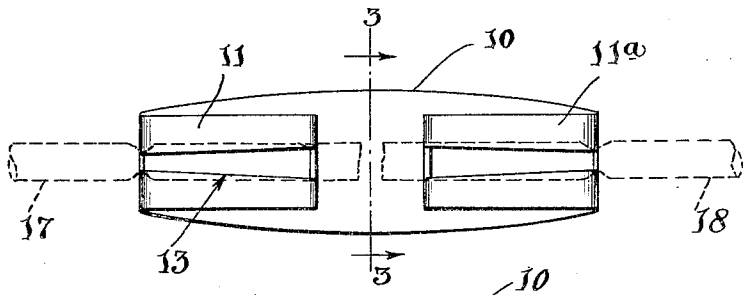
Aug. 2, 1932. A. BUSCHHAUS 1,870,172

FASTENING DEVICE

Filed May 21, 1932

Fig. 1.



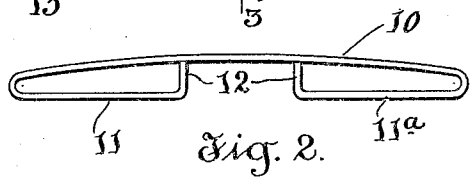
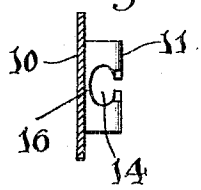


Fig. 2.

Fig. 3.



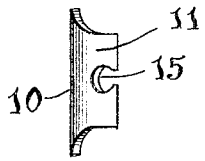


Fig. 4.

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UNITED STATES PATENT OFFICE

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FASTENING DEVICE

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This invention relates to fastening devices which are adapted for use with elastic cords, elastic bands and the like, and such fastening devices are preferably in the nature of couplings for the opposite ends of such cords or bands, which are thereby preferably made endless in effect, and which may therefore be used with stockings, underwear and other wearing apparel by drawing them or rolling them thereinto so that they serve as means for holding such articles of apparel in desired wearing position.

An object of the present invention is to provide a fastening device of such a construction that an end of an elastic cord or band will automatically tighten itself therein when properly applied thereto.

Another object of the invention is to provide a fastening device with pinching portions which are spaced away from the body or plate which supports them, for a distance less than the thickness of the elastic cord, elastic band, etc., whereby to promote the automatic tightening or securement of the end of the cord or band.

Another object of the invention is to provide fastening devices of the class referred to, which are of very simple construction and yet exceedingly satisfactory and efficient when in use.

These being among the objects of the present invention, the same consists of certain features of construction and combinations of parts to be hereinafter described and then claimed with reference to the accompanying drawing illustrating two embodiments of the invention and wherein

Fig. 1 is a plan of the preferred form, an elastic cord being indicated in broken lines;

Fig. 2 is a side elevation thereof;

Fig. 3 is a cross-section on the line 3—3, Fig. 1; and

Fig. 4 is an edge elevation of one end of the fastener.

Referring to the drawing, the preferred construction of such fastening device comprises a main body 10 which is preferably composed of sheet metal so that such body is in the form of a plate, which is preferably elongated and provided at the end edges with a pair of tongues 11, 11*a*. Each of the tongues is preferably formed by bending the same inwardly from the end edges of the plate or body so that they will be directed the one towards the other.

In some cases one of the tongues 11, 11*a* might be omitted and replaced by some other securing means, and when two tongues are employed they are both preferably located opposite one face of the body or plate 10. Whether one or two tongues are employed, each tongue is provided at its inner end with an inwardly turned or bent end portion 12 which serves as means for spacing the main body of the tongue away from the plate 10. Each tongue is provided with a slit 13 whereby opposite side portions of the tongue are spaced away from each other for a slight distance. Preferably this slit 13 is narrower towards the connecting end of the tongue than towards its inner end. such slit extending into the outer bend of the tongue as well as into the inturned end portion 12. so as to enable the introduction thereinto of one end of an elastic cord or band. The ends of the slit 13 are terminated by an enlarged opening 14 in the inturned end portion 12 and an enlarged opening 15 in the connecting bent portion between the main body of the tongue and the plate 10. A portion 16 of the tongue remains between the opening 14 and the terminal of the tongue, thereby forming a slight connecting bridge. In the drawing the device is shown larger than in practice. as in practice the fastening device is used for securing the end of a comparatively small elastic cord or band. Preferably the proportions of the parts of the fastener are such that the distance between the edges at opposite sides of the slit 13 is less towards the base or connecting portion of the tongue than towards the inner end of the tongue. with the result that the material of the end of the cord which is inserted into the slit is pinched towards the outer end of the slit. because such end of the slit is of less transverse dimension than that of the cord or band. To insert one end of the cord or band into the slit. it is only necessary to press with the thumb nail upon the terminal thereof and then with the other hand

pull the cord or band so as to stretch and narrow the same, thereby enabling its introduction laterally into the slit 13, and then on releasing such other hand from the cord or band, the latter will resume its unstretched condition and automatically tighten itself within the slit, the converging edges of the tongue portions at opposite sides of the slit acting automatically to pinch some of the material of the cord or band and secure the latter in place. The end of the cord or band when applied is pressed down into the enlarged openings 14, 15, and inasmuch as each tongue 11, 11*a* is spaced also a less distance from the plate or body than the thickness of the elastic cord or band, the holding effect is augmented when the cord is released and allowed to resume its unstretched condition.

In both of the illustrated forms of the invention it is obvious that the tightening of the ends of the elastic cord or band may be facilitated by inclining the tongues silghtly towards the plate or body so that the distance from the same decreases toward the narrowed ends of the slits, inasmuch as the end of the cord will be pressed closely in between the tongue and plate or body. In Fig. 1, two end portions 17, 18 of a cord are shown in broken lines as connected by the device.

It is obvious that the invention is susceptible to more or less modification as will be obvious to those skilled in this particular art.

What is claimed as new is,—

A fastening device of the class described, comprising a metallic body having a tongue bent back from an edge of the body and spaced away from such body, the inner end of the tongue being bent inwardly towards the body, such tongue having a longitudinal slit, and also having enlarged openings in the portion at such edge and in the inwardly bent end, which openings are connected by such slit.

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