

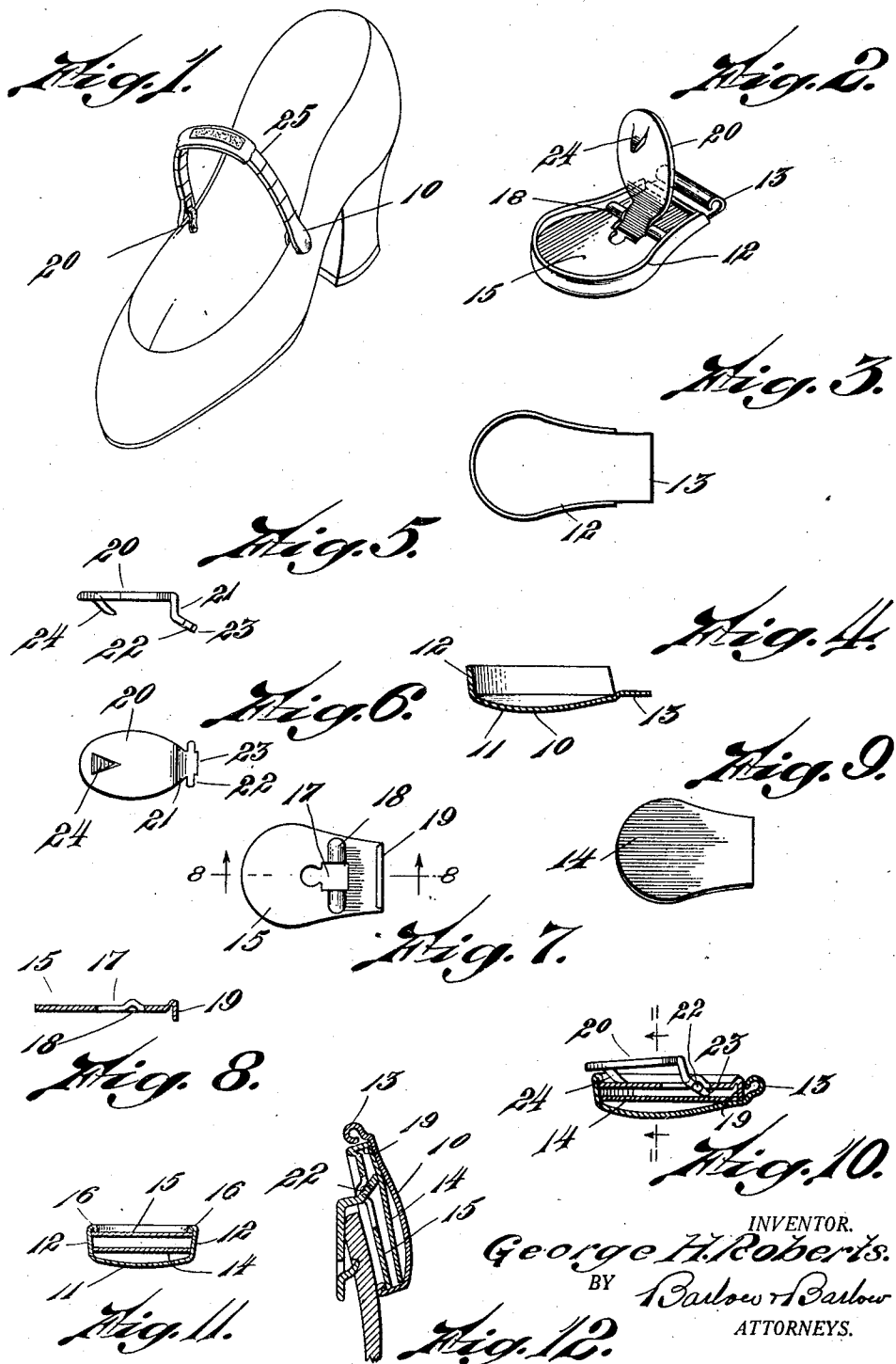
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CLASP

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CLASP.

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This invention relates to an improved construction of clasp more particularly adapted for use as a connector for straps such as shoe straps or the like; and has for its object to provide a clasp or connector of this character comprising a pair of jaws operably connected together, one of the jaws being provided with a tooth or spur on its inner surface to engage and bite the side of the shoe or other material to be gripped between it and the opposite jaw.

A further object of the invention is to form the clasp or connector with a body jaw which is toothless on its biting surface and a cooperating lever jaw having a single penetrating tooth on its biting surface, means being provided for pressing these jaws toward each other to firmly grip the material to which the connector is to be attached between the jaws and to also provide means on the connector by which it may be attached to the strap or the like.

A still further object of the invention is the provision of a strap connector of this character having a body member forming one gripping jaw, this member having a front wall, edge walls, a rear wall and an intermediate resilient wall and to also provide a cooperating lever jaw which is pivoted in the rear wall and pressed by said resilient wall towards closed position to force the spur or tooth which is formed on the gripping surface of the lever jaw to grip the shoe or material to which it is to be attached against the body jaw.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described, and particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a perspective view showing a strap attached to the side edges of a shoe by means of the strap connector members at either end thereof.

Figure 2 is a perspective view showing the under side of one of the clasps or strap connectors with the jaws separated.

Figure 3 is a plan view of the outer shell portion of the body jaw.

Figure 4 is a side elevation of the outer shell portion of the body jaw.

Figure 5 is a side elevation of the lever jaw.

Figure 6 is a top view of the lever jaw.

Figure 7 is a plan view of the under side of the body back plate.

Figure 8 is a section on line 8—8 of Figure 7.

Figure 9 is a perspective view of the intermediate body spring plate.

Figure 10 is a sectional view of the lever jaw as pivotally mounted in the body jaw.

Figure 11 is a sectional elevation on line 11—11 of Figure 10 showing the inclined side walls of the body jaw by which the back plate and intermediate plates are retained in their set positions.

Figure 12 is a sectional elevation illustrating the clasp or strap connector as attached to the edge of a shoe upper.

It is found in providing a connector or clasp for connecting the ends of a shoe strap to the side edges of a shoe, of advantage to form the gripping face of the outer jaw smooth or toothless so as not to abrade, disfigure or injure the outer surface of the shoe permitting it to be subsequently worn without the strap, if desired; also it is found of importance to provide a tooth on the biting face of the inner jaw for penetrating the inner surface or wall of the shoe so that it will effectually prevent the clasp or connector from slipping from the shoe to release the strap even when the latter is under a heavy strain which is often the case when the wearer is walking or dancing. Then again, by the provision of a single gripping tooth on the inner surface of the clasp or connector it is permitted a pivoting motion to rock back and forth on the edge of the shoe and follow the vibrating or swinging motion of the band due to the moving muscles of the foot while walking or dancing and so by this pivoting motion on the single tooth to prevent abrading or unduly injuring the inner face of the shoe; and the following is a detailed description of the present embodiment of my invention and showing one means by which these advantageous results may be accomplished:—

With reference to the drawings, 10 designates the body jaw which is stamped up from sheet metal and which comprises a front wall 11 side edge walls 12 and a foldable neck portion 13. These edge walls are somewhat inclined inwardly toward the front wall, as best shown in Figure 11 and into this body portion is set a spring plate 14 its edges resting against these inclined

walls 12 and is spaced a short distance from the front wall 11. The rear wall 15 of the body is set in position in the body with its marginal edges resting against the inclined edge walls 12 and the edges of these walls are rolled over as at 16 onto the back plate 15 to bind it securely in position. This back plate is provided with an opening 17 through it through which the end of the lever jaw, presently described, extends and is provided with transverse recesses 18 on its under side on opposite sides of the opening 17, also its rear end is turned inwardly as at 19 to rest against the back of the front plate and form a spacer for this end of the back plate.

The lever jaw 20 of this clasp is provided with an inwardly turned neck portion 21 to extend through the opening 17 in the back plate 15 and is provided with a pair of laterally-extending pivot arms 22 which engage the recesses 18 in the inner face of the back plate. This neck portion is provided with a slight extension 23 beyond these pivot pins to engage and rest upon the resilient plate 14 in the body jaw thereby causing the lever jaw to be pressed to closed position and at the same time permitting it to be swung back to open position and retained in this position when desired.

When this clasp or connector is employed for attaching the ends of a strap such as an instep strap to a shoe, it is found of advantage to form the body jaw without teeth so as not to injure the finish of the outside surface of the shoe upper to which it is attached and it is also found of advantage to provide a tooth 24 on the inner face of the lever jaw which is preferably cut and raised from the stock of this jaw and is set to pitch or extend on an angle in the direction of pull or towards the rear of the clasp where the strap is attached so that it will penetrate the material of the inner surface of the shoe and positively prevent accidental withdrawal of the clasp therefrom even while under severe strains upon the strap due to walking and dancing.

In order to provide simple and effective means for attaching this clasp or connector to the band 25, I roll this extending portion 13 up into eye-form to engage a corresponding bar in the band by which arrangement the clasp or connector is flexibly or pivotally attached in position.

My improved clasp or connector is very simple and practical in construction and is effective in its operation and by its use the ends of the band, strap or similar device may be quickly attached to a shoe or other article and will strenuously resist being accidentally withdrawn therefrom until the jaws are separated permitting a ready removal from its operating position.

The foregoing description is directed sole-

ly towards the construction illustrated, but I desire it to be understood that I reserve the privilege of resorting to all the mechanical changes to which the device is susceptible, the invention being defined and limited only by the terms of the appended claims.

I claim:

1. A strap connector comprising a body having a front plate with side walls, a diaphragm spring in said body, a back plate having its edge engaging the side walls and held in position by the folded-in edge of said side walls, one of said plates having an eye for attachment to the strap, bearings in said back plate, a lever jaw having pintles in said bearings and swingable towards and from said back plate to clamp between it and the back plate an article to which it is desired to attach said strap, and a tongue portion on said lever engaging said spring to be forced thereby into clamping position or when said lever is swung thru substantially 90° to then force or hold said lever in open position.

2. A strap connector comprising a body having an outwardly bellied front plate with side walls, a diaphragm spring spanning the bellied portion of said front plate and bendable thereinto, a back plate having its edge engaging the side walls and spaced from said spring, said back plate being held in position by the folded-in edge of said side walls, one of said plates being extended and having an eye for attachment to the strap, bearings in said back plate, a lever jaw having pintles in said bearings and swingable towards and from said back plate to clamp between it and the back plate an article to which it is desired to attach said strap, and a tongue portion on said lever engaging said spring to be forced thereby into clamping position or when said lever is swung thru substantially 90° to then force or hold said lever in open position.

3. A strap connector comprising a body having an outwardly bellied front plate with outwardly inclined flaring side walls, a diaphragm spring spanning the bellied portion of said front plate and bendable thereinto, a back plate having its edge engaging the flaring side walls at a position to space it from said spring, said back plate being held in position by the folded in edge of said side walls, one of said plates being extended and formed into an eye for attachment to the strap, bearings in said back plate, a lever jaw having pintles in said bearings and swingable towards and from said back plate to clamp between it and the back plate an article to which it is desired to attach said strap, and a tongue portion on said lever engaging said spring to be forced thereby into clamping position or when said lever is swung thru substantially 90° to then force or hold said lever in open position.

4. A strap connector comprising a body having an outwardly bellied front plate with side walls, a diaphragm spring spanning the bellied portion of said front plate and bend-
5 able thereinto, a back plate having its edge engaging the side walls and spaced from said spring, said back plate being held in position by the folded-in edge of said side walls, one
10 of said plates being extended and formed into an eye for attachment to the strap, a lever jaw pivotally supported in said back plate and having a tongue to engage said
15 spring, and a spur on said lever jaw to engage the article to which it is desired to attach said strap and assist in holding against a tension on the strap.

5. A strap connector comprising a body having a pair of plates, a diaphragm spring

between said plates, one of said plates being extended and having an eye for attachment
20 to the strap, bearings in one of said plates, a lever jaw having pintles in said bearings and swingable towards and from the plate carrying bearings to clamp between it and
25 the plate an article to which it is desired to attach said strap, a tongue portion on said lever engaging said spring to be forced thereby into clamping position or when said
30 lever is swung thru substantially 90° to then force or hold said lever in open position, and a spur on said jaw inclined to resist the pull of said strap on said attaching eye.

In testimony whereof I affix my signature.

GEORGE H. ROBERTS.