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(54) **Fastener with fitting means for fastening shoes or the like**

(57) The present invention proposes to realize hooking elements which permit to accomplish the closing and opening operations with an only manoeuvre of the fingers and even with an only hand. In this way, it is possible to rapidly lace and unlace the shoes. Moreover, the said hooking elements permit both a keeping and a contemporaneous bending in the sense of lacing the shoe in such a way as to permit the foot to be bent. Thus, the foot may in general enjoy a greater comfort.

Essentially, a fastener (1) is formed by two fixed

parts (2, 3), each part being fixed on a respective flap to be closed with the other flap, and a hooking element (4) which represents the means on which it is possible to act in order to lace or unlace a shoe or the like.

The hooking element (4) is connected through elastic elements (10) or the like with one (3) of the two fixed parts and is hooked through bayonet or pivot means to the other fixed part (2).

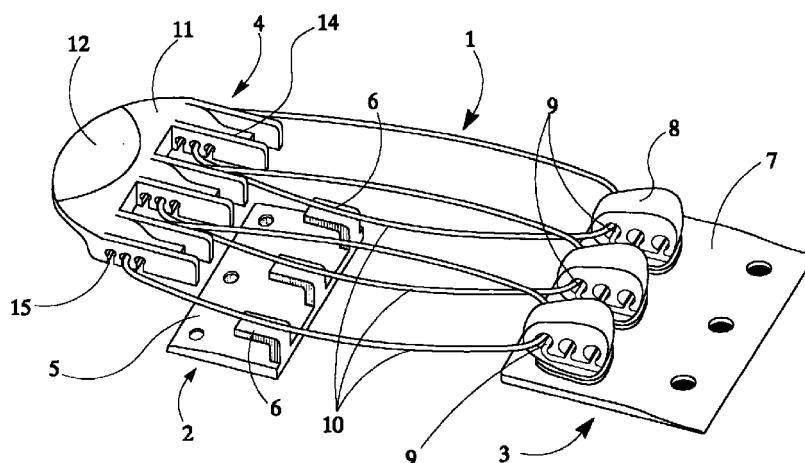


Fig. 2

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Description

[0001] The present invention proposes a fastener for the fastening of shoes or the like, characterized by the fact of being provided with particularly shaped fitting means which permit shoes or the like to be closed through the cooperation of elastic tension elements.

[0002] In general, the present fastener is provided with coupling fitting means which interact with elastic elements to permit shoes or the like to be closed. In this way, it is possible to obtain a hooking system showing the characteristics of a perfect keeping and a contemporaneous bending next to the instep.

[0003] Moreover, the present invention proposes a closing fastener to be used with very simple quick opening and closing manoeuvres, the lacing and unlacing phases being made easy and immediate to lace and unlace the fastening elements.

[0004] As known, the market of footwear and leather articles offers a great variety of coupling means or systems for fastening shoes or the like at the lacing sectors.

[0005] The lacing systems used till today, besides some types of particular coupling such as the Velcro coupling or the shaped buckles may be essentially subdivided in lacing means with holes and lacing means with hooks. The lacing means with holes are also provided with laces or strings passing through the holes while in the lacing means with hooks, the strings permit flaps of upper to be connected by using hooks or open connecting elements.

[0006] It is also known that such lacing systems may constitute a practical problem, above all but not only for children since at first, the strings or laces must pass through their respective holes or supports and then, such strings or laces must be tied.

[0007] Above all in case of children, the lacing systems with shoe-laces or strings appear to be inadequate and difficult to be used and therefore, the prior art is turning with greater and greater care to such solutions that may make the lacing operations easier without compromising the appearance or look of the manufactured article.

[0008] The aim of the present invention is therefore to carry out hooking systems which must be both functional and pleasant, namely, these hooking systems must make the closing phases of the shoes easier and must be agreeable as concerns the look of the shoes or even, these hooking systems may improve the whole appearance of the manufactured article.

[0009] Another aim of the present invention is to realize hooking elements which permit an optimal keeping and a contemporaneous bending in the sense of lacing the shoe in such a way as to permit the foot to be bent and enjoy in general a greater comfort.

[0010] Another aim of the present invention is to realize a type of hooking which permits to accomplish the closing and opening operations with an only

manoeuvre of the fingers and even with an only hand, there being thus the possibility of lacing and unlacing the shoes rapidly.

[0011] The above described aims and advantages are reached according to the present invention with a fastener with fitting means for fastening shoes or the like, which is characterized by the fact of being formed by two fixed parts, each part being fixed on a respective flap of the shoe or the like to be closed, one part being provided with hooks or the like while the other part being provided with seats housing elastic means or the like, the opposite part of which is inserted in a closing element showing shaped means fit to be coupled with hooks or the like, provided on the said fixed part.

[0012] In addition, the holding means that hold the said closing element may be both bayonet type and pivot type so that in the first case it is possible to open the said holding means with an outward traction and in the second case it is possible to open the said holding means through a very simple lifting operation with the fingers.

[0013] Now, the invention will be better understood from the following description, set forth as an example not limiting the invention itself, with reference to the accompanying drawings wherein:

Fig. 1 shows a schematic perspective view of the parts to be coupled together in a hooking element according to the present invention;

Fig. 2 shows a schematic perspective view of the whole hooking system, in an opened position;

Fig. 3 shows a schematic view of the same, in a closed position;

Figs 4 and 5 show schematic sectional elevations of the hooking parts according to the invention, such parts being applied to two flaps to be mutually closed;

Figs 6 and 7 show schematic views of the hooking means to be coupled according to a possible variant.

[0014] With reference to the accompanying drawings, number 1 denotes a fastener according to the present invention. This fastener 1 is formed basically by two parts, indicated with 2 and 3. These parts 2 and 3 must be respectively fixed on to two flaps to be mutually closed. In addition, the fastener is provided with a hooking element 4 which permits a shoe or the like to be laced or unlaced.

[0015] The parts that form the fastener may be made of metal or plastic or other more suitable material depending on the exigency.

[0016] The fixed part 2 is a plate 5 which is fixed to the flap to be closed. The plate 5 is fixed in a known way to the flap, for instance it may be sewn thereon or it may be fixed by means of rivets or the like. The upper surface of the plate 5 is provided with bent hooks 6 which are arranged along a side of the plate itself and are

turned backwards toward the opposite side.

[0017] As already said, the part 3 is fixed to the other flap to be closed and is likewise a plate 7. The plate 7 is fixed in a known way to the respective flap of the vamp or the like, for instance it may be sewn thereon or it may be fixed by means of rivets or the like. The upper surface of the plate 7 is provided with a plurality of projections 8 which are provided with eyelets 9 through which elastic elements 10 pass.

[0018] The opposite side of the said elastic elements 10 in respect to the side of the projections 8 is applied and fixed to the closing element 4 which is provided with shaped means which may be coupled with the said fixed part 2 which is provided with the hooks 6.

[0019] In fact, the closing element 4 is a body 11 which is provided on one side with a grip sector 12 which may show suitable non-slip wrinkles or reliefs. It is also possible to personalize these wrinkles or reliefs. The opposite side of the closing element 4 is provided with shaped projections 13. The shape of the projections 13 is complementary to the shape of the hooks 6 since sunken seats 14 are provided to insert in the hooks 6 in the closing position.

[0020] In addition, the lower part of the body 11 is provided with spaced eyelets 15 in which elastic elements 10 are inserted.

[0021] As it can be seen in Fig. 3, the position of the hooked parts shows a continuous outline from which it appears that the two connected sectors form in practice an only body.

[0022] Figures 6 and 7 show a variant in which hooking elements 16 are characterized by the presence of a through round 17 to be inserted in a corresponding shaped seat 18 with round end 19, the seat being integral with the fixed part 20 or being applied to the fixed part 20.

[0023] Unlike the preceding solution in which the hooking element 4 is extracted from the respective hooks with a traction, in this case it is sufficient to lift the hook itself as a lever in order to open and close the hook.

[0024] Advantageously, the said elastic means 10 may be rigid elements, their function being the same.

[0025] As it can be seen, both hooking systems as described and illustrated herein may be used with very simple and rapid opening and closing manoeuvres and even with an only manoeuvre of the fingers or even with an only hand so as to permit an immediate lacing and unlacing of the shoes or the like on which these fasteners are mounted.

[0026] An expert of this field can find further possible variants which are to be considered as included in the scope of protection of the invention as illustrated in the following claims.

Claims

1. Fastener with fitting means for fastening shoes or

the like, characterized in particular by the fact of being formed by two fixed parts (2, 3), each part being fixed on one of the two flaps of the shoe or the like to be closed, one part (2) being provided with hooks (6) or the like while the other part (3) being provided with seats (9) holding elastic means (10) or the like, the opposite side of which is inserted in a closing element (4) showing shaped means (13, 14) coupling to the hooks (6) or the like, provided on the said first fixed part (2).

2. Fastener with fitting means as claimed in the foregoing claim, characterized by the fact that the holding means that hold the said closing element (4) may be both bayonet type means and pivot type means so that in the first case it is possible to open the said holding means with an outward traction and in the second case it is possible to open the said holding means through a lifting with the fingers.

3. Fastener with fitting means as claimed in the foregoing claims, characterized by the fact of being basically formed by two parts (2, 3), each part being fixed on one respective flap of the two flaps to be mutually fastened, and a closing element (4) which represents the means on which it is possible to act in order to lace or unlace a shoe or the like.

4. Fastener with fitting means as claimed in the foregoing claims, characterized by the fact that the first part (2) of the fixed parts is formed by a plate (5) which is fixed in a known way to the flap to be fastened, it may be sewn thereon or it may be fixed by means of rivets or the like, the upper surface of the plate (5) being provided with bent hooks (6) which are arranged along a side of the plate itself and are turned backwards toward the opposite side.

5. Fastener with fitting means as claimed in the foregoing claims, characterized by the fact that the second part (3) of the said fixed parts may be sewn or applied by means of rivets or the like on the other flap of the upper to be fastened and is likewise formed by a plate (7) and a plurality of projections (8) showing eyelets (9) through which elastic means (10) or the like pass.

6. Fastener with fitting means as claimed in the foregoing claims, characterized by the fact that the opposite side of the said elastic means (10) in respect to the side of the projections (8) is applied and fixed to the closing element (4) which is provided with shaped means (13, 14) which may be coupled with the said fixed part (2) which is provided with the hooks (6).

7. Fastener with fitting means as claimed in the fore-

going claims, characterized by the fact that the said closing element (4) is formed by a body (11) which is provided on one side with a grip sector (12) which may show suitable nonslip wrinkles or reliefs, there being the possibility of personalizing such wrinkles and reliefs, and the opposite side of the closing element (4) is provided with shaped projections (13) the shape of which is complementary to the shape of the hooks (6) since sunken seats (14) are provided to insert in the hooks (6) in the closing position.

8. Fastener with fitting means as claimed in the foregoing claims, characterized by the fact that the lower side of the closing element is provided with spaced eyelets (15) in which elastic elements (10) are inserted.

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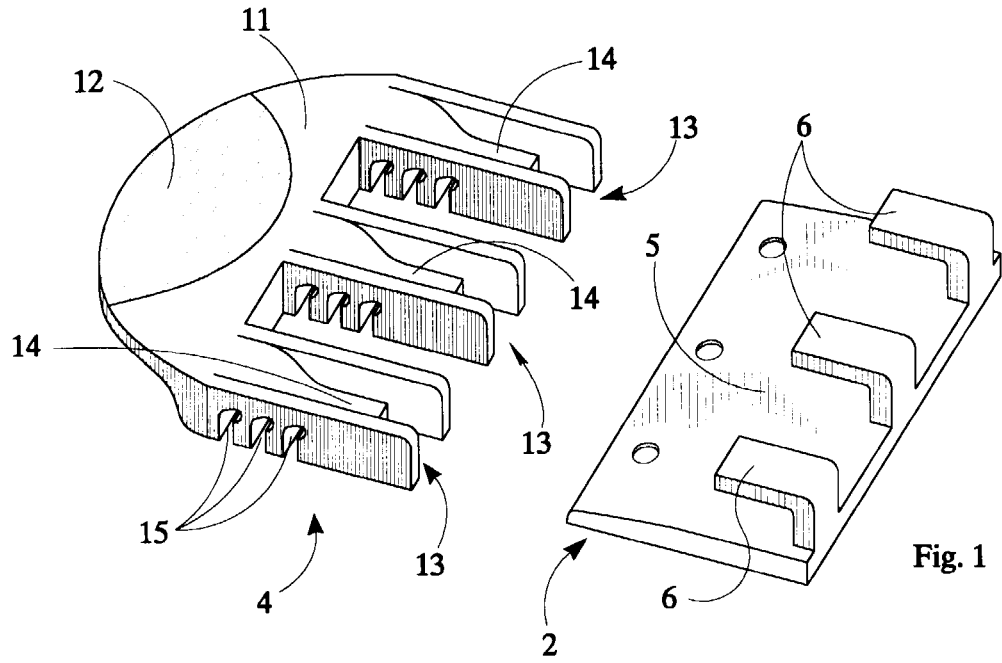


Fig. 1

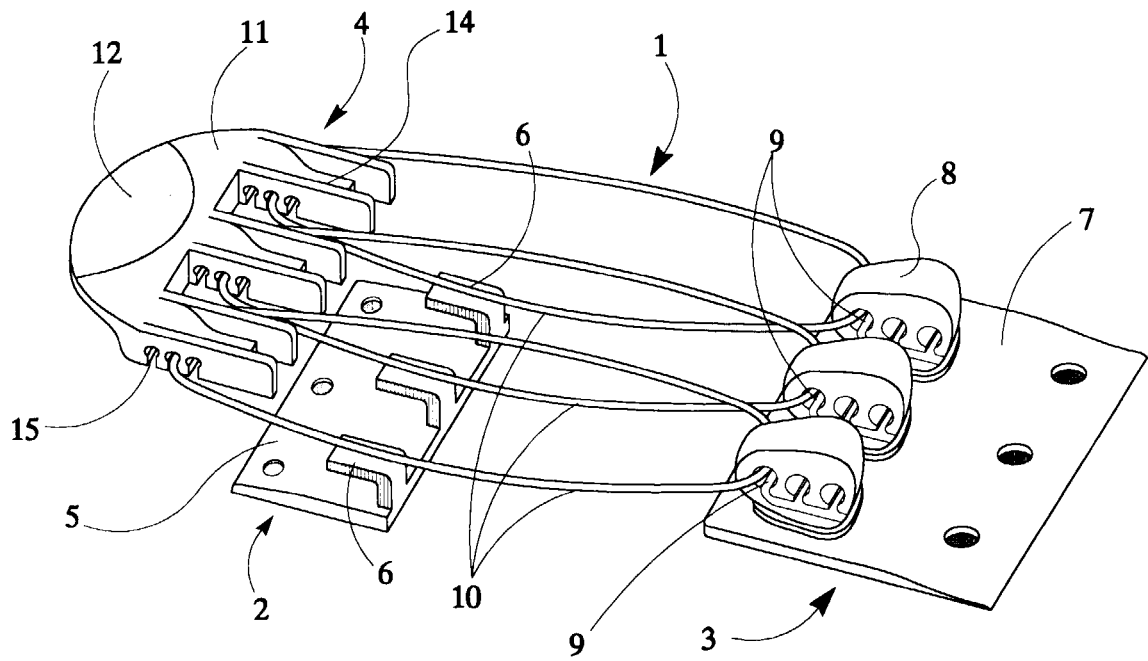


Fig. 2

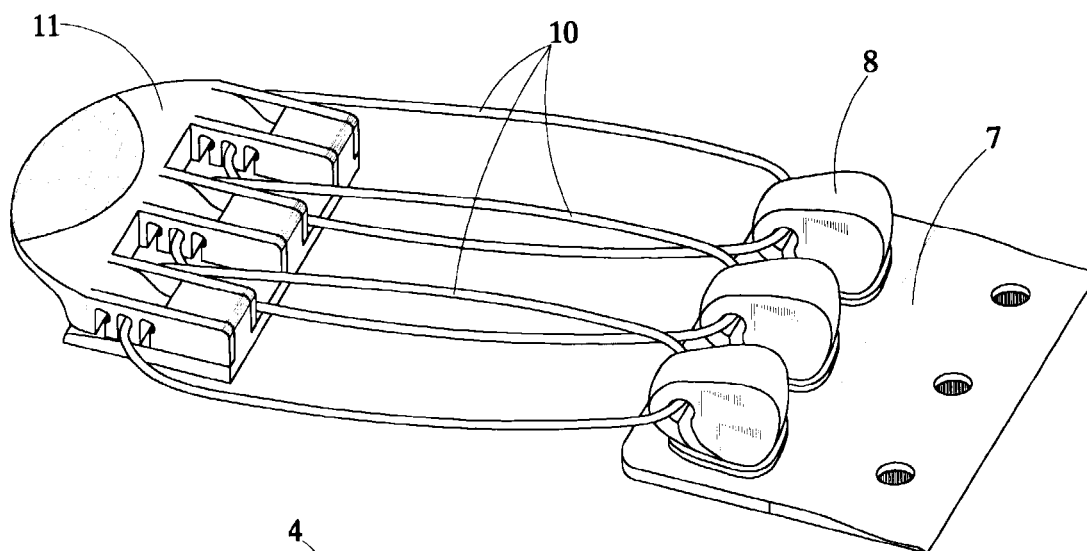


Fig. 3

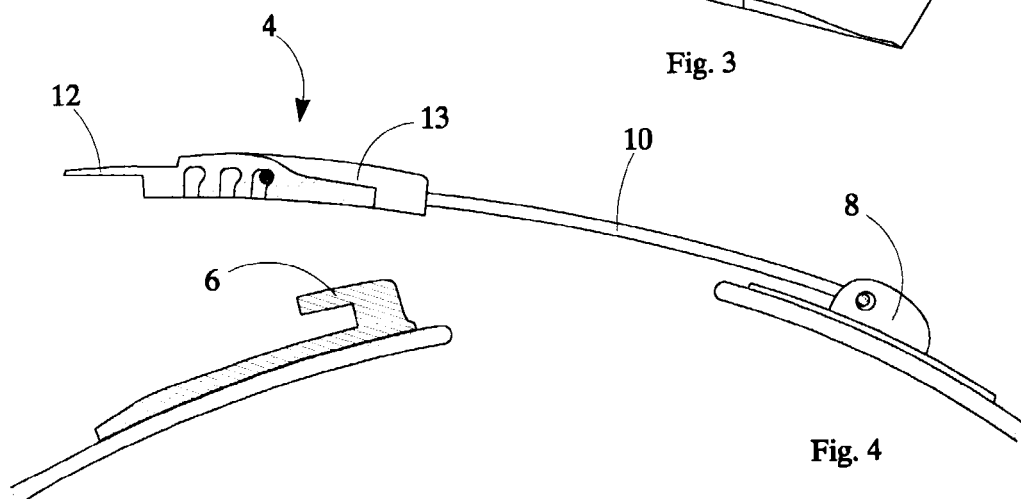


Fig. 4

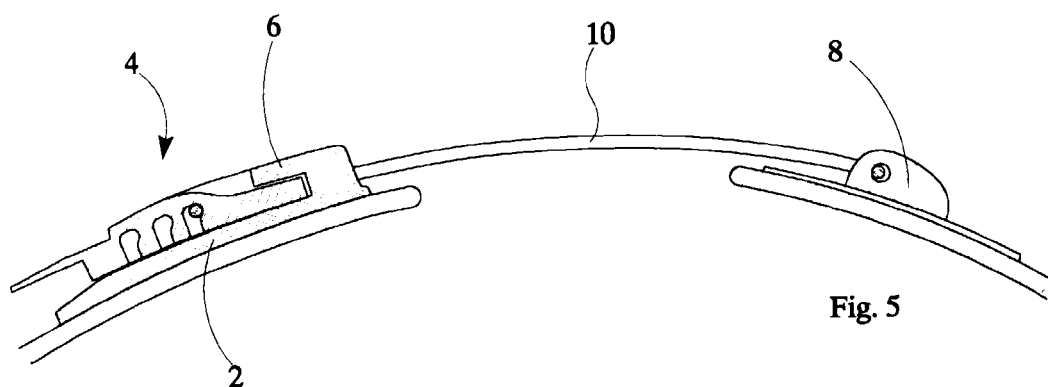


Fig. 5

