Feb. 8, 1966 F. W. SCHULENBERG 3,233,801

WRISTWATCH STRAP AND SECUREMENT THEREFOR

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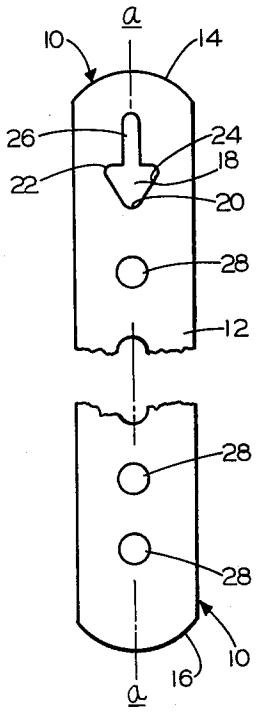


FIG. 1.

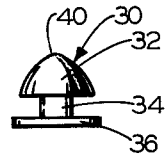


FIG. 2.

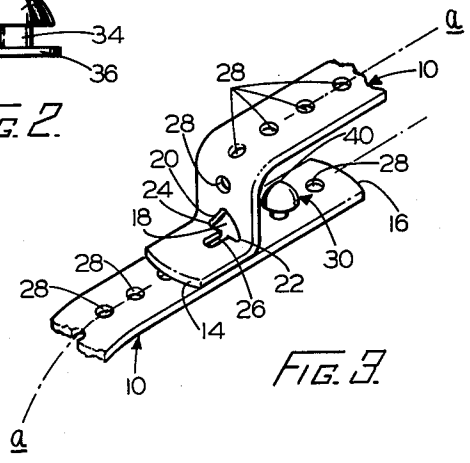


FIG. 3.

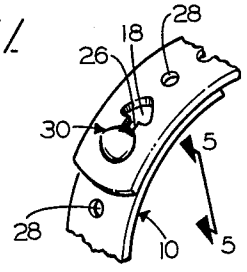


FIG. 4.

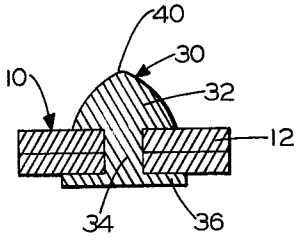


FIG. 5.

INVENTOR

FRED W. SCHULENBERG

BY

ATTORNEY

United States Patent Office

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WRISTWATCH STRAP AND SECUREMENT THEREFOR

Fred W. Schulenberg, St. Louis, Mo., assignor to No-Buk-L Products, Inc., St. Louis, Mo., a corporation of Missouri

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2 Claims. (Cl. 224—4)

The present invention relates generally to bands or bracelets for wristwatches, and the like, and more particularly to a non-metallic wristwatch band characterized by its resiliency which, together with its unique securement means, permits facile engagement and disengagement from a wearer's wrist.

It has been the general practice to make wristwatch bands from metal, leather, and cloth material. Expandable bands made from metal links are not only costly to manufacture, but they also tend to pinch the wearer and ride up and down the wearer's wrist. The leather and cloth material type band usually require threadable type buckles, clasps, or the like, which are often difficult to fasten with one hand. Further, they absorb perspiration which leads to rotting and eventual replacement of such band.

The general purpose of this invention is to provide a securable band for wristwatches which possesses none of the aforedescribed disadvantages. To attain this, the present invention utilizes a resilient plastic wrist strap and unique securement stud and slot therefor which assures easy and positive fastening to the wearer's wrist.

An object of the present invention is the provision of a securable wristwatch band which is easily securable to the wearer's wrist without requiring it to be threaded through a buckle or the like.

Another object is to provide a securable band for wristwatches which is adjustable to a size corresponding to the wearer's wrist and which fastens simply, but positively thereto.

A further object of the invention is the provision of a securable band for wristwatches which is adjustably securable to the wearer's wrist and which does not absorb perspiration or ride up and down the wrist.

In the present invention these purposes (as well as others apparent herein) are achieved generally by providing a flat resilient wrist strap having a generally triangular opening in close proximity to one of its ends. A narrow slot extends from the triangular opening along the longitudinal centerline of the strap and terminates short of the one end. Near its other end the wrist strap is provided with a plurality of spaced apart openings. A stud having an acorn-shaped head and a disc portion joined by a narrower stem portion is used to secure the two ends of the strap about the wearer's wrist. The acorn-shaped head has its largest diameter adjacent its base; this diameter being substantially the same as one side of the triangular opening provided in the wrist strap.

Utilization of the invention will become apparent to those skilled in the art from the disclosures made in the following description of the preferred embodiment of the invention as illustrated in the accompanying drawing, in which:

FIG. 1 is a plan view of a preferred embodiment of the securable band of the present invention;

FIG. 2 is an enlarged side elevation of a stud utilized to secure the ends of the securable band of FIG. 1;

FIG. 3 is a partial perspective view illustrating the method of overlapping the ends of the strap of FIG. 1 and securing them together;

FIG. 4 is a partial perspective view similar to FIG. 3 showing the overlapped ends of the strap secured together; and

FIG. 5 is a full cross-sectional view taken along line 5—5 of FIG. 4.

Referring now to the drawing, wherein like reference characters designate like or corresponding parts throughout the several views, there is shown in FIG. 1 a one-piece securable band, generally designated **10**, for wristwatches. The band **10** consists of a flat strap **12** which is stamped from a sheet of vinyl plastic. The plastic material is characterized by its durability and its resiliency, that is, it possesses wear characteristics which resist repeated bending, crimping, and the like; yet it is resilent enough to undergo slight elongation and resiliently return to its original shape.

It has been found that a length of approximately 9 inches is sufficient to permit overlapping of the strap ends **14** and **16** when wrapped around the wearer's wrist. In close proximity to the strap end **14** there is die punched a generally triangular opening **18** which has three rounded corners **20**, **22** and **24**. The rounded corner **20** is positioned along the longitudinal centerline, designated as *a—a*, of the securable band **10**. The other rounded corners **22** and **24** are positioned between the strap end **14** and the centered corner **20** so that, in general appearance, the triangular opening **18** resembles an arrowhead pointing away from the strap end **14**. The three sides of the triangular opening **18** between the rounded corners **20–24** are of substantially the same length.

A narrow slot **26** extends from the triangular opening **18** along the longitudinal centerline *a—a* of the strap **12** toward but terminating short of the strap end **14**. This slot **26** serves as a locking or securment slot for a quick-fastening securement stud to be described hereinafter.

Extending inward from the opposite strap end **16** and along the longitudinal centerline *a—a* are a plurality of spaced apart openings **28**. These openings **28** are used to adjust the length of the securable band on the wearer's wrist and secure the ends together.

Referring now to FIG. 3 there is shown a securement stud, generally designated **30**, which is used to tie together the two ends of the wrist strap **12**. Preferably, this quick-fastening stud is formed of hard, durable material, for example, stainless steel. It consists of an acorn-shaped head portion **32**, a stem portion **34**, and a disc portion **36**.

The head portion **32** extends curvedly and somewhat conically upward from a flat circular undersurface or base **38** to terminate in a smooth rounded top **40**. Its largest diameter is adjacent to the base **38**, such diameter being substantially the length of one side of the triangular opening **18**. Thus, when the acorn-shaped head portion **32** has been inserted through the trianguar opening **18**, the circle of its base **36**, when viewed in plan form, extends outwardly to overlap the straight mid-portions of the sides of the triangular opening **18**. As will be more fully explained hereinafter, the insertion of the acorn-shaped head portion **32** through the triangular opening **18** is made easy because the diameter of the base **38** is substantially the same as the length of one side of the triangular opening **18**.

Extending downward from the center of the flat base **38** of the head portion **32** is the stem portion **34**, of substantially lesser diameter than the flat base **38** and slightly narrower than the slot **26** of the wrist strap **12**. The length of the stem portion **34** is substantially twice the thickness of the wrist strap **12** (see FIG. 5), so that both ends of the strap may be accommodated between the flat base **38** of the head portion **32** and the top of the base portion **36**.

At the lower end of the stem portion **34** the integral disc portion is provided. This portion **36** has a diameter substantially greater than any of the openings **28** provided at the end **16** of the wrist strap **12**. Thus, when the securement stud **30** has its head portion **32** inserted through the openings **28** so that they enclose the stem portion **34**, it is restrained from further insertion into or through the openings by the base portion **36**.

Quick, easy securement, now to be described, may be made with one hand.

For purposes of illustration, the securement step shown in FIG. 4 is illustrated with the strap **12** removed from the wrist of the wearer. It is to be understood that the wrist strap **12** would be preliminarily threaded through the mounting provisions on a watch.

The proper opening **28** corresponding to the wrist size of the wearer is chosen. The hand is adjusted to size by forcing the acorn-shaped head portion **32** of the stud **30** through such opening from the undersurface of the wrist strap **12**. Because the wrist strap **12** is made of durable, tough plastic material and is also resilient, the head portion **32** can be forced through the opening **28** and retained about its stem portion **32**. The disc **36** prevents the stud **30** from being pulled completely through the opening **28**, its flat undersurface being presented against the wearer's wrist.

After the stud **26** has been inserted, the strap end **16** is wrapped around the wearer's wrist so as to overlap the strap end **14**. By pulling at the end **14** the resilient plastic wrist strap **12** can be elongated sufficiently so that the triangular opening **18** assumes the position shown in FIG. 3, that is, with the centered corner **20** slantingly elevated above the rounded top **40** of the stud head portion **32** and the other two corners **22, 24** held depressed below the flat surface of its base **38**. By maintaining the opening **18** in this position and allowing it to move to the right as seen in FIG. 3, it can be matingly inserted over the head portion **32** of the stud **30** without stretching or tearing the sides of the triangular opening **18**. Because of its resiliency, the elongated strap will draw the triangular opening down over the head portion **32** and into the narrow slot **26**.

It should be noted that the complementary shape of the triangular opening **18** and the acorn-shaped head portion **32** when held in the position above described, taken together with the characteristic resiliency of the wrist strap **12**, permit quick and easy fastening of the ends of the strap without repeated stretching and possible tearing of the plastic material around generally triangular opening **18**.

Obviously, many modifications and variations of the present invention are possible in the light of the above teachings. For example, it may be convenient to provide a strap with a plurality of triangular and slotted openings **18** at one end of the strap, and a single hole **28** adjacent to the opposite end. It is therefore to be understood that, within the scope of the appended claims, the invention may be practiced otherwise than is specifically described.

I claim:

1. A securable band for wristwatches, and the like, comprising

a flat wrist strap of plastic characterized by resiliency and having a length sufficient to permit overlapping of its ends, said strap including

a generally triangular opening having rounded corners and positioned in proximity to one end thereof, one rounded corner of said triangular opening positioned along the longitudinal centerline of said flat strap and the other rounded corners being positioned between said one end of said strap and said one rounded corner,

a slot extending from said triangular opening along the longitudinal centerline of said strap and terminating short of said one end thereof, and

a plurality of spaced apart holes extending from the other end of the strap and positioned along the longitudinal centerline thereof,

together with

a stud for securing said strap and including

an acorn-shaped head portion having a base including a flat undersurface and having its largest diameter adjacent to its base, said diameter being substantially the same as one side of said triangular opening,

a stem portion extending downward from the center of said base of said head portion for a length substantially twice the thickness of the strap, said stem portion being narrower than said slot of said flat strap, and

a disc portion at the end of said stem portion opposite said head portion and of substantially greater size than any of said plurality of holes in said strap.

2. A securable band for wristwatches, and the like, comprising

a flat wrist strap of plastic characterized by resiliency and having a length sufficient to permit overlapping of its ends, said strap including

a plurality of generally triangular openings each having rounded corners and positioned in proximity to one end thereof, one rounded corner of each of said triangular openings positioned along the longitudinal centerline of said flat strap and the other rounded corners of each of said openings being positioned between said one end of said strap and said one rounded corner,

each opening having a slot extending therefrom along the longitudinal centerline of said strap, and

a hole adjacent to the other end of the strap and positioned along the longitudinal centerline thereof,

together with

a stud for securing said strap and including

an acorn-shaped head portion having a base including a flat undersurface and having its largest diameter adjacent to its base, said diameter being substantially the same as one side of each of said triangular openings,

a stem portion extending downward from the center of said base of said head portion for a length substantially twice the thickness of the strap, said stem portion being narrower than said slots of said flat strap openings, and

a disc portion at the end of said stem portion opposite said head portion and of substantially greater size than said hole in said strap.

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GERALD M. FORLENZA, *Primary Examiner.*

J. E. OLDS, *Assistant Examiner.*