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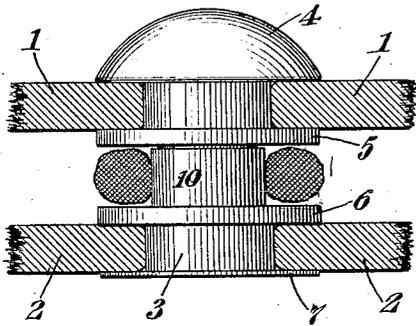
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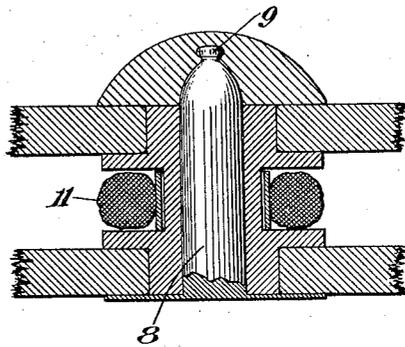
EASY LACING DEVICE

Filed Oct. 20, 1922

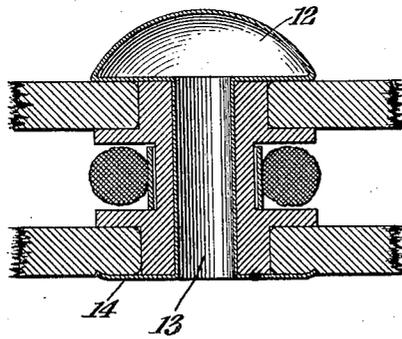
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



INVENTOR

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BY his ATTORNEYS

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# UNITED STATES PATENT OFFICE.

LOUIS FUNCK, OF BRONXVILLE, NEW YORK.

EASY-LACING DEVICE.

Application filed October 20, 1922. Serial No. 595,740.

*To all whom it may concern:*

Be it known that I, LOUIS FUNCK, a citizen of Switzerland, and a resident of Bronxville, in the county of Westchester and State of New York, have invented a certain new and useful Easy-Lacing Device, of which the following is a specification.

This invention relates to an easy lacing device for use wherever lacing is employed to hold together adjacent edges of leather or other material.

The invention has as an object the construction of a device which will make it easy to lace together adjoining edges of leather or other material. It has as an object the construction of a device which will permit the rapid lacing of the adjoining edges of leather or other similar material by a single pull of the ends of the laces whereby the edges are brought together without the necessity of having to thread the laces through a number of eyelets before drawing out the ends of the laces.

A further object of the invention is to construct a device which may be inserted between split sections of the leather along the edges to be laced, and the provision of means in said devices for engaging the laces and permitting their easy movement. A further object of the invention is to construct the lacing devices so that they may be used on shoes or other articles without unduly attracting notice.

These objects and others are achieved by this invention in the following manner, the disclosure constituting a preferred embodiment thereof.

The drawings illustrate the preferred embodiment of the invention, and in said drawings—

Figure 1 represents a side view of the lacing device between outer and inner sections of the leather or other material;

Fig. 2 represents a section through Fig. 1, and

Fig. 3 represents a section of a modification of the lacing device.

In said drawings there are shown sheets of leather 1 and 2 spaced apart at their edges either by splitting the leather along its edges or by some other mode of construction. Between these sheets of leather there is positioned the lacing device denoted generally by the numeral 3. The latter has a button 4 mounted thereon, and also has two flanges 5 and 6 which operate to hold the leather

sheets 1 and 2 in fixed position relative to the device 3. A flange 7 is mounted upon a cylindrical member 8 having a bead or snap 9 on the end thereof for the purpose of engaging a recess in the interior of the button 4 to snap the latter in position. A loosely mounted and rotatable collar 10 is positioned between the flanges 5 and 6 around the device 3, and around this collar the laces 11 are intended to pass.

In the modification of Fig. 3, the button 12 is integral with a cylindrical shaft 13 and a flared-out flange 14, the latter serving to grip the leather adjacent thereto. The structure is otherwise the same as in the other embodiment.

It will be seen that the lacing device is constructed to be inserted in the eyelet of the leather and to be firmly secured in position. A space is provided between the leather sections for the insertion of the laces around the rotatable collars 10, thus permitting an easy and rapid movement of the laces with almost no friction. The laces, by reason of their position between the leather sections, are hidden from view, and are ordinarily not moved from their positions.

In the operation of the device, after the laces have been threaded around the collars 10 in the several eyelets of the leather, it will be merely necessary to pull on the ends of the laces in order to draw the edges of the leather sheets together, and thereupon the laces may be tied. When it is desired to separate the leather again, it will be merely sufficient to untie the laces and pull the leather edges apart since the rotation of the collars 10 will prevent any friction. It will be obvious that the laces need not be removed from their positions around the collars 10 between the split sections of leather. This device may find application in any case where it is desired to bring together two leather sheets or sheets of other material, by means of laces. For example, it may be used for lacing belts, canvas sheets, bags, corsets, shoes, and other objects. In the lacing of shoes, for example, the shoes may be punctured for eyelets in the usual manner either part of the way or all of the way, and the edges of the leather may be split or otherwise constructed to be formed in separated sections adjacent said eyelets and the edges of the uppers. The lacing device may then be inserted in the eyelets and fastened therein, after which

the edges of the leather may be sewed or otherwise fastened together between the eyelets in order to make the construction more secure against coming apart under the stresses of wear. The laces may be then passed between the leather sections and around the rollers in the same manner as the ordinary shoe would be laced, the difference being that the laces will not be visible except where they pass across the space between the edges of the leather flaps, that is, they will not be seen coming from the eyelets. The latter may be closed by neat appearing buttons such as buttons 4 shown in Fig. 1, or they may be left open. Shoes so constructed will be easy to put on and take off, since all that is necessary without bringing the leather edges together is to pull on the ends of the laces, whereupon they will slip around the collars 10 and draw together the leather flaps in a single operation. The usual bow will then be tied. When taking the shoe off, it will be sufficient to untie the bow and pull the flaps apart, for the laces will offer no resistance to such a pull. It will be evident that the laces remain in position around the collars 10 at all times, and need not be removed until they are worn out or are broken. It will facilitate the insertion of the laces to have the wire tips thereof curved instead of straight, so that they may be passed around the collars 10 between the leather sections.

As many apparently widely different embodiments of this invention may be made without departing from the spirit thereof, it is to be understood that I do not intend to limit myself to the specific embodiment thereof, except as indicated in the appended claims.

I claim:

1. In devices for lacing together adjoining edges of leather or similar material, the combination of additional strips adjacent said edges, eyelets along said edges and strips, short cylindrical bearings in the eyelets, having flanges against the inside of said leather edges and strips, loose collars

between said flanges, buttons removably mounted on the outside of the bearings to cover the eyelets, and means to hold the bearings in place.

2. In devices for lacing together adjoining edges of leather or similar material, the combination of additional strips adjacent the said edges, eyelets along said edges and strips, short cylindrical bearings in the eyelets having flanges bearing against the insides of said leather edges and strips, rotatable collars between said flanges, buttons mounted on the outside of the bearings to cover the eyelets, and means to hold the bearings in place.

3. In devices for lacing together adjoining edges of leather or similar material whose edges are split for a short distance in to provide flaps, eyelets along said flaps, short cylindrical bearings in the eyelets having flanges bearing against the insides of said flaps; rotatable collars between the said flanges; buttons mounted on the outside of the cylinders to cover the eyelets, and means to hold the said cylindrical bearings in place.

4. In devices for lacing together adjoining edges of leather or similar material, whose edges are split, eyelets along said edges, short integral cylindrical bearings in the eyelets having flanges bearing against the insides of said leather, loose collars between said flanges and means to hold the said bearings in place.

5. In devices for lacing together adjoining edges of leather or similar material, the combination of additional strips adjacent said edges, eyelets along said edges and strips, short integral cylindrical bearings in the eyelets, having flanges bearing against the inside of said leather edges and strips, loose rotatable collars mounted between said flanges, and means to hold the bearings in place.

In testimony that I claim the foregoing, I have hereunto set my hand this 5th day of October, 1922.

LOUIS FUNCK.