April 12, 1932. J. SOLOMON 1,853,938

GARMENT FASTENER

Filed May 31, 1930

Fig. 1

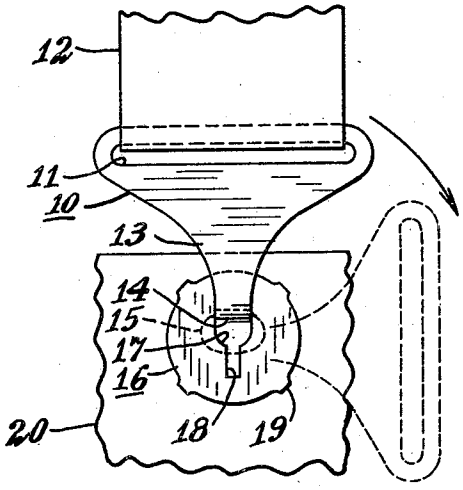


Fig. 2

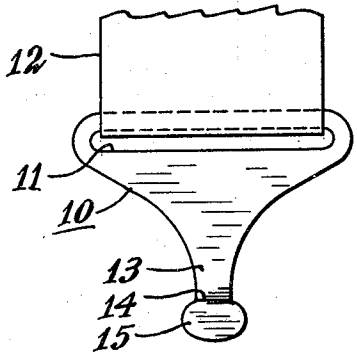


Fig. 3

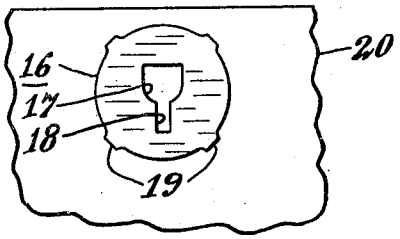


Fig. 5

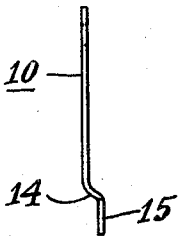


Fig. 6

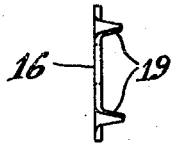


Fig. 4

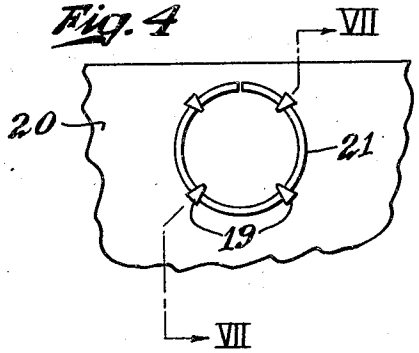
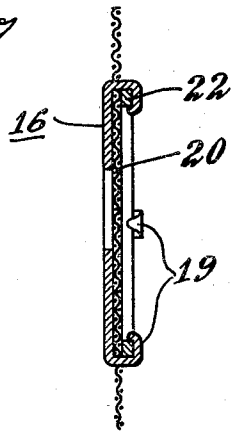


Fig. 7



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UNITED STATES PATENT OFFICE

JOSEPH SOLOMON, OF BIRMINGHAM, ALABAMA, ASSIGNOR TO LIBERTY OVERALL COMPANY, OF BIRMINGHAM, ALABAMA, A COPARTNERSHIP COMPOSED OF JOSEPH SOLOMON AND LOUIS JACOBSON

GARMENT FASTENER

Application filed May 31, 1930. Serial No. 458,615.

My invention relates to garment fasteners of the type in which the male element is a headed member, adapted to be interlocked with the female element by insertion through a slotted plate provided with suitable means for its attachment to the garment, the design of the interlocking parts requiring that the headed member shall be shifted through an arc 90 degrees after insertion through the slot to bring it to its normal working position in which it is interlocked with the plate.

More particularly, my present invention has for its object to improve and perfect the garment fastener which forms the subject matter of Letters Patent No. 1,370,403, issued to J. E. Bernhard on March 1, 1921.

The features which distinguish my present invention from the Bernhard fastener have to do with the slotted plate, or female element, and its fastening means, and the first feature is that the slotted plate, in order to give it a better and more attractive appearance and provide ample turning room between it and the underlying fabric for the head of the male element, is made circular in shape, as by such an arrangement the minimum sized plate can be used and the maximum turning room provided in all directions for the fastening head on the male member.

The second and most important improvement lies in the design of the backing member placed against the inside surface of the garment and interlocked to the outer plate by marginal prongs on the latter which, after piercing the garment, are bent about the retaining member. This retaining member is made in the form of a ring from flat or circular stock as may be desired, having approximately the diameter of the outer plate, the stock used to form the ring being narrow enough for the prongs of the outer plate to be bent over it and inwardly towards the garment so that then the tips will not lie in exposed position.

A further advantage derived from the use of a backing ring is that practically the whole area of cloth underlying the slotted plate is left free to give to the head of the male element when being interlocked with the plate and when the head is in place it will readily pass the cloth inwardly beyond the plane of the backing member and thus prevent the ring and its engaging prongs causing wear or discoloration of under garments.

My invention further comprises the novel details of construction and arrangement of parts, which in their preferred embodiment only are illustrated in the accompanying drawings which form a part of this specification, and in which:—

Fig. 1 is a plan view showing the garment fastening elements in assembled position, the dotted position of the male member showing its position when being engaged or disengaged from the female member.

Fig. 2 shows the male element in plan view.

Fig. 3 is a front view, and Fig. 4 a rear view showing the elements of the female member and the manner in which the prongs on the slotted plate interlock the backing ring formed of wire stock.

Fig. 5 is a side view of the male member.

Fig. 6 is a side view of the slotted plate.

Fig. 7 is an enlarged view taken on the line VII—VII of Fig. 4 showing the backing ring formed of flat stock.

Similar reference numerals refer to similar parts throughout.

In the embodiment of my invention illustrated, I have shown a garment fastener of the type that is especially suitable for use with overalls and like garments where it is of importance that the elements forming the fastener should be capable of passing through the laundry machines without being injured or deformed thereby.

The fastener comprises a male element 10 having a slot 11 therein for the reception of the shoulder strap 12 and having a tapering neck portion 13 downturned at 14 and provided with a rounded T-head 15.

The female element of the fastener comprises a circular metallic disk or plate 16 having formed therein a slot comprising an enlarged portion 17 and a relatively narrow neck 18. The slot is arranged symmetrically in the center of the plate with its long axis in line with the pull of the strap 12. The plate being circular ample marginal space is

provided for the display of a trade-mark or advertising data.

The plate is provided at suitably spaced intervals with marginal tangs or pointed spuds 19 which are adapted to be forced through the garment 20, and to be bent around a ring-like backing member which is placed on the inside of the garment, and which preferably has a diameter substantially equal to that of the disk 16.

This backing ring may be formed from round wire stock 21, as shown in Fig. 4, or it may be stamped from sheet metal 22, as shown in Fig. 7. It is important that it should be formed from stock sufficiently narrow for the tangs or spuds 19 to have their points lapped over and bent inwardly about it so that they will be so placed that there will be no tendency for them to catch or hang upon any garment that the fastening may come in contact with.

It will be noted that the ring being narrow and circular in shape affords the maximum clearance under the slotted plate 16 for the head 15 as it is engaged and disengaged from the plate.

In interlocking the fastening members, the male member is presented at right angles to the axis of the slot 17, 18, see Fig. 1, and almost in a plane at right angles to the plane of the plate 16. When in this position, the head 15 will pass freely between the end wall of the slot 17 and the opposite wall of the slot 18. Thereupon, the member 10 is swung down almost into parallelism with the plate 16, and when in this parallel plane, it is swung through an angle of 90 degrees to the position shown in full lines in Fig. 1. The fact that the ring 21 leaves practically all of the cloth under the plate 16 free enables the head to press this cloth inwardly and to work freely between the garment and the plate 16 in being engaged and disengaged from the plate.

While I have shown my invention in its preferred form, it will be obvious to those skilled in the art that it is not so limited, but is susceptible of various changes and modifications, without departing from the spirit thereof, and I desire, therefore, that only such limitations shall be placed thereupon as are imposed by the prior art or as are specifically set forth in the appended claim.

What I claim is:

A garment fastener comprising a female member formed by a substantially circular flat metallic disk provided with a central substantially T-shaped slot therethrough and having marginal tangs adapted to pierce a garment, a retaining ring having substantially the same diameter as the disk and formed of narrow stock adapted to have the tangs folded inwardly about it to secure the disk against the outer continuously smooth and uninterrupted surface of the garment while leaving substantially all of the cloth underlying the disk free to yield equally in all directions from said slot as a center, in combination with a male member having a contracted neck carrying an offset rounded head separably received in the slot between said disk and cloth and interlocked in said slot, the head on the male member that is interposed between the disk and the garment being small relatively to the ring so as to be freely manipulated between the disk and the garment.

In testimony whereof I affix my signature.

JOSEPH SOLOMON.