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BELT AND BUCKLE

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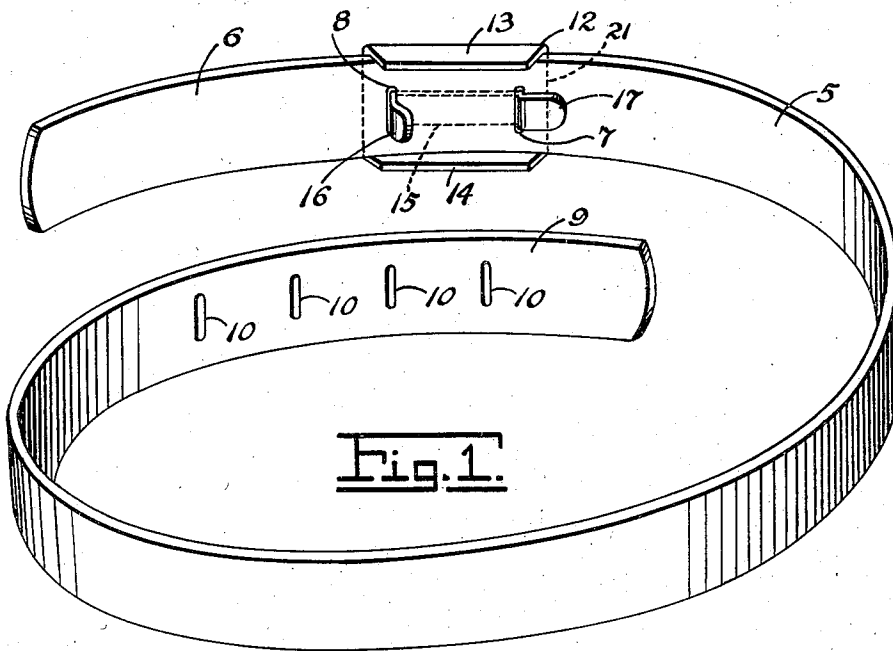


Fig. 1.

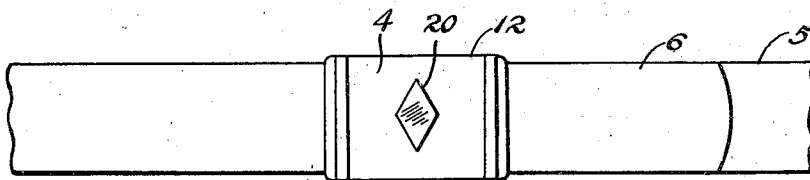


Fig. 2.

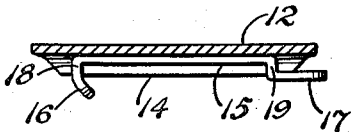


Fig.3.

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BELT AND BUCKLE

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4 Claims. (Cl. 2—322)

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This invention relates to a new and useful belt and buckle assembly of highly simplified design.

A primary object of this invention is to provide a belt and buckle easily and quickly manufactured and assembled, with consequent substantial savings in manufacturing costs.

Another object is to provide a buckle which requires no stitching, riveting or other mechanical operations for fastening or securing it to the end of a belt, the buckle being easily and quickly disengaged from a belt of one color and attached to a belt of another color when it is desired to have the belt harmonize with the wearer's suit or dress.

Another object of this invention is to provide a highly serviceable belt and buckle of a neat and streamlined appearance with no visible perforations or exposed anchoring or fastening means.

Another object is to provide a device of this character that will maintain the overlapping ends of a belt in substantial longitudinal alignment.

These and other objects and advantages are attained by the means described in the following specifications and illustrated upon the accompanying drawings in which:

Fig. 1 is a perspective rear view of a belt and buckle with the free end of the belt disengaged from the buckle.

Fig. 2 is a fragmental front elevational view of the belt and buckle.

Fig. 3 is a longitudinal section of the buckle.

It is common practice in the manufacture of belts to employ a buckle requiring the use of rivets, stitches, staples or other mechanical means of securing it to the end of the belt. Such buckles also require the threading of the opposite end of the belt therethrough, with the result that repeated buckling and unbuckling causes the belt to become worn and unsightly in appearance. These disadvantages are obviated by the present invention as illustrated upon the drawings. An ordinary belt, which may be of leather, plastic, cloth, or other suitable material, is indicated at 5, and has one of its ends 6 punched with properly spaced elongated perforations 7 and 8. The opposite end 9 of the belt is punched with similar perforations 10, spaced apart to any desired extent, said perforations being used for adjusting the belt to the girth of the wearer.

The buckle, which is indicated by the character 12, may be in the form of a plate having its exposed face 4 suitably ornamented, as by embossing, stamping, engraving, or the like 20, and may or may not include the upper and lower flanges 13 and 14. The buckle may be slightly curved to conform to the contour of the waist.

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To the rear face of the buckle, intermediate the top and bottom, and in horizontal alignment therewith, is soldered or otherwise fixed a metal strip 15 having opposite ends 16 and 17 formed as shown in Figs. 1 and 3. End 16 projects substantially at right angles from the rear face of the buckle and has its terminus slightly curved in the general direction of the end 17, the entire length of the end or projection 16 being slightly in excess of twice the thickness of the belt 5. The end 17 is turned up from the rear of the buckle for a distance approximating the single thickness of the belt, and then turned outwardly beyond an end of the buckle in substantial parallelism with the face of the buckle. The arcuacy of end 16 is formed on a radius which is substantially shorter than the distance to shank 19, so that in applying the buckle to the belt it is necessary to in effect snap the end 16 through perforation 8, thereby simply retaining the buckle in place.

The buckle is attached to the belt strap simply by inserting the end 17 fully into the perforation 7 and then pressing the end 16 into engagement with perforation 8. The buckle is disengaged from the belt with equal facility, having no rivets, stitches, or staples to be removed, an advantage to the wearer, since he or she may have a belt to match each garment with but one buckle interchangeable with all the belts. In such cases the belts need not be removed from the garments, it being a relatively simple matter to detach the buckle from one belt and apply it to another. The simplicity of assembly is of primary importance to the manufacturer since such mechanical operations as sewing and riveting the buckle to the belt strap have been eliminated, resulting in substantial savings in manufacturing costs. Extension of the strip end 17 beyond the end 21 of the buckle, facilitates initial entry thereof into the perforation 7, as will be appreciated.

The end of projection 16 of the buckle is designed to engage one of the perforations 10 of the belt, the curved portion of the end 16 serving to retain the belt end 9 in contact with and parallel to the belt end 6, with the turned end 17 of the buckle being overlapped by the end 9 of the belt. No threading of the belt strap through or into the buckle is necessary. It should be noted that the various perforations 7, 8, and 10 are in the form of elongated slots rather than round holes. These elongated perforations, together with the elements 16 and 17 serve to maintain the buckle and both belt ends in substantial alignment, thus enhancing the appearance of the belt

in use. It should also be noted that the belt in use, as shown in Fig. 2 presents a neat, streamlined appearance, with no visible perforations or exposure of anchoring or fastening means. The strip 15 preferably is substantially rigid, and may be formed as a simple stamping of metal. Perforations 7 and 8 are spaced apart a distance equal to the space between perpendicular shanks 18 and 19 of the strip ends or hooks, and perforations 10 may be spaced as desired since only one is used in joining the belt ends. The length of shank 19 is substantially equal to the thickness of belt end 6.

It is to be understood that various structural and ornamental modifications may be made within the scope of the appended claims, without departing from the spirit of the invention.

What is claimed is:

1. In a device of the class described, the combination of a plain length of belting characterized by uniformity of thickness from end to end, opposite ends of the belt being apertured to form elongated slots extending transversely between the belt edges, and a buckle comprising a plate having an outer face and an inner face approximating in width the width of the belt, a rigid strip having opposite ends, and an intermediate portion fixed flatwise upon the inner face of the plate lengthwise thereof, one end of the strip being turned substantially at right angles to the plate to provide a shank, then extended toward the adjacent end of the plate in substantial parallelism therewith, said shank being in length no shorter than the single thickness of the belt, the other end of the strip being turned substantially at right angles to the plate, then projected generally in the direction of extension of said one end of the strip, to provide a hook and a shank, the shank last mentioned being of a length slightly exceeding two thicknesses of the belt applied thereto at the belt slots.

2. In a device of the class described, the combination of a plain length of belting characterized by uniformity of thickness from end to end, opposite ends of the belt being apertured to form elongated slots extending transversely between the belt edges, and a buckle comprising a plate having an outer face and an inner face, said plate having opposite ends disposed transversely of the belt, a hook having a shank extending substantially perpendicularly from the inner face of the plate and terminating in an end directed toward one end of the plate in substantial parallelism therewith, said shank being in length no shorter than the single thickness of the belt and adapted for reception in a slot of the belt, a second hook having a shank extending substantially perpendicularly from the inner face of the plate and terminating in an end projected generally in the direction of the first hook end, the shank of

the second hook being of a length exceeding two thicknesses of the belt applied thereto at the belt slots.

3. In a device of the class described, the combination of a plain length of belting characterized by uniformity of thickness from end to end, opposite ends of the belt being apertured to form elongated slots extending transversely between the belt edges, and a buckle comprising a plate having an outer face and an inner face approximating in width the width of the belt, a rigid strip having opposite ends, and an intermediate portion fixed flatwise upon the inner face of the plate lengthwise thereof, one end of the strip being turned substantially at right angles to the plate to provide a shank, then extended toward the adjacent end of the plate in substantial parallelism therewith, said shank being in length no shorter than the single thickness of the belt, the other end of the strip being turned away from the plate to extend therefrom a distance at least equal to twice the thickness of the belt, to provide an anchorage lug insertable in a slot at one end of the belt.

4. In a device of the class described, the combination of a plain length of belting characterized by uniformity of thickness from end to end, opposite ends of the belt being apertured to form elongated slots extending transversely between the belt edges, and a buckle comprising a plate having an outer face and an inner face approximating a width the width of the belt, a rigid strip having opposite ends, and an intermediate portion fixed flatwise upon the inner face of the plate lengthwise thereof, one end of the strip being turned substantially at right angles to the plate to provide a shank, then extended toward the adjacent end of the plate in substantial parallelism therewith, said shank being in length no shorter than the single thickness of the belt, the other end of the strip being turned away from the plate to extend therefrom a distance at least equal to twice the thickness of the belt, to provide an anchorage lug insertable in a slot at one end of the belt, and an appendage on the anchorage lug to resist withdrawal thereof from said slot.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,213,677	Morris et al.	Jan. 23, 1917
1,345,750	Beaumont	July 6, 1920

FOREIGN PATENTS

Number	Country	Date
494,367	Great Britain	Oct. 25, 1938

Certificate of Correction

Patent No. 2,423,668.

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ROBERT N. WIETHORN

It is hereby certified that errors appear in the printed specification of the above numbered patent requiring correction as follows: Column 4, line 33, for the words "a width" read *in width*; line 34, for "apposite" read *opposite*; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 2nd day of September, A. D. 1947.

[SEAL]

LESLIE FRAZER,
First Assistant Commissioner of Patents.