No. 837,250. PATENTED NOV. 27, 1906.

E. I. RAINS.

METALLIC BUTTONING DEVICE.

APPLICATION FILED DEC. 30, 1905.

Fig. 1.

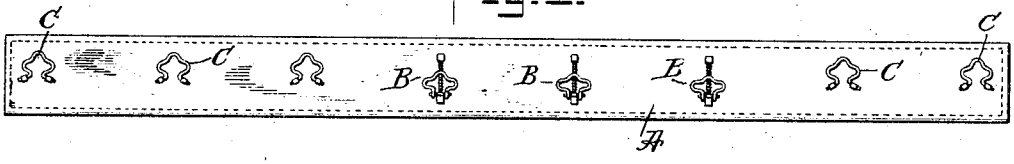


Fig. 4.

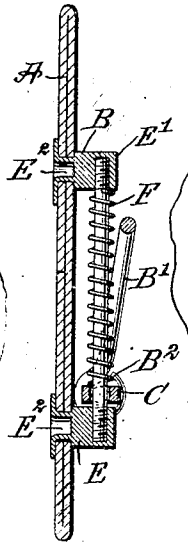


Fig. 2.

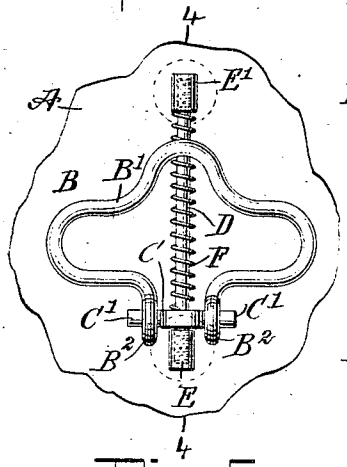


Fig. 3.

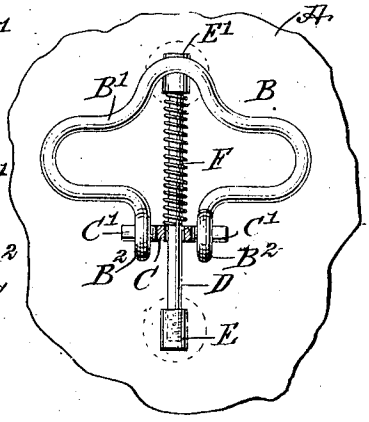


Fig. 5.

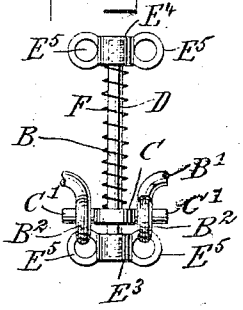


Fig. 6.

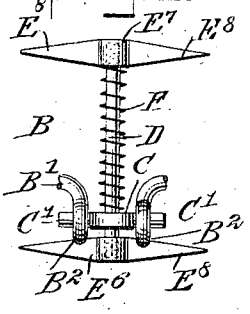
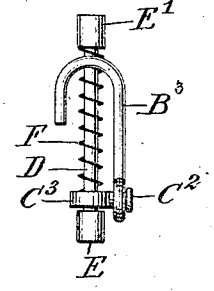


Fig. 7.



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METALLIC BUTTONING DEVICE.

No. 837,250. Specification of Letters Patent. Patented Nov. 27, 1906.

Application filed December 30, 1905. Serial No. 293,905.

To all whom it may concern:

Be it known that I, ELEAZER I. RAINS, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Metallic Buttoning Device, of which the following is a full, clear, and exact description.

The invention relates to garment-supporters; and its object is to provide a new and improved metallic buttoning device for yieldingly connecting two garments or two parts of a garment with each other—for instance, connecting boys' pants with their shirt-waists and blouses—the device being arranged to readily compensate for strains in almost every direction and without danger of breaking or tearing the connected parts, especially when the wearer is bending in a forward direction.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a face view of the inner side of a waistband provided with the improvement. Fig. 2 is an enlarged face view of part of the waistband and the buttoning device in normal position. Fig. 3 is a like view of the same, showing the buttoning device in a strained position. Fig. 4 is a transverse section of the same on the line 4 4 of Fig. 2; and Figs. 5, 6, and 7 are face views of modified forms of the improvement.

As illustrated in Fig. 1, the waistband A of a pair of pants is provided with a number of swiveled and yielding metallic buttoning devices B and non-yielding fixed buttoning devices C, the said swiveled and yielding devices B being preferably three in number and attached to the waistband A at the back thereof, and the said non-yielding fixed devices C are secured to the waistband at the sides or hip portions. The buttoning devices B and C are properly spaced apart and are preferably located in the manner described and shown, as the principal strain when the wearer bends forward is at the back portion of the connected garments or parts, and hence the buttoning devices B are located at this particular point.

Each buttoning device B is preferably made from a piece of wire bent to form a buttoning member B′, having its ends terminating in eyes B^2, engaging trunnions C′, projecting from opposite sides of a slide C, mounted to turn on and to slide up and down on a guideway D, preferably in the shape of a rod, screwed or otherwise secured at its ends to fastening devices E and E′, secured to the waistband A, preferably by providing the fastening devices E and E′ with integral eyelets E^2, penetrating the waistband A and clenched at the rear face thereof, as plainly indicated in Fig. 4.

The slide C is spring-pressed, and for this purpose a spring F is coiled on the guideway D and presses with its lower end on the top of the slide C and abuts with its upper end against the fastening device E′. Thus the slide C is normally held at rest against the fastening device E, as plainly shown in Figs. 1, 2, and 4; but when the device is in use and the buttoning member B′ is attached to a button or the like on the shirt-waist or blouse and an undue strain is exerted by the wearer—for instance, bending forward—then the buttoning member B′ slides upward on the guideway D against the tension of the spring F. By having the buttoning member B′ mounted to swing on the slide C and the latter capable of turning on the guideway D it is evident that the buttoning member B′ is swiveled and free to swing in almost any direction, thus allowing the buttoning member B′ to readily move with the button to which it is attached. It is understood that when the wearer bends over the waistband A and the shirt-waist or blouse tend to separate, and by having the buttoning member B′ mounted to swing such separating movement is compensated for without impairing the sliding movement against the tension of the spring F of the buttoning member B′.

By reference to Fig. 4 it will be noticed that the fastening devices E and E′ hold the guideway D spaced from the inner side of the waistband A to allow free sliding of the slide C on the guideway.

The fastening devices E and E′ may be varied without deviating from the spirit of my invention. For instance, as shown in Fig. 5, the fastening devices E^3 and E^4, carrying

the guideway D, are provided with sidewise-extending ears or loops E^5, adapted to be engaged by stitches for fastening the devices E^3 and E^4 to the waistband A. As illustrated in Fig. 6, the fastening devices E^6 and E^7, carrying the guideway D, are provided with sidewise-extending prongs E^8, adapted to be passed through the material of the waistband A to be clenched at the rear side of the said waistband.

By the use of the fastening devices E^3 E^4 and E^6 E^7 each buttoning device B may be readily removed from the waistband whenever it is desired to wash the garment or when the devices B are to be transferred to another garment.

The buttoning member B′ may be of various forms. For instance, as shown in Figs. 1, 2, and 3, it is of approximately trefoil shape to permit of conveniently passing the buttoning member over the button and to engage the top portion with the shank of the button for securely buttoning the member B′ to the button of the shirt-waist, blouse, or like garment and to allow convenient buttoning and unbuttoning of the member B′. As shown in Fig. 7, the buttoning member is in the form of a hook B^3, mounted to swing on a stud or trunnion C^2, formed on the slide C^3, mounted to turn and to slide on a guideway D, the same as above described and shown in Figs. 1, 2, 3, and 4. This hook-shaped buttoning member can be readily hooked onto the shank of the button from either side, as the slide C^3 is free to turn on the guideway to carry the hook-shaped buttoning member to either side of the button.

From the foregoing it will be seen that the metallic buttoning device shown and described is very simple and durable in construction, is composed of comparatively few parts, not liable to get easily out of order, and the metallic buttoning device can be readily attached to the waistband.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A metallic buttoning device for yieldingly connecting two garments or two parts of garments with each other, comprising a guide on one part, and a buttoning member for engagement with the other part, the buttoning member having a yielding connection with the said guide and arranged to slide and to turn relative thereto, the buttoning member being free to swing independent of the sliding and turning movements.

2. A metallic buttoning device for yieldingly connecting two garments or two parts thereof with each other, comprising a buttoning member for engagement with a button on one garment, a guideway on the other garment, a slide on the said guideway and on which the said buttoning member is mounted, the said slide being mounted to move up and down on said guideway and to turn thereon, and a spring coiled on the said guideway and pressing the said slide.

3. A metallic buttoning device for yieldingly connecting two garments or two parts thereof with each other, comprising a buttoning member for engagement with a button on one garment, a guideway on the other garment, and a spring-pressed slide on the said guideway, mounted to slide and also to turn thereon, the buttoning member being mounted to swing on the said slide.

4. A metallic buttoning device for yieldingly connecting two garments or two parts of a garment with each other, comprising a buttoning member for engagement with a button on one of the said parts, a guideway secured at its ends to the other of the said parts, the guideway extending a distance from the face of the part to which it is attached, a slide mounted to slide on the said guideway and to turn thereon, and on which the said buttoning member is mounted to swing, and a spring coiled on the said guideway and pressing the said slide.

5. A metallic buttoning device for yieldingly connecting two garments or two parts of a garment with each other, comprising a buttoning member for engagement with a button on one of the said parts, a guideway secured at its ends to the other of the said parts, the guideway extending a distance from the face of the part to which it is attached, a slide mounted to slide on the said guideway and to turn thereon, and provided with sidewise-extending trunnions on which the said buttoning member is mounted to swing, and a spring coiled on the said guideway and pressing the said slide.

6. A metallic buttoning device for yieldingly connecting two garments or two parts of a garment with each other, comprising a buttoning member for engagement with a button on one of the said parts, a guideway having attaching means at its ends for securing the guideway to the other of the said parts, the guideway extending a distance from the face of the part to which it is attached, a slide mounted to slide on the said guideway and to turn thereon, and on which the said buttoning member is mounted to swing, and a spring coiled on the said guideway and pressing the said slide.

7. A metallic buttoning device for yieldingly connecting two garments or two parts of a garment with each other, comprising a buttoning member adapted for engagement with a button on one of the said parts, a rod having fastening devices at its ends for securing the same to the other of said parts, the rod being spaced from the face of the part to which it is attached, a slide mounted to slide and to turn on said rod, and on which

the buttoning member is mounted to swing, and a coiled spring on the said rod and bearing at one end against one of said fastening devices, the other end of the spring pressing on the slide and normally holding the same in engagement with the other fastening device.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ELEAZER I. RAINS.

Witnesses:
S. E. RAINS,
SIDNEY P. HESSEL.