C. WEST.

FASTENING DEVICE.

APPLICATION FILED MAR. 3, 1920.

1,373,782.

Patented Apr. 5, 1921.

Fig. 1.

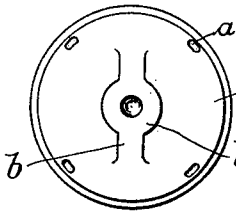


Fig. 2.

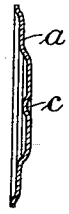


Fig. 3.

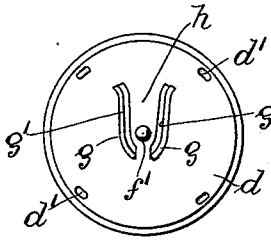


Fig. 4.

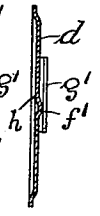
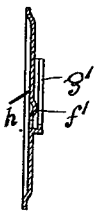


Fig. 4A.



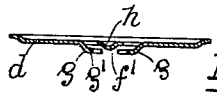


Fig. 5.

Fig. 6.

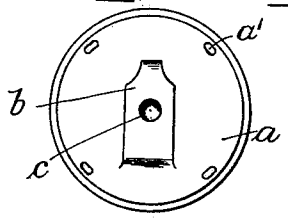


Fig. 7.

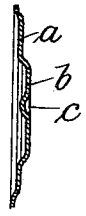


Fig. 8.

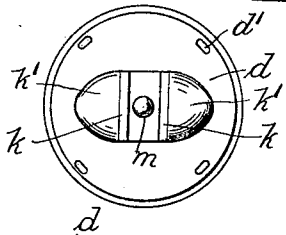


Fig. 9.

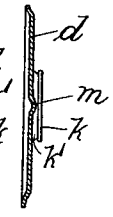




Fig. 10.

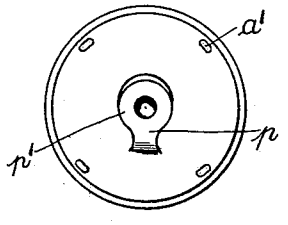




Fig. 11.

Fig. 12.

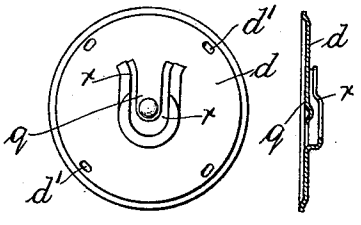


Fig. 13.

Fig. 14.

INVENTOR.

C. West.

UNITED STATES PATENT OFFICE.

CHARLES WEST, OF LONDON, ENGLAND.

FASTENING DEVICE.

1,373,782. Specification of Letters Patent. Patented Apr. 5, 1921.

Application filed March 3, 1920. Serial No. 363,075.

To all whom it may concern:

Be it known that I, CHARLES WEST, a subject of the King of Great Britain and Ireland, residing at London, England, have invented certain new and useful Improvements in Fastening Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to fastening devices for dresses, clothes and the like and refers to that class of fastening formed in two parts, one part having a raised tongue or bridge adapted to engage between the turned up edges of the other part.

In fastening devices of this type it has been proposed to form one member with downwardly and outwardly inclined edges, so as to engage the upwardly and inwardly turned inclined edges of the other part, the one part having a point or stud which, when the two parts are in engagement enters a hole in the other part. It has also been proposed to bend the outer opposite edges of one part inwardly and to attach to the other part two outwardly and oppositely extending tongues adapted to engage beneath the inwardly turned edges of the other part, the two parts being retained in engagement by a stop. In other forms the one part has attached thereto a stud or button with an enlarged head adapted to engage a keyhole slot or recess in the other part.

According to the present invention the two members of the device are preferably formed by stamping. One of the members is formed or provided with a centrally disposed slightly projecting bridge or tongue which may be of rigid or springy metal. The other portion simply consists of a metal plate, having a receptive portion formed with sides arranged parallel or in the shape of a U or the like, the receptive portion being formed by stamping up or otherwise raising thereon, near the center of the plate upwardly and inwardly extending sides, so that they come above the general level of the plate, leaving the tongue between them.

The other half of the fastener is provided with a member constituted by a tongue or by a bridge or the like which is formed narrow at one end or with an enlarged central portion said bridge projecting somewhat above the general level of the plate.

The relative dimensions of the two parts of the fastener are such that the member provided with the tongue, bridge or the like can be slid with respect to the other part, so that it enters at the one end of the receptive portion and, as it is drawn along the same, the edges of the bridge come under the inwardly projecting edges forming the outline of the receptive portion, thus constituting a secure fastener.

I prefer to provide additional means for holding the parts locked together after they have been engaged. This means may consist of a projection or projections on the bridge adapted to engage in a recess or recesses on the tongue, of the receptive portion. Or again the projections may be on the receptive portion, while the recess or recesses may be in the bridge.

And in order that my said invention may be clearly understood I will now proceed to describe the same with reference to the drawing accompanying this specification, which shows by way of example and to a greatly enlarged scale a number of forms of fasteners made according to my invention.

Referring to Figures 1 to 5, in which Fig. 1 and Fig. 2 show respectively a plan and section of one member of the fastener, Figs. 3, 4, and 5 are a plan and two sections at right angles to one another of the other member of the fastener while Fig. 4^a is a vertical section of a modified form of the member shown in Figs. 3 to 5. The member shown at Figs. 1 and 2 consists of a plate a which is preferably provided with perforations a^1 to enable it to be sewn to the material. This plate a is formed or stamped with a bridge b, having a central perforation or recess c.

The other half of the fastener consists of a plate d stamped up on each side substantially of the shape of a U at g g but the U is broken at the bottom. The tongue h may either be formed as shown in Fig. 4^a, or it may be continued as shown at Figs. 3 and 4, so that it forms a bridge rejoining the metal of the plate between the turned up portions g. The edges g^1 of the turned up portions are bent over as shown clearly at Fig. 5. When the tongue is used, as shown in Fig. 4^a, the U piece is continued around and not broken, as shown in this figure the lower ends of the turned up portions g being joined together.

With this construction it is simply neces-

sary to slide the enlarged portion b^1 of the bridge b downward under the turned over edges g^1 of the U shaped piece g until the springy portion f^1 of the tongue or bridge h engages the hole c.

Figs. 6 to 10 are similar views to Figs. 1 to 5 of another form of fastening.

In this case one of the members, namely that illustrated at Figs. 6 and 7 is provided with a bent up bridge b furnished with a perforation or recess c.

The other member illustrated at Figs. 8 to 10 is provided with two parallel stamped out and turned over portions k k as will be seen clearly from the drawing and m is an embossed head located between the stamped portions k.

On the outer sides of the stamped up portions k k, the metal is formed with a projecting rib k^1 k^1 to give additional strength.

With this construction it is simply necessary to slide the bridge between the turned in portions k of the other part of the fastening until the hole or recess c engages over the head m. The bridge b owing to its formation cannot slide entirely through between the bent up portions k k.

Figs. 11 to 14 show further modifications. In this case the plate a is provided with a tongue p carrying a central disk or button p^1. The other part of the fastening is formed with a tongue q of U shape, the outer edges of the U being bent over at r.

With this form of fastener the raised edges of the U shaped portion are stepped up on the inside, as seen clearly at Fig. 14. This stepped up portion forms a recess or pocket into which the disk or button p^1 is drawn when the members of the fastener are completely engaged and the construction acts in a similar manner to the head, engaging with a recess in the other form of the fastener to prevent self dis-engagement.

In some cases where the members are stamped out from plates the bridge and receptive portion therefor may be stamped up without cutting through the metal of the plate.

It will be understood that the particular method of constructing the members of the device may be varied without departing from the principle of my invention.

Devices of the foregoing description possess the great advantage as compared with those at present in use, that they can be passed through washing and like machinery without becoming damaged, as the parts are so stamped, that the pressure, such as that produced by passing them through wringing rollers will not bend them out of shape.

What I claim as my invention and desire to secure by Letters Patent of the United States of America is:—

1. A fastening device of the type described consisting of two members each formed from a single piece of material, one of said members constituting a bridge portion comprising a plate having raised centrally thereon a bridge, said bridge extending above the general level of the plate, and formed of restricted width at at least one end and a second member constituting a receptive portion comprising a plate having raised thereon two upwardly and inwardly projecting sides spaced apart to receive the bridge of the other member the tongue located between the projecting sides having a central recess adapted when the parts are engaged with one another to receive a bead pressed out centrally of the bridge portion to prevent self disengagement, for the purposes set forth.

2. A fastening device of the type described comprising a bridge portion and a receptive portion each formed of a single piece of material, the bridge portion comprising a plate having raised centrally thereon a bridge extending above the general level of the plate and joined thereto at each end, the width of which at, at least one end is restricted, while the receptive portion comprises a plate having raised thereon two upwardly and inwardly projecting sides, the inner edges of which are spaced apart to receive the end of the bridge of restricted width, the material between the upwardly projecting sides constituting a tongue having a central recess formed thereon to engage a central bead, on the bridge of the bridge portion, for the purposes set forth.

3. A fastening device of the type described comprising a bridge portion and a receptive portion each formed of a single piece of material, the bridge portion comprising a plate having raised centrally thereon a bridge extending above the general level of the plate and joined at each end thereto, the width of the bridge being restricted at at least one end, while the receptive portion comprises a plate having raised thereon two upwardly and inwardly extending sides, spaced apart to receive either end of the bridge formed on the bridge portion, the material between the sides of the receptive portion constituting a tongue and formed with a recess with which engages a bead on the bridge of the bridge portion when the two members are in engagement for the purposes set forth.

4. A fastening device of the type described comprising a bridge portion and a receptive portion each formed from a single piece of material, the bridge portion comprising a plate having raised centrally thereon a bridge extending above the general level of the plate and joined at each end thereto, the width of the bridge at one portion thereof being greater than the width over the remaining portion, while the re-

ceptive portion comprises a plate having raised thereon, so as to extend above the general level of the plate, two upwardly and inwardly projecting sides, open at each end, the upwardly projecting sides of the receptive portion being spaced apart to retain the wide portion of the bridge of the bridge portion, for the purposes set forth.

5. A fastening device of the type described, comprising a bridge portion and a receptive portion each formed from a single piece of material, said bridge portion comprising a plate having raised centrally thereon a bridge, said bridge being of restricted width at at least one end, extending above the general level of the plate and parallel with the upper surface thereof and being joined to said plate at at least one end, while the receptive portion comprises a plate having raised thereon two receptive upwardly and inwardly projecting sides, the inwardly projecting sides being above the general level of the plate and their inner facing edges being spaced apart to permit of the passage of the end of the bridge of restricted width, the material of the plate between the sides of the receptive portion constituting a tongue having a recess with which engages a bead on the bridge when the two members are engaged, for the purposes set forth.

In witness whereof I affix my signature.

CHARLES WEST.