May 25, 1937. G. L. WILHELM ET AL 2,081,209

LACING AWL

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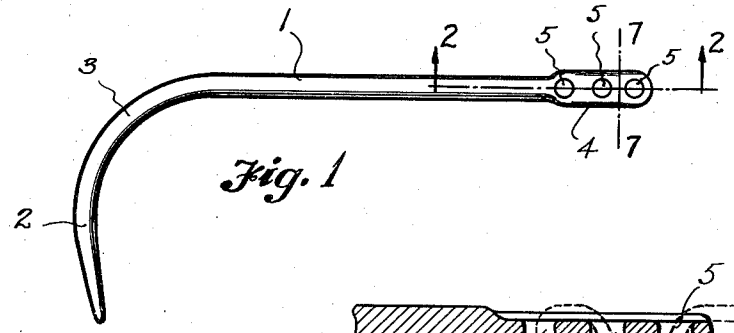

Fig. 1

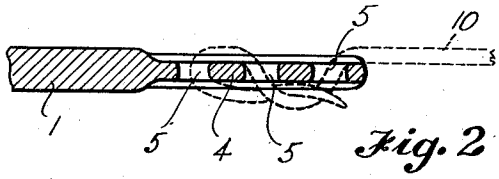

Fig. 2

Fig. 7

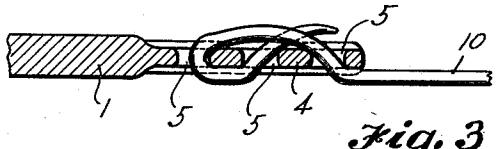

Fig. 3

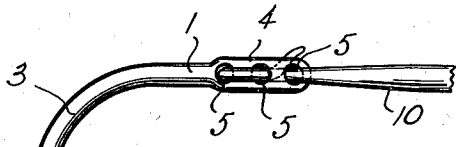

Fig. 4

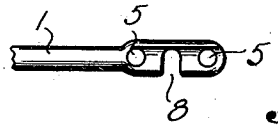

Fig. 5

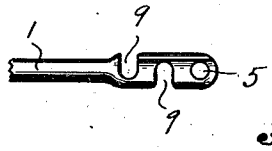

Fig. 6

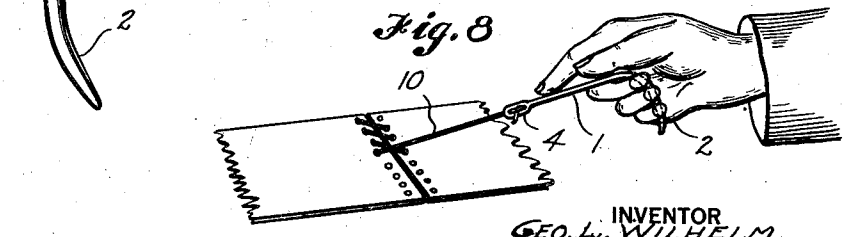

Fig. 8

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LACING AWL

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Application January 15, 1934, Serial No. 706,652

1 Claim. (Cl. 223—103)

This invention relates to improvements in lacing awls of that character used for lacing together the ends of power transmission belts and the like, and it has for its principal object to provide an awl for that purpose that is formed with an angular bend as an aid to gripping the awl for pushing its pointed end through the lacing holes and also for pulling the awl and an attached lacing through the holes, and which also is provided with eyelets of a character and arrangement that permits relatively easy and quick attachment of the lacing thereto in a loop that will not pull out or slip during use of the awl, nor will it cause bulkiness that would interfere with pulling the awl and lacing through the holes.

More specifically stated, the present invention resides in the provision of a lacing awl formed with an angular bend which facilitates gripping and holding the awl while pushing or pulling it, and which has a flattened head portion provided with a plurality of eyelets or recesses through which lacing strips may be threaded easily and securely held.

Other objects of the invention reside in the various details of construction and in the arrangement of parts as will hereinafter be fully described.

In accomplishing these objects, we have provided the improved details of construction, the preferred forms of which are illustrated in the accompanying drawing, wherein—

Fig. 1 is a side view of a preferred form of lacing awl embodied by the present invention.

Fig. 2 is an enlarged sectional view on the line 2—2 in Fig. 1, illustrating, particularly, the flattening and concaving of the opposite faces of the head, and the provision of eyelets therein for receiving the lacing.

Fig. 3 is a similar view illustrating another method of threading the lacing in the eyelets.

Fig. 4 is a view illustrating a modified form of construction with respect to the angular bending of the awl.

Fig. 5 is a detail illustrating a modified form of construction of the head portion; this head being formed with a laterally opening recess between the two eyelets.

Fig. 6 is a detail of another modification.

Fig. 7 is a cross sectional detail, on line 7—7 in Fig. 1, showing the concaving of the opposite side surfaces of the head portion of the awl.

Fig. 8 is a perspective view illustrating the use of the laterally bent portion of the awl as a handhold in pulling the lacing.

Referring more in detail to the drawing—

The awl, as illustrated in Fig. 1, comprises a shank portion 1 formed with laterally directed end portion 2; this latter portion being tapered to a point to facilitate its application to lacing holes, and it merges into the shank portion in a gradually rounded bend as at 3. At the end opposite the tapered point, the shank has a flattened head portion 4. This is provided with three eyelets 5, which are arranged in alinement longitudinally of the shank and directly through the flattened head portion. The opposite side portions of the head portion, throughout its length, are concave as shown in Fig. 7 to receive the lacing flatly thereagainst so that it will give minimum interference in being pulled through the lacing holes of a belt or other object to which a lacing is being applied.

In the modified form illustrated in Fig. 4, the bend in the shank is closely adjacent the head end, so as to provide a relatively long lateral portion serving as a handhold for pulling the awl and lacing through an opening.

Fig. 5 shows the head portion of the device provided with two spaced eyelets 5 and a laterally opening recess 8 between these eyelets. The device of Fig. 6 is another modified form in which there is a single eyelet, at the end of the head, and spaced recesses 9—9 forwardly thereof opening to opposite edges of the head portion.

In using awls of this type formed with three alined eyelets as in Figs. 1 to 4, the lacing strip, designated at 10, would be threaded after the fashion illustrated either in Fig. 2 or Fig. 3. After it has thus been threaded, the laterally turned end portion of the awl is projected through the lacing holes and then by gripping the end portion as in Fig. 8, the awl and lace may be pulled through.

It is obvious that various modifications are possible and that the extent of the lateral portion may be varied to suit ordinary or special conditions.

In summarizing the advantages of the present awl, it will be mentioned that awls of this character provide for easily pushing the awl through openings and then for pulling the awl and lacing through. Its construction eliminates the use of the usual marlin spike for threading through the holes, and for threading under laces when an end is to be secured to finish an operation. Furthermore, a lock stitch is more easily and quickly made by use of the present type of awl than by use of the usual type. The fact that provision is made in the shape of the awl for pulling it through, makes possible the threading

of more laces through a hole than was heretofore possible without aid of some pulling device. Also, the shape of the awl provides for keeping the lacing straight and free of twists.

The novel features contained in the construction of the head and inward concaving of its opposite faces provides that the lacing loop, after being threaded through the head eyelets, will lie flatly against the sides of the head and thus not form an objectionable stop or bump that would be hard to pull through the lacing holes.

The alinement of the eyelets or recesses also provides a gripping hold on the lace when it is pulled tight that will positively prevent its slipping.

Having thus described our invention, what we claim as new therein and desire to secure by Letters Patent is:—

A lacing awl having a flattened head formed with spaced eyelets longitudinally alined in the head and a recess intermediate the eyelets and opening in a direction at right angles to the axes of the eyelets.

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