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EYEGLASSES RETAINING BAND

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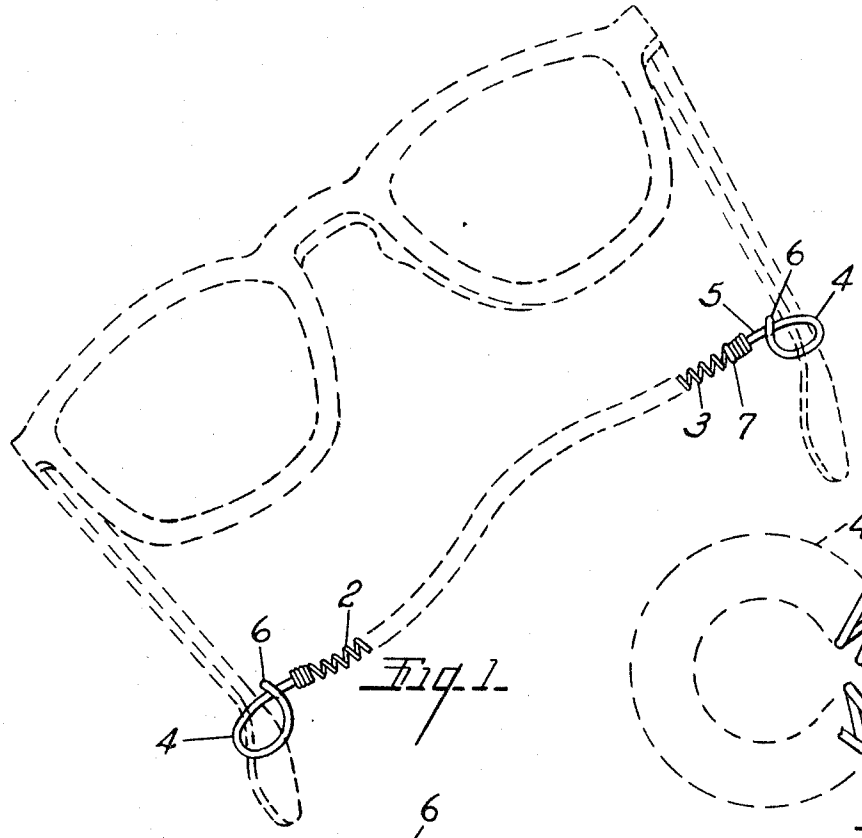


Fig. 1

Fig. 4

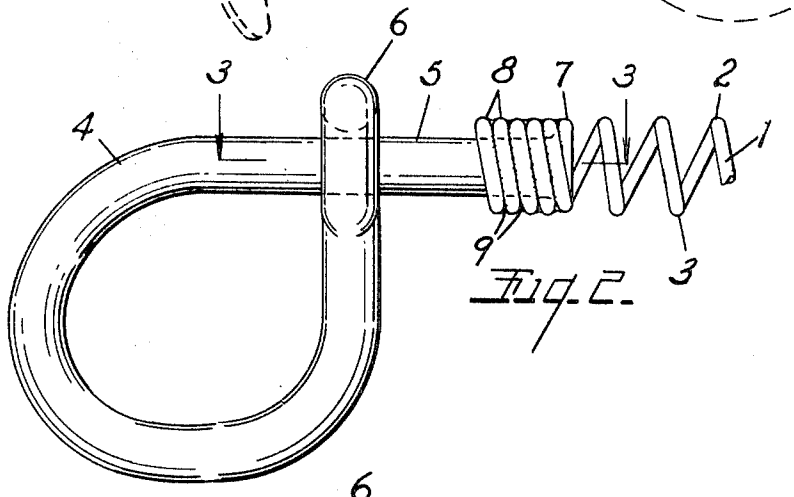


Fig. 2

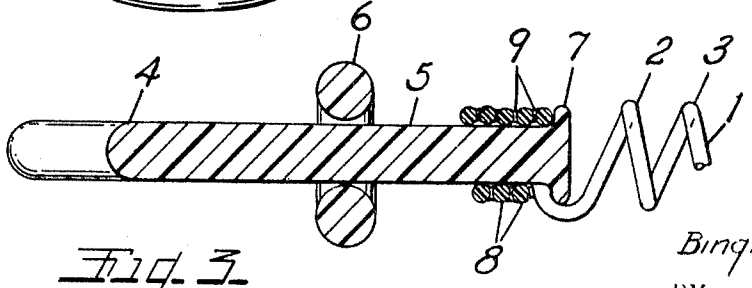


Fig. 3

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EYEGLASSES RETAINING BAND

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U.S. Cl. 24—3 5 Claims

ABSTRACT OF THE DISCLOSURE

A helical coil of monofilament nylon is set in the form of a flexible and stretchable spring. End turns of the coil are secured to each other in retaining engagement behind an enlargement on the end of a strand of molded polyvinyl. The polyvinyl has an eyelet on its other end and the strand is passed through the eyelet to form a loop and extended through the end turns of the helix to the enlargement.

DESCRIPTION

The drawings, of which there is one sheet, illustrate a preferred form of the retaining band.

FIG. 1 is a perspective view of the band in operative position on the bows of a set of eyeglasses, the glasses being shown in dotted lines.

FIG. 2 is an enlarged, fragmentary, elevational view of the loop connection at one end of the band.

FIG. 3 is a cross sectional view taken along the plane of the line 3—3 in FIG. 2.

FGI. 4 is a fragmentary elevational view of one end of a modified form of the band.

The band of the invention is disclosed as a retaining device for holding eyeglasses on the wearers head; but obviously the band could be used for yieldably and removably connecting any two objects which have relatively elongated projections or hooks which could be engaged by the loops on the ends of the band.

The band consists of a length of monofilament nylon 1 which has been formed into a stable but flexible and yieldable spring 2, by winding the turns 3 of the spring into a helix around a mandrel. The helix is set by heating it in hot water and then letting it cool while in its coiled position.

The ends of the band are permanently connected to two attaching loops 4 of polyvinyl material. The loops are formed by molding a strand 5 of the polyvinyl with an eyelet 6 on one end, and a flange or enlargement 7 on the other. The loop is formed by passing the free end of the strand through the eyelet, before or after the enlargement is formed.

The diameter of the strand 5 of the end loop is sized to approximately fit within the inner diameter of the helix of the band. As appears most clearly in FIGS. 2 and 3, the enlargement 7 is pressed into or through several end turns 8 of the helix and the end turns are secured together by adhesive 9 or self fusion of the material between the

end turns. Since a reliable adhesive which will adhere to both nylon and polyvinyl is difficult to find, the end turns of the helix are secured to each other to form short end cylinders that are retained on the end of the eyelet strand 5 by the enlargement 7.

In the modified form of the band shown in FIG. 4, the end loop 4A is formed from the end of the helically coiled band 2A itself. Several end turns 10 of the loop are interleaved between intermediate turns 11 of the band, and the interleaved turns are secured in lapped, side by side relation by adhesive 12.

The size of the end loops 4 of the preferred form of the band are adjustable by the slip fit of the eyelet 6, while the end loops 4A of the modified band are adjustable by stretching the turns of the spring-like coils in the loops. In each form, the band 2 forms a light and highly flexible connection between two connected members, such as the bows of the pair of eyeglasses.

What is claimed as new is:

1. A retaining band comprising a length of monofilament nylon coiled and set into a flexible and stretchable helix, and having end loops of adjustable size connected to the ends of the band,

said helix constituting the sole connection between said end loops.

2. A retaining band as defined in claim 1 in which at least one of said end loops is formed of a strand of polyvinyl plastic having an eye on one end and an enlargement on the other,

said other end being passed through said eye,

and the end turns of said helix being wound around said other end of said polyvinyl strand and secured to each other behind said enlargement.

3. A retaining band as defined in claim 2 in which said end turns are secured together by adhesive.

4. A retaining band as defined in claim 1 in which at least one of said loops is formed by turning the end portion of the helix on itself and interleaving the end turns with intermediate turns of the helix,

said interleaved turns being secured to each other in side by side relation.

5. A retaining band as defined in claim 4 in which said interleaved turns are secured together by adhesive.

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