Oct. 18, 1932. V. PUC 1,882,672

SLIDING CLASP FASTENING

Filed April 11, 1931

Fig. 1.

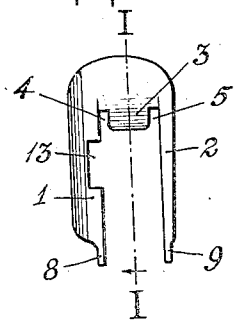


Fig. 2.

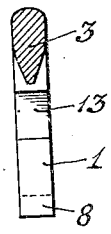


Fig. 3.

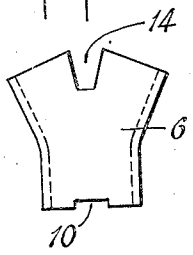


Fig. 4.

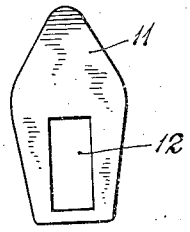


Fig. 5.

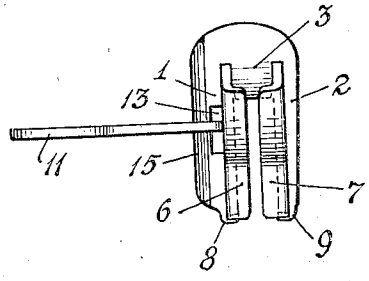
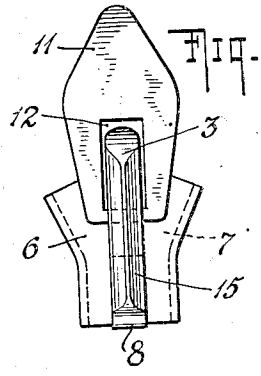


Fig. 6.



WITNESS

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UNITED STATES PATENT OFFICE

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SLIDING CLASP FASTENING

Application filed April 11, 1931, Serial No. 529,399, and in Czechoslovakia April 12, 1930.

This invention relates to sliding clasp fastenings of the type in which the edges of the pieces of material to be fastened are provided with inter-locking elements which are caused to engage by movement of a sliding clasp or cam in one direction and are disengaged by movement of the clasp or cam in the other direction.

At present, it is customary for the sliding clasp or cam to be made in a single piece. As a result, objection is frequently taken to the sliding clasp fastener on account of the visible part of the clasp or cam being too conspicuous in relation to the pieces of material fastened together.

The object of the present invention is to remove this drawback, and to this end I provide, in accordance with the invention, a sliding clasp fastening in which the slider clasp or cam is made in parts, the outer part or one or more of the outer parts being of celluloid or like opaque material of relatively low tensile strength or otherwise made, coated or treated so that it is or they are inconspicuous relatively to the pieces of material fastened together and serve to complete a harmonious appearance of the sliding clasp and of the material which is fastened together.

More specifically, I provide a sliding clasp fastening with a three-piece slider clasp which comprises a rigid body part and a pair of cheeks or cam parts, the cheek or cam part visible when the pieces of material are connected together being made of celluloid or otherwise made or treated so as to resemble in appearance or colour the fastened pieces of material.

Preferably, the body part of the clasp is moulded or formed in such a manner that it has a pair of limbs connected by a wedge-shaped part, these limbs having slots cut therein or being otherwise formed so as to carry two cheek members or cam plates. For the attachment of the cam plates and the body part of the clasp together, each cam plate is preferably provided with a tapered or other slot adapted to engage with a notch in the wedge-shaped part, and each cam plate is in this case locked in position relatively to the body part of the clasp by a doubled-over tongue or other fixing member on the limb of the clasp adjacent thereto.

Preferably, the body part of the clasp is provided with a recess or otherwise made to accommodate a draw-member or finger piece whereby the clasp can be slid in either direction, the draw-member or finger piece being retained in the recess or otherwise held in connection with the body part of the clasp by one of the cheeks or cam plates.

A sliding clasp embodying the invention will now be described, by way of example, with reference to the annexed drawing, in which:

Fig. 1 is a side view of the body part of the clasp;

Fig. 2 is a sectional view of the body part on the line 1—1 (Fig. 1);

Fig. 3 is a plan view of one of the cheeks or cam members;

Fig. 4 is a view of the draw member or finger piece;

Fig. 5 is a plan view of the complete three-piece slider clasp;

Fig. 6 is a side view of the complete slider clasp.

Referring to the drawing,

As shown most clearly in Figs. 1 and 2, the rigid body part or stiffening part of the clasp is cast or stamped in one piece and has limbs 1, 2 of unequal strength, interconnected by a wedge-shaped part 3. In this part, two slots 4, 5 are made for the reception of inner and outer cam plates 6, 7.

The stronger limb 1 has a groove 13 in which rests a draw-member 11 (Fig. 4). The ends of the limbs 1, 2 of the body part are reduced to constitute tongues 8, 9, these tongues being flexible and adapted to secure the inner and outer cam plates 6, 7 firmly to the body part as described below.

Each cam plate 6, 7 has a tapered slot 14 at its upper end, the sides of the cam plate forming said slot being adapted to engage with the sides of the wedge-shaped part 3 forming the slots 4 or 5, and a shallow notch 10 at its lower end, and, when the cheeks are

inserted in the slots 4, 5 respectively, the tongues 8, 9 are bent over the outer ends of the corresponding cheek and engage the notch 10 thereof. In this manner, the inner and outer cam plates 6, 7 are rigidly secured to the body part of the clasp, an amount of rigidity being obtained which is equal to that obtained when the slider clasp is made in one piece. The tapered slot 14 is provided in each of the cam plates 6 and 7 in order to lock such plate into position within the wedge-shaped part 3 and thus prevent lateral movement of the cam plate. The sides of the tapered slot 14 engage the sides of the part 3 immediately above the slot 4 or 5 thereof and thus lock the cam plate rigidly to said part so that the plate is incapable of sidewise movement.

The draw-member 11 is provided with a rectangular opening 12 whereby, prior to the attachment of the inner and outer cam plates 6, 7 and body part together, it can be slipped over the stronger limb 1 of the body part in order that the lower or inner end of the draw-member may engage with a groove 13 provided in the limb 1. As will be apparent, the inner cam plate 6, when secured in position on the body part, effectively retains the draw-member 11 in the groove 13, whilst permitting the draw-member to be pulled in whichever direction it is desired to draw the slider clasp as a whole.

The limb 1 of the body part is formed with an integral rib 15 which serves to reinforce the limb and avoids undue weakening thereof at the groove 13.

I claim:—

1. In a sliding clasp fastening having inter-locking elements along the edges of material to be fastened, a slider clasp for opening and closing the inter-locking elements, comprising a stiffening element constituting the body part of the clasp, cam means separate from said stiffening element, comprising a rigid inner cam plate and an outer plate separate from each other, the latter being of a material of low tensile strength and in appearance harmonious with the fastened material, connecting means comprising elongated limbs integral with the body part and extending along the entire length of the cam plates, whereby said cam plates are secured to said stiffening element, and a draw member for sliding said clasp bodily.

2. In a sliding clasp fastening having inter-locking elements along the edges of material to be fastened, a slider clasp comprising, in combination, a stiffening member having a pair of spaced parallel limbs interconnected by a slotted wedge-shaped part, separate slotted cam plates adapted to engage said slotted wedge-shaped part, fixing means integral with said limbs for securing thereto said cam plates, and a draw-member connected to said clasp for sliding said clasp to open and close the interlocking elements of the fastening.

3. In a sliding clasp fastening in which inter-locking elements are provided along the edges of material to be fastened, a slider clasp for opening and closing the interlocking elements, comprising spaced stiffening limbs, a wedge-shaped bridge integrally connecting said limbs and provided with slots, an inner slotted cam plate engaging one of the slots in said wedge-shaped bridge and one of said limbs, a flexible tongue on said last mentioned limb for securing thereto said inner cam plate, an outer cam plate of opaque material adapted to engage the other of said slots in said wedge-shaped bridge, a flexible tongue adapted to be doubled over on said last-mentioned cam plate for rigid attachment thereof to said upper limb, and a draw-member on said outer limb for sliding said clasp to open and close the inter-locking element of the fastening.

4. In a sliding clasp fastening, in which the edges of material to be fastened are provided with inter-locking elements, a slider clasp comprising a rigid body part, an inner cam plate separate from said body part, an outer cam plate of an opaque material of low tensile strength and separate from said body part and from said inner cam plate, means for rigidly securing said cam plates to said body part, comprising elongated limbs integral with the body part and extending along the entire length of the cam plates, a finger-piece for sliding said clasp bodily so as to open and close the inter-locking elements of the fastening, and means in one of said limbs for accommodating said finger-piece so as to be retained therein by said outer cam plate.

5. In a sliding clasp fastening in which the edges of material to be fastened are provided with inter-locking elements, a slider clasp comprising, in combination, a wedge-shaped bridge, an inner limb formed integral with said bridge, a recessed outer limb formed integral with said bridge in spaced parallel relationship with said inner limb, an inner cam plate, means for securing said inner cam plate to said inner limb and bridge, an outer cam plate, a finger-piece adapted to engage said recessed outer limb for sliding said clasp bodily to open and close the inner-locking elements of the fastening, and means whereby said outer cam plate is rigidly secured to said outer limb and bridge so that said outer plate retains on said outer limb said finger piece.

6. In a sliding clasp fastening having interlocking elements along the edges of material to be fastened, a slider clasp for opening and closing the inter-locking elements, comprising in combination a slotted wedge-shaped bridge, an inner limb formed integral with said bridge, an outer limb formed

integral with said bridge in spaced parallel relationship to said inner limb, an inner cam plate adapted to engage said slotted bridge and be supported by said inner limb, a flexible integral tongue on said inner limb adapted to be doubled over on said inner cam plate to secure said inner plate rigidly to said limb, an outer cam plate adapted to engage said slotted bridge and be supported by said outer limb, a second flexible tongue integral with said outer limb and adapted to be doubled over on said outer limb, and a draw-member whereby said clasp is slidable bodily.

7. In a sliding clasp fastening in which the edges of material to be fastened are provided with inter-locking elements, a slider clasp comprising in combination a slotted wedge-shaped bridge, an inner limb formed integrally with said bridge, an outer limb formed integral with said bridge in spaced parallel relationship to said inner limb, an inner cam plate adapted to engage said slotted bridge and be supported by said inner limb, a flexible integral tongue on said inner limb adapted to be doubled over on said inner cam plate to secure said plate rigidly to said limb, an outer celluloid cam plate, a second flexible tongue integral with said outer limb and adapted to be doubled over on said outer cam plate to secure said plate rigidly to said outer limb, a recessed part on said outer limb, a longitudinal reinforcing rib on said outer limb, and a finger-piece adapted to engage with said recessed part and be retained therein by said outer cam plate.

In testimony whereof I affix my signature.

VOJTĚCH PUC.