

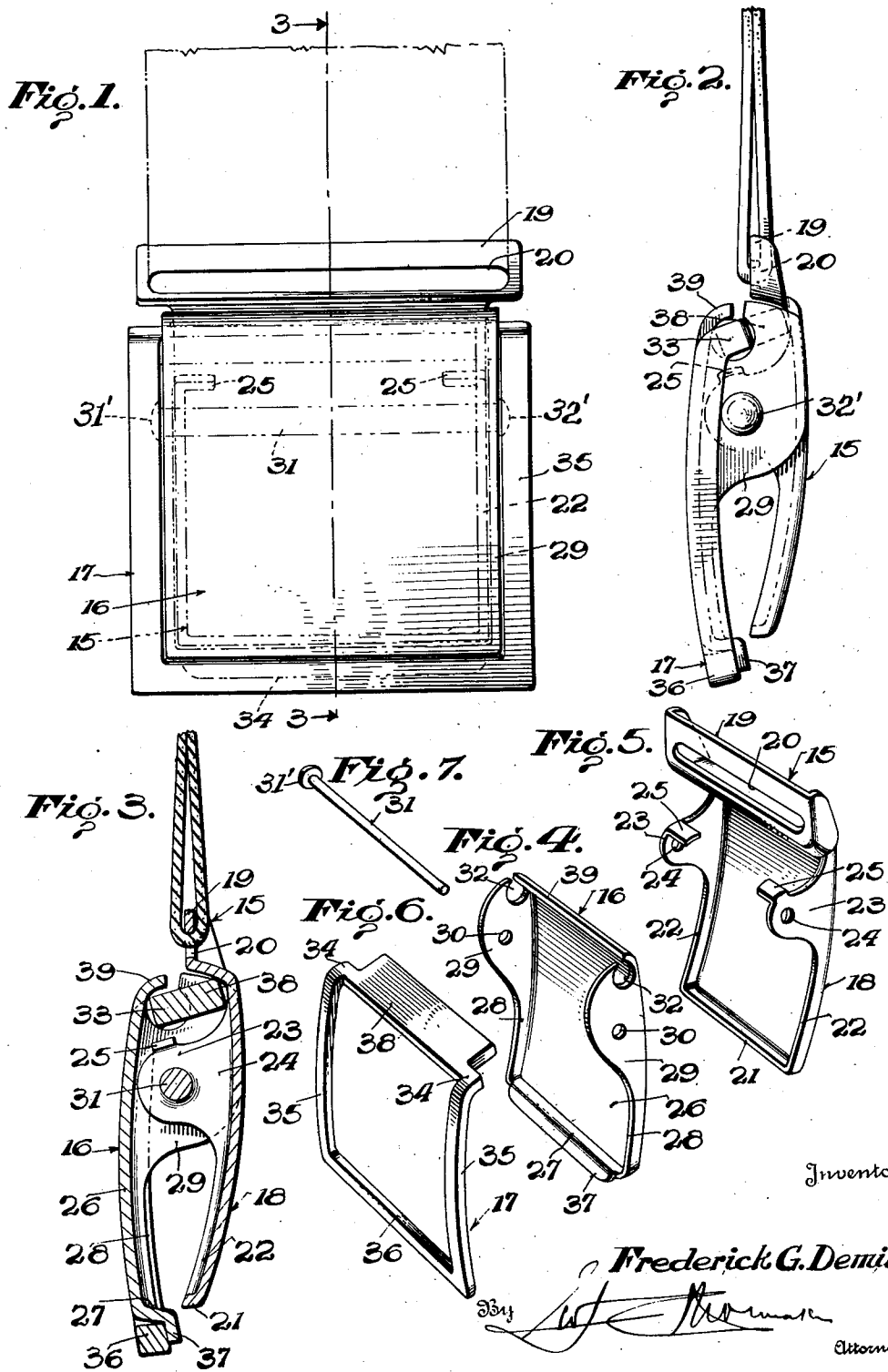
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GARMENT CLASP

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GARMENT CLASP

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The present invention relates generally to garment clasps, and more particularly to a clasp of the type embodying opposing pivoted jaw members and a locking lever to effect the closing of the jaw members, especially adapted for use as an end clip for suspenders, garters and the like.

Among its many objects, the invention aims to provide a novel construction embodying a minimum number of readily formed and easily assembled parts which will, as a whole, be strong, effective and durable in use.

Another object of the invention is the provision of a construction of garment clasp of the above type, in which the parts are relatively arranged, constructed and are cooperative in a manner to do away with the necessity of springs such as are ordinarily present for the purpose of opening the jaws when the latter are released.

Further objects of the invention will be better understood in the course of the following detailed description thereof, and by reference to the accompanying drawing, which latter forms a part of this specification, and in which

Figure 1 is a front elevation of the improved clasp.

Figure 2 is a side view thereof.

Figure 3 is a central vertical longitudinal section taken therethrough.

Figure 4 is a detail perspective view of the upper jaw in inverted position.

Figure 5 is a detail perspective view of the lower jaw, and

Figure 6 is a similar view of the locking member or lever.

Figure 7 is a perspective view of the clasp pintle pin.

Referring now to these figures, the improved clasp according to the present showing embodies but four parts, namely, an inner jaw 15, an outer jaw 16 and a locking lever 17, and its pivot pin 31.

The inner jaw 15 consists of a rectangular plate 18 which as plainly seen in Fig. 5 is slightly curved from its front to its rear ends and is provided at the latter end with an offset extension 19 having a slot 20 therein so that this extension forms an integral strap or tape guide to receive a portion of the garter or suspenders with which the clasp is used in practice.

Along its front edge, the inner jaw 15 has a flange 21, in connection with similar flanges along the side edges thereof as seen at 22. These side flanges 22 merge into enlarged side ears 23 positioned intermediate the ends of the jaws,

the ears having transversely aligned openings 24 and being also provided with inwardly laterally projecting lugs 25 opposite to one another and opposite the openings 24.

The outer jaw 16 is also formed of a flat rectangular plate 26 which is curved from front to rear and is provided along its forward edge with a flange 27 and along its side edges with side flanges 28. As in the case of the inner jaw 15 the side flanges 28 of the outer jaw 16 merge into enlarged angular ears 29, the dimensions of the outer jaw 16 in respect to those of the inner jaw 15 adapting the ears 29 of the outer jaw to depend along the outer faces of the ears 23 of the inner jaw as plainly seen by a comparison of Figs. 2 and 3.

Unlike the ears 23 of the inner jaw, however, the side ears 29 of the outer jaw extend to the rear end of the jaw, the forward portions of these ears 29 having openings 30 for alignment with the openings 24 of the inner jaw to receive a transverse pivot pin 31 having a preformed head 31' at one end and the other end of which is subsequently riveted as at 32' (Figure 1) to hold the pin in position and which thus forms a pivot intermediate the ends of the jaws upon which they are shiftable to open and closed positions.

At their rear ends, the side ears 29 of the outer jaw 16 are provided with rearwardly opening slotted apertures 32 in which the rear cross bar 33 of the locking lever 17 is movably disposed adjacent to its opposite ends, those portions of the cross member 33 constituting its pivot portions being indicated at 34 and located between the rear ends of the side bars 35 of the locking lever and the ends of the wedge member 38.

In addition to its rear cross member 33 the locking lever includes curved side bars 35 and an outer bar 36, respectively, which with the rear cross bar 33 thus forms an open substantially rectangular frame and it will be noted that this open frame is so proportioned and shaped that in the closed position of the clasp it does actually frame the outer jaw 16, the curved side bars 35 extending along the curved sides of said outer jaw and the outer bar 36 extending along the front flanged edge of the outer jaw, the latter of which it will be noted is provided with a forwardly projecting lip 37 against which the outer bar 36 of the locking lever rests in the closed position. The lip 37 thus forms a stop for the locking lever in this position and presents a smooth edge for engagement of fabric

thereby eliminating chance of injury to fabric, and making possible easier application to a garment.

It will thus be seen that the open frame is substantially rectangular in formation and lies in the same plane as the curved outer jaw 16 when the parts are in operative relation and that the whole or full face of the outer jaw is exposed to view. The result is that the face of the outer jaw is not obscured by the locking lever and the locking lever is more readily grasped by a thumb and finger to operate the same than would be the case if the locking lever were disposed within the area of the outer surface of the outer jaw. In view of the open frame type of locking lever the same is readily manipulated in that it is not necessary to insert a finger nail between the face of the jaw and the locking lever and in that the locking lever in the present case may be readily grasped by a thumb and finger either at the outer bar of the frame or along the side bar of the frame or at the corners between the side bars and the outer bar of the frame.

The rear cross bar 33 of the locking lever is provided, between its pivot portions 34 with an extension 38 projecting approximately at right angles with respect to the body plane of the locking lever 17 and so arranged that when the lever is moved downwardly to closed position it will engage as a wedge against the rear portion of the inner jaw, rearwardly of the side ears of the latter so that bearing as it does between those portions of the jaws rearwardly of their pivots, it will force the forward effective ends of the jaws toward one another into clasping relationship.

It is to be particularly noted that the rear cross bar 33 of the locking lever is assembled in the first instance in connection with the outer jaw 16 by shifting said cross bar into the slotted rearwardly opening apertures 32 and is thereafter confined in pivotal relationship with the outer jaw by turning inwardly the rear edge of the outer jaw in the form of a curved flange 39 which has the effect of constricting the apertures 32 so that the locking lever 17 is thus supported in its entirety by the outer jaw.

It is also to be noted and may be seen in Fig. 3 that the wedge extension 38 of the locking lever is spaced from the projecting lugs 25 of the side ears 23 of inner jaw 15. However, when the lever 17 is raised from its locking position in which it frames the outer jaw as above stated, this movement which is a pivotal movement on the pivot portions 34 of the locking lever, causes the wedge extension 38 of the locking member to swing forwardly and upwardly out of contact with the rear portion of the inner jaw and against the lugs 25 which project into the path of such swinging movement of the locking wedge. Thus when the lever has been raised to a point where the wedge 38 moves free of the inner jaw, this wedge comes into contact with the lugs 25 and in the further upward movement of the lever this contact of the wedge 38 with lugs 25 becomes a fulcrum point forcing the rear portion of the outer jaw downwardly on the jaw pivot 31 so that the outer ends of the jaws are spread away from each other and the clasp is thus effectively opened.

By thus providing mechanical means whereby in the raising of the locking lever to open position the jaws themselves are forced apart, it is obvious that springs or similar means fre-

quently of a rapidly deteriorating character may be dispensed with. Furthermore, by so doing the total number of necessary parts is not only reduced to the same extent, but a possible source of rapid failure in practical use is eliminated.

In the construction of the present clasp the width of the jaws with respect to the length thereof is important and in the present structure it is desired to provide as much width as possible so as to effect a substantially wide clasping action of the clasp with reference to the supported garment and so as to insure a firm grip and distribute the strain over the maximum area possible.

What is claimed is:

1. A garment clasp comprising outer and inner jaws having overlapping pivotally connected side ears forming a pivot for the jaws intermediate their ends, the ears of the outer jaw having rearwardly opening slotted apertures at the rear end of the outer jaw, a frame shaped locking lever having a rear cross member pivotally confined at its sides in said apertures of the outer jaw and including a wedge extension arranged between its pivoted portions movable into and out of engagement with the rear portion of the inner jaw, said lever having front and side bars arranged to extend along the side and front portions of the outer jaw to frame the latter in the closed position of the lever, and an abutment carried by the inner jaw and interposed in the path of and designed for contact with the wedge extension in the opening movement of the lever for moving the jaws away from each other during a portion of the opening movement of the lever.

2. A garment clasp comprising a pair of jaws having oppositely disposed overlapping ears and a pivot passing through the ears whereby to pivotally connect the jaws together, oppositely disposed inwardly directed elements carried by one of the jaws, and a locking lever pivotally mounted on the other jaw and having a cross member arranged between the jaws forming a wedge movable into engagement with said oppositely disposed elements for opening the jaws during a portion of the outward pivotal movement of the lever.

3. A garment clasp comprising inner and outer reversely curved jaws pivotally connected together intermediate their ends, a slotted extension carried by the inner jaw extending longitudinally beyond the inner ends of both jaws and the outer jaw having an inset flange extending longitudinally beyond the outer ends of both jaws, and an open swingable frame consisting of relatively narrow curved side bars and relatively narrow inner and outer end bars, the inner end bar being pivotally mounted on the outer jaw and extending laterally and constituting a wedge operating between the jaws, the side bars of the frame being curved corresponding to the curvature of the outer jaw, said frame in normal operative position of the clasp having its outer end bar engaging the aforesaid flange of the outer jaw and being limited thereby.

4. A garment clasp comprising inner and outer jaw members, overlapping side ears carried by the jaw members, means pivotally connecting the overlapping side ears in the medial regions thereof, the ears of the outer jaw member being formed with slotted aligned apertures, a locking lever having a cross bar supported in the apertures, said bar being formed with an extension providing a wedge designed for engagement with the inner jaw member to force the latter toward the outer jaw member and close said jaw mem-

bers, and a projection on one of the ears of the inner jaw member positioned in the path of movement of the extension and designed upon engagement with the latter to be moved thereby
5 to force the inner jaw member away from the outer jaw member and open said jaw members.

5. A garment clasp comprising inner and outer jaws pivotally connected together intermediate their ends, the outer jaw having an inset flange
10 extending longitudinally beyond the outer ends of both jaws, and an open swingable frame con-

sisting of relatively narrow side bars and relatively narrow inner and outer end bars, the inner end bar being pivotally mounted on the outer jaw and extending laterally and constituting a wedge operating between the jaws, said outer jaw in normal operative position of the clasp
5 being nested within the frame with the outer end bar of the latter engaging the inset flange and being limited thereby.

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