictionally grip the pintles, this frictional grip being further enhanced by the fact that rolled portion **22** has some degree of resiliency due to the fact that the rolled portion does not form a completely closed loop. This resiliency is enhanced by the use of a metal such as brass, it being further noted that the aforedescribed relative hardness of the bracket and clamping arm will result in less wear on the parts. It will be obvious that the extent of frictional drag that exists when clamping arm **14** is moved is dependent upon the relative configurations and dimensions of rolled portion **22** and pintles **30**; and by making a slightly larger flat on the pintles and on the rolled portion, or by using a rolled portion that has greater strength and less resilience, a greater degree of friction will exist.

In assembling the clamping arm **14** to bracket **12**, the lugs **28** are preferably bent toward each other and into rolled portion **22** until the lugs **28** are substantially parallel with respect to each other and the pintles **30** are positioned within the said rolled portion. In order to facilitate this assembly operation, the flats **32** on pintles **30** are aligned with the flat **24** on rolled portion **22**, as shown in FIG. 4, in which relative position the pintles may freely and easily slide into the said rolled portion. The fact that pintles **30** are an integral part of clamping arm **14** and that, therefore, no separate shaft member is involved makes automatic assembly of the clamping arm and bracket a relatively easy and economically feasible procedure, this procedure being further facilitated by proper alignment of the flats **24** and **32** during the assembly operation, as aforedescribed.

While there is shown and described herein certain specific structure embodying the invention, it will be manifest to those skilled in the art that various modifications and rearrangements of the parts may be made without departing from the spirit and scope of the underlying inventive concept and that the same is not limited to the particular forms herein shown and described.

What is claimed is:

1. An earclip comprising a pair of pivotally connected members, each of which has a portion adapted to engage opposite sides of a wearer's lobe to effect a clamping grip thereon, one of said members having a pair of substantially parallel spaced lugs, each of which has an aligned integral inwardly extending pintle, said other member having a rolled portion extending around said pintles to effect the aforesaid pivotal connection between said members, said pintles having a cross dimension larger than a cross dimension of said rolled portion whereby a frictional drag is imparted as said members pivot with respect to each other, said frictional drag serving as the sole means for maintaining said members in any desired position of adjustment with respect to each other.

2. In the earclip of claim **1**, said pintles terminating in spaced relation with respect to each other.

3. In the earclip of claim **1**, said pintles each being in the form of a cup-like projection formed from said lugs.

4. In the earclip of claim **1**, each of said members being of metal construction, one of said members being constructed of a harder metal than the other.

5. In the earclip of claim **1**, said pintles each being substantially round in cross section and each having an aligned flat section, said rolled portion being substantially round in cross section and having a flat section, said rolled portion being freely slidable onto said pintles when said flat sections are aligned.

6. In the earclip of claim **1**, said rolled portion comprising a partially open loop, whereupon some degree of resiliency exists between said rolled portion and said pintles.

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U.S. Cl. X.R.

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