Dec. 17, 1935. G. FELTGEN 2,024,634

CLASP

Filed Sept. 15, 1934

Fig. 1

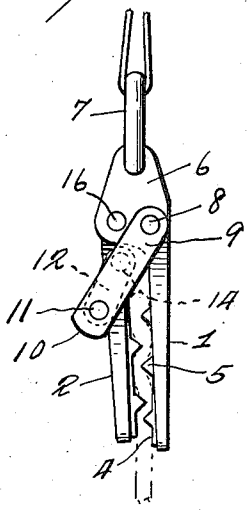


Fig. 2

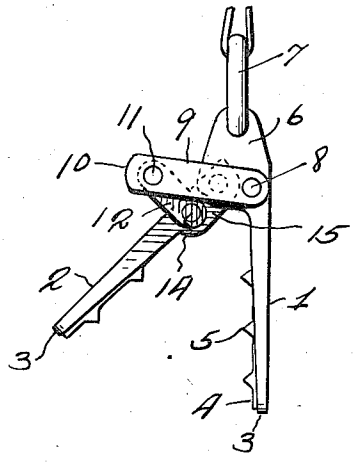


Fig. 3

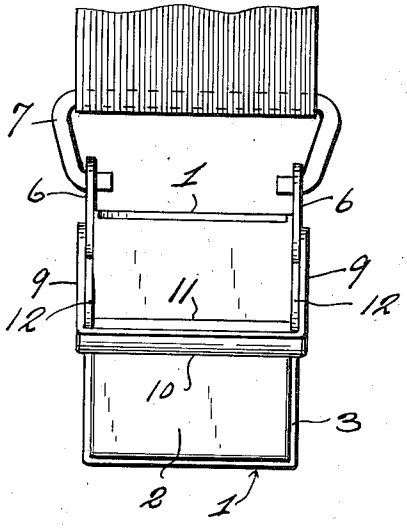
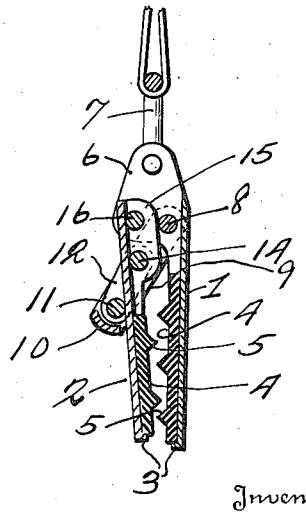


Fig. 4



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Patented Dec. 17, 1935 2,024,634

UNITED STATES PATENT OFFICE

2,024,634

CLASP

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Application September 15, 1934, Serial No. 744,216

1 Claim. (Cl. 24—248)

This invention relates to a clasp, and it is primarily an object of the invention to provide a device of this kind comprising two relatively movable jaws having associated therewith a lever locking mechanism whereby said jaws may be readily separated when desired or caused to effectively grip the work.

Another object of the invention is to provide a device of this kind which is of advantage in connection with suspenders for clothing and which operates in a manner eliminating the requirement of buttonholes.

An additional object of the invention is to provide a device of this kind comprising two relatively movable jaws, the opposed or working faces of the jaws having disposed thereover a facing of rubber or other yielding material to allow effective gripping action of the jaws without marring or injuring the work with which said jaws engage.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved clasp whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be the better understood, I will now proceed to describe the same with reference to the accompanying drawing, wherein:—

Figure 1 is a view in side elevation of a clasp constructed in accordance with an embodiment of my invention and in clamping position, the associated work being indicated by broken lines;

Figure 2 is a view similar to Figure 1 with the jaws in open position;

Figure 3 is a view in front elevation of the device as illustrated in Figure 1;

Figure 4 is a sectional view taken lengthwise through the structure as illustrated in Figure 3.

As disclosed in the accompanying drawing, my improved clasp comprises two flat plates or jaws 1 and 2 each having its outer end margin and its side margins defined by the flanges 3 extending beyond the inner face of the jaw. These flanges 3 facilitate the placement of the facing 4 which is disposed over the major portion of the working face of the jaw and which is of rubber or other desired yielding material. The facings 4 allow the clasp to be effectively engaged with fabrics without marring or injuring the same yet materially increasing the holding or gripping action. For this latter purpose the facings 4 preferably have disposed thereacross the outstanding ribs 5 with the ribs 5 of the facing of one jaw alternating with the ribs 5 of the facing of the second jaw as is particularly illustrated in Figures 1 and 4 of the drawing.

The rear portions of the side flanges 3 of the plate or jaw 1 are transversely enlarged, as at 6, to provide plates which extend beyond the rear end of the plate or jaw 1 proper. The outer or free extremities of the plates 6 are adapted to have suitably connected therewith the clevis or bail 7 for connecting the clasp in its entirety to a suitable supporting member if so desired and especially when the clasp is employed in connection with suspenders for garments.

The plates 6 extend a material distance beyond the working face of the plate or jaw 1 and a desired distance inwardly of the rear edge thereof and said plates 6 closely adjacent to the plate or jaw 1 are connected by a pin 8 which extends a sufficient distance outwardly of the plates 6 to allow for the attachment thereto of the free or outer end portions of the side arms 9 of the substantially U-shaped lever 10. The pin 8 is employed for facility and economy in production as it is to be understood that the arms 9 of the lever 10 may be pivotally connected to the plates 6 in any manner which can be employed with facility.

The arms 9 of the lever 10 at their outer extremities are tied or connected by a cross member or bar 11 which provides a mounting for the rigid links 12 immediately adjacent to said arms 9 and inwardly arranged with respect thereto. These links 12 also have pivotal connection with a pin 14 connecting the side flanges 3 of the second plate or jaw 2 at the rear portion thereof and which portion is preferably transversely enlarged as indicated at 15.

The portions 15 also have operatively disposed therethrough the pintle 16 carried by and interposed between the plates 6 of the jaw 1 outwardly of and parallel with the pin 8. This pintle 16 therefore provides a pivoted or swinging connection between the plates or jaws 1 and 2 at the rear portions thereof whereby may be obtained the desired movement of one of said jaws with respect to the other. The pin 8 and pintle 16 are also preferably arranged side by side in a plane substantially at right angles to the rear portion of the plate or jaw 1 although this may be slightly varied to a reasonable degree.

When the lever 10 is swung in a direction away from the plate or jaw 1 the links 12 will effect a similar swinging movement of the plate or jaw 2 so that said jaw 2 may assume the open position as generally indicated in Figure 2 of the drawing. The work is inserted between the open or separated plates or jaws 1 and 2 whereupon the lever 10 is swung forwardly and inwardly with respect to the jaws 2 and 1 and which operation through the medium of the links 12 throws or swings the plate or jaw 2 toward the jaw or plate 1 with a resultant tight gripping of the work between the jaws or plates 1 and 2 or more particularly the facings 4 as indicated by dotted lines in Figure 1 of the drawing.

As the lever 10 is swung toward the jaws 1 and 2 and before said lever reaches the end of its swinging movement by contact of the bar 11 with the plate or jaw 2, the pin 14 will be beyond the plane occupied by the pin 8 and bar 11 or, in other words, said pin 14 will be beyond the center as determined by the plane of the pin 8 and bar 11. This results in an effective locking of the lever 10 with the jaws or plates 1 and 2 in effective clamping relation with the further result that the greater the pull imposed upon the jaws 1 and 2 by the work gripped therebetween the tighter will be such locking action. It is to be further noted that with the lever 10 in its active position as illustrated in Figures 1 and 4 of the drawing, the plates or jaws 1 and 2 can only be separated by direct pull being imposed upon the lever 10.

From the foregoing description it is thought to be obvious that a clasp constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some change and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:—

A clasp comprising a jaw provided with transversely spaced parallel plates at the rear portion thereof disposed at right angles to the face of said jaw, a second jaw having an end portion extending between the plates of the first jaw, said end portion of the second jaw having transversely spaced flanges, a pintle bridging the space between the plates of the first jaw and disposed through the flanges of the second jaw for pivotally mounting the second jaw, a U-shaped jaw operating lever having its side arms pivotally connected with the plates of the first jaw at points inwardly of the pintle and having the bight thereof disposed in contacting relation with the second jaw when closed, links pivotally connected with the outer portion of the side arms of the lever closely adjacent the bight thereof and with the transversely spaced flanges of the second jaw at points spaced from but in relatively close proximity to the pintle, the bight of the lever being concave on its inner side and the pivotal connection between the outer ends of the links and the outer portions of the side arms of the lever being disposed within the concave side of the lever.

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