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(71) Applicant: **Sammi Export S.r.l.**
53039 Torrita di Siena (Siena) (IT)

(72) Inventor: **Spinelli, Andrea**
53049 Torrita di Siena (Siena) (IT)

(74) Representative: **Martini, Lazzaro**
Studio Brevetti Ing. Dr. Lazzaro Martini s.r.l.
Via dei Rustici 5
50122 Firenze (IT)

(54) Hook for footwear

(57) Hook for footwear and the like, of a type consisting of a body (1) having a substantially laminar structure and so shaped as to define a channel (7) closed on at least three sides (2, 3, 8) and exhibiting a slide portion able to interact with a lace going through said channel (7). Said slide portion is made up of one or more flanges (9) of said laminar structure (1) which are folded up and/or joined to each other and/or to other parts of the same structure.

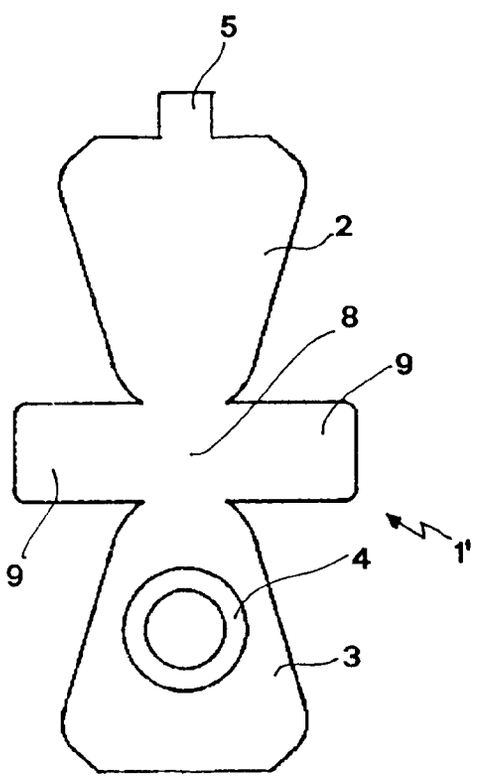

Fig. 1

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Description

[0001] The present invention refers to a hook for footwear and the like.

[0002] In many types of footwear articles, the vamp's flaps are joined by laces which cross a plurality of hooks or loops shaped as an open or closed ring and disposed in pairs on the two flaps.

For a proper use of the footwear article, the laces must go through the hooks without encountering too high a friction therein; in other words, no obstacle causing a non uniform tightening between the different portions of the loops and contributing to a non uniform wear of the lace should be present.

[0003] With a view of limiting this drawback, the patent application IT-TV94U0008 discloses a loop-shaped tightening apparatus comprising a plurality of driving sheave elements for the footwear's laces, which elements are allowed to rotate about two axes orthogonal to each other; each of the sheaves is borne by a C-shaped plate fastened to the vamp by hinge means. A further embodiment provides for the use of a folded plate perforated on two opposite portions in order to receive a non-removable but free-to-rotate ball allowing the laces of the footwear article to slide therein.

[0004] The solutions so far disclosed for manufacturing footwear articles are complex inasmuch as they require a plurality of separated steps for the preparation of their components. The fact of providing more parts actually implies assembly steps which prolong and complicate the manufacturing process. The more complex work brings about significantly higher costs which weighs heavily on the commercial competitiviness of the product which has, typically, relatively limited manufacturing costs.

[0005] A further drawback of the above solutions lies in the fact that withing said hooks, the elements used for the sliding of the lace are disposed some distance away form the corresponding end of the hook; in other words, an opening is provided between the slide element (sheave or ball in the described examples) and the portion delimiting the hook on the corresponding side. This opening makes the thus formed hook disagreeable from the aesthetical point of view, especially for use on valuable footwear and/or characterized by an aestethically refined line. Moreover, the presence of this opening, is likely to cause dust or, more generally, dirt to pile up upon wearing the shoes. The main object of the present invention is to overcome the said drawbacks.

[0006] This result has been achieved, according to the invention, by providing a hook for footwear and similar articles having the features indicated in the characterizing part of claim 1. Further characteristics being set forth in the dependent claims.

[0007] The advantages deriving from the present invention lie essentially in that it is possible to provide a hook for footwear and the like easy to make, effective and characterized by an extremely low cost. Besides, the thus obtained hook results aesthetically appreciable and offers the advantage - as far as dirt-collection is concerned - of having no gap between the lace-guiding element and the corresponding hook's end.

[0008] These and other advantages and characteristics of the present innovation will be best understood by anyone skilled in the art from a reading of the following description in conjunction with the attached drawings given as a practical exemplification of the invention, but not to be considered in a limitative sense, wherein:

- Fig.1 refers to a feasible embodiment of a hook according to the present innovation, shown in a plan view in its state of intermediate product;
- Fig.2 refers to the embodiment of Fig.1 in its state of finished product, shown in a top view;
- Fig.3 refers to the embodiment of Fig.1 in its state of finished product, shown in a bottom view;
- Fig.4 refers to the embodiment of Fig.1 in its state of finished product, shown in a side view;
- Fig.5 refers to the embodiment of Fig.1 in its state of finished product, shown in a sectional view taken on line V-V in Fig. 2;
- Fig. 6 refers to another feasible embodiment of a hook according to the present innovation, shown in a plan view in its state of intermediate product;
- Fig.7 refers to the embodiment of Fig.6 in its state of finished product, shown in a top view;
- Fig.8 refers to the embodiment of Fig.6 in its state of finished product, shown in a bottom view;
- Fig.9 refers to the embodiment of Fig.6 in its state of finished product, shown in a side view;
- Fig.10 refers to the embodiment of Fig.6 in its state of finished product, shown in a sectional view taken on line X-X in Fig. 7;
- Fig. 11 refers to a further feasible embodiment of a hook according to the present innovation, shown in a plan view in its state of intermediate product;
- Fig.12 refers to the embodiment of Fig.11 in its state of finished product, shown in a top view;
- Fig.13 refers to the embodiment of Fig.11 in its state of finished product, shown in a bottom view;
- Fig.14 refers to the embodiment of Fig.11 in its state of finished product, shown in a side view;
- Fig.15 refers to the embodiment of Fig.11 in its state of finished product, shown in a sectional view taken on line XV-XV in Fig. 12.

[0009] Reduced to its basic structure, and reference being made to the figures of the attached drawings, a hook (1) according to the innovation is of a type consisting of a body (1) having a substantially laminar structure and so shaped as to define a channel (7) closed on at least three sides (2, 3, 8). In other words, the hook (1) may either of closed ring type, as in the examples of Figs. 1 to 5 and 11 to 15, or of open ring type (open mouth), as in the example of Figs. 6 to 10.

In this type of hook provision is made for a slide portion

able to interact with a lace going through the channel (7).

[0010] Advantageously, the present invention exhibits a slide portion made up of one or more flanges (9) of the laminar structure (1) which are folded up and/or joined to each other and/or to other parts of the same structure.

[0011] In practice, as shown in the example, two flanges (9) may be provided which are joined with each other; alternatively, provision may be made for only one flange which unites with another portion of the laminar structure (1), or for only one flange folded up, or for more flanges joined to the laminar structure (1), etc.

The channel (7) exhibits a top portion (2), a bottom portion (3) and a connecting portion interposed therebetween. In the illustrated example, the flanges (9) are made up of the same connecting portion (8) which, in correspondence of one step for the formation of the intermediate product (1'), has an initial development of an extent larger than the width taken up by the same portion (8) over the finished product (1). In this way, there is obtained a connecting portion (8) of substantially cylindrical shape.

Moreover, the flanges (9) extend directly from the end (6) of body (1), in correspondence of said connecting portion (8), so as to provide an assembly without solution of continuity between the connecting portion (8) and said slide portion (9). This allows overcoming the drawback of having a gap between the slide portion and the hook, as provided in the solutions of the prior art.

To engage the hook (1), the latter is provided with means (4) for attachment to the vamp, said means being made up of a substantially cylindrical element (4) (in one piece with the body (1) of the hook in the examples) hanging downwards from a base portion (3) and having a free end apt to be fixedly riveted over the vamp. It is understood that the positioning of such cylindrical element (4) may be different from the one indicated in the drawings for exemplification purpose. Moreover, other vamp-fixing means of known type may be used, which wiil not be described herein.

In the case of a closed ring-type hook, the body (1) of the hook may be provided with one or more fins or edges (5; 20) on the base portion (3) or on the top portion (2), and folded over the other portion to keep the latter in place. In the example of Figs. 1 to 5, provision is made for one fin (5), whereas in the example of Figs. 11 to 15 provision is made for a rivetable edge (20) and for two fins as well, as shown only in Fig. 13.

[0012] Alternatively, in one example (not shown), the flanges (9) may extend sideway from the top portion (2) or from the base portion (3) and be folded up and/or united inside the channel (7) to define the slide portion.

Claims

1. Hook for footwear and the like, of a type consisting of a body (1) having a substantially laminar structure and so shaped as to define a channel (7) closed on at least three sides (2, 3, 8) and exhibiting a slide portion able to interact with a lace going through said channel (7), hook characterized in that said slide portion is made up of one or more flanges (9) of said laminar structure (1) which are folded up and/or joined to each other and/or to other parts of the same structure.

2. Hook according to claim 1, characterized in that said channel (7) exhibits at least a top portion (2), a bottom portion (3) and a connecting portion (8) interposed therebetween, and one or more flanges (9) are disposed in correspondence of said connecting portion (8).

3. Hook according to claim 1, characterized in that said one or more flanges (9) are made up of the same connecting portion (8) which, in correspondence of a step for the formation of the intermediate product (1'), has an initial development of an extent larger than the width taken up by the same portion (8) over the finished product, so as to determine a connecting portion (8) of substantially cylindrical shape.

4. Hook according to claim 2 or claim 3, characterized in that said flanges (9) extend directly from the end (6) of body (1) , in correspondence of said connecting portion (8), so as to provide an assembly without solution of continuity between the connecting portion (8) and said slide portion (9).

5. Hook according to claim 1, characterized in that said body (1) is provided with means (4) for attachment to the vamp, said means being made up of a substantially cylindrical element (4) hanging downwards from a base portion (3) and having a free end apt to be fixedly riveted over the same vamp.

6. Hook according to claim 5, characterized in that said substantially cylindrical element (4) is made in one piece with said body (1).

7. Hook according to claim 1, characterized in that said body (1) has a base portion (3) and a top portion (2) joined together by a connecting portion (8) in correspondence of one end (6) to form one body, and it is provided, in correspondence of the opposite end, with one or more fins or edges (5; 20) located either on said base (3) or on said top (2) portion and folded over the other portion in order to retain it.

8. Hook according to claim 1, characterized in that said channel (7) exhibits at least a top portion (2), a base portion (3) and a connecting portion (8) interposed therebetween, and said one or more flanges (9) branch out sideway from either said top por-

tion (2) or said base portion (3) and are folded up and/or joined together inside said channel (7).

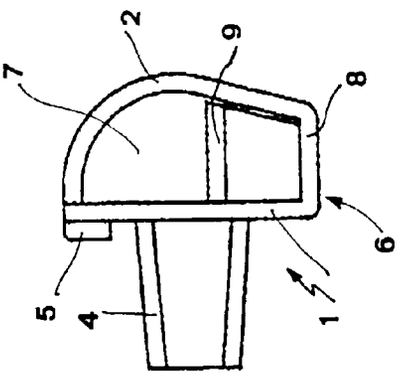

Fig. 5

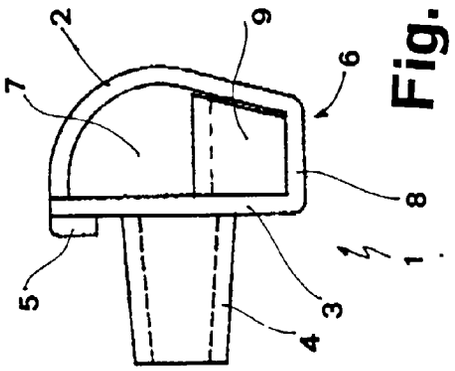

Fig. 4

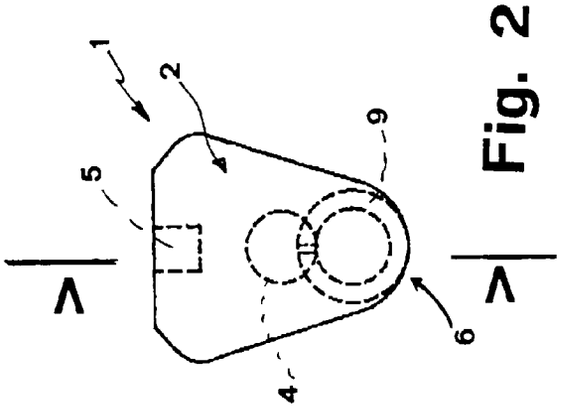

Fig. 2

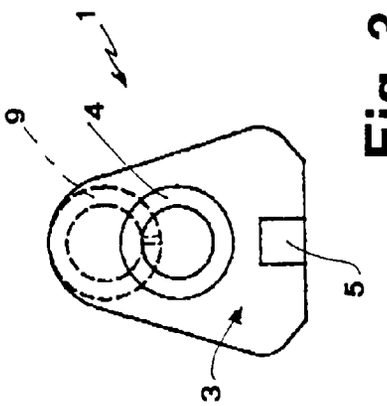

Fig. 3

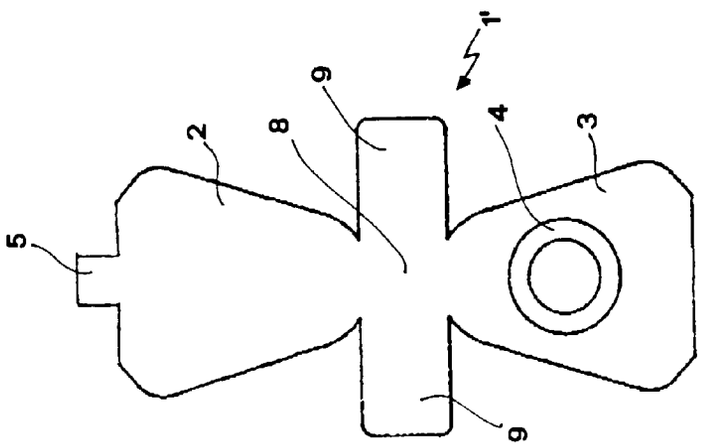

Fig. 1

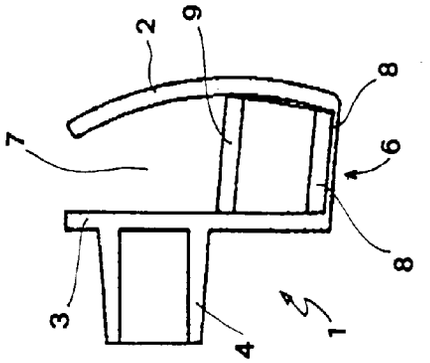

Fig. 10

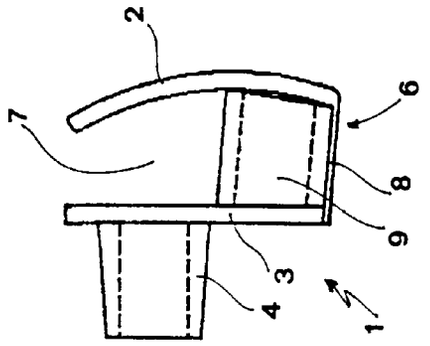

Fig. 9

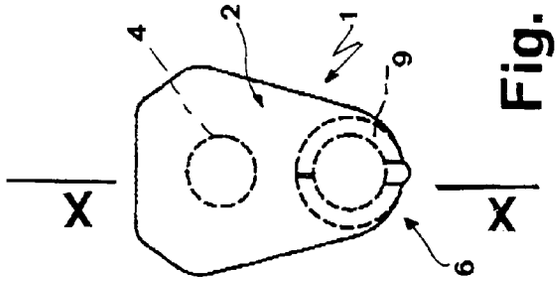

Fig. 7

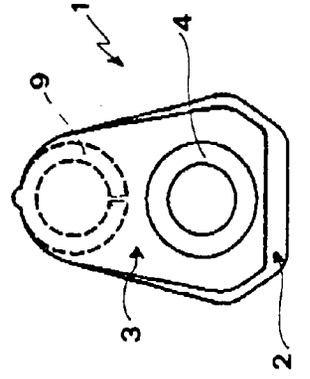

Fig. 8

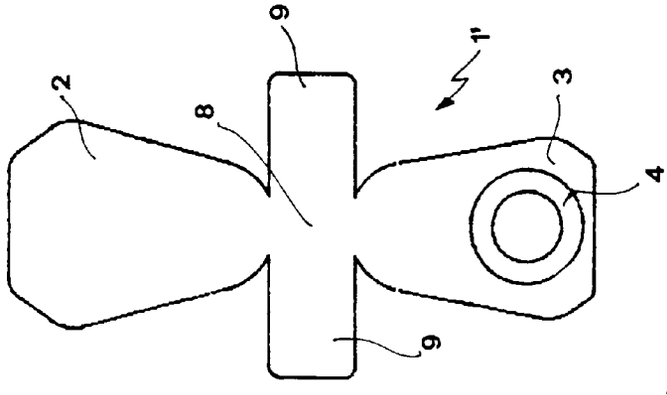

Fig. 6

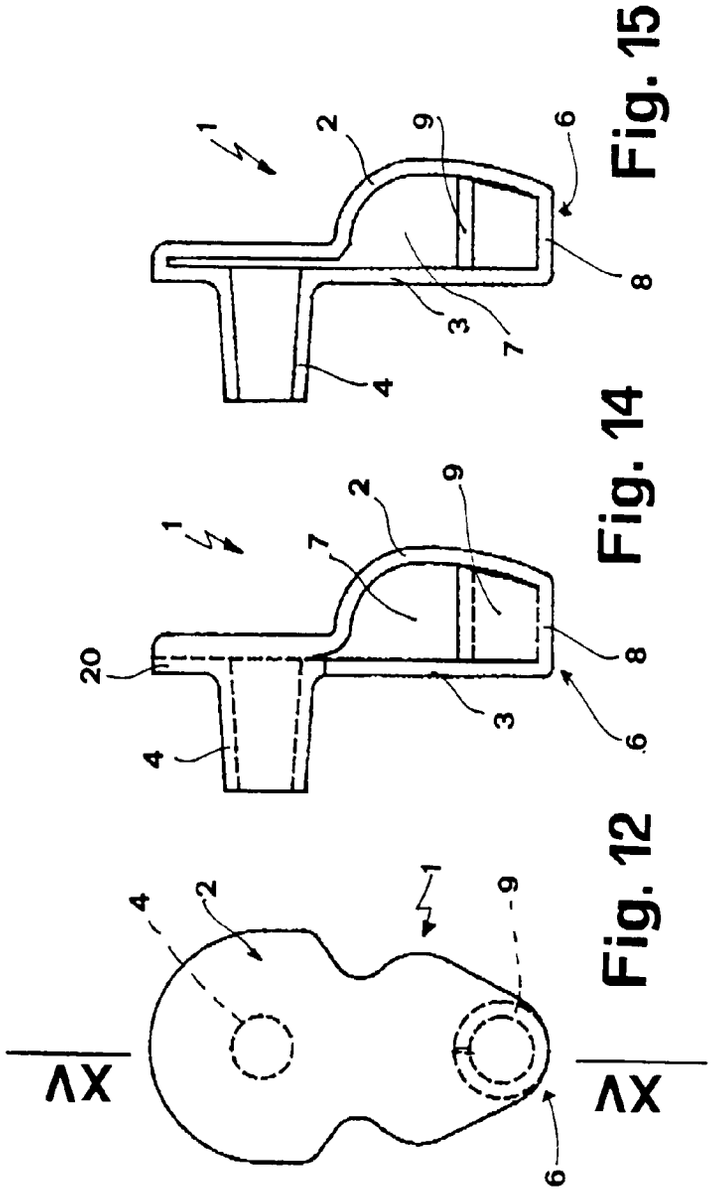

Fig. 12

Fig. 14

Fig. 15

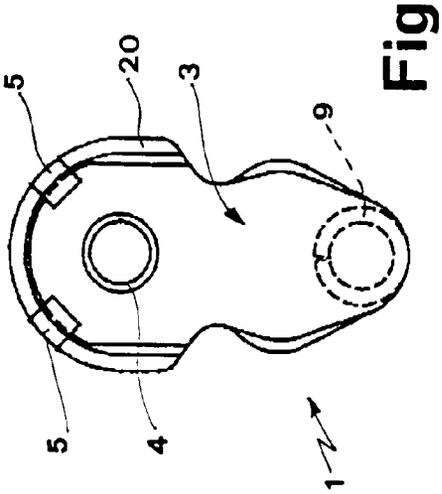

Fig. 13

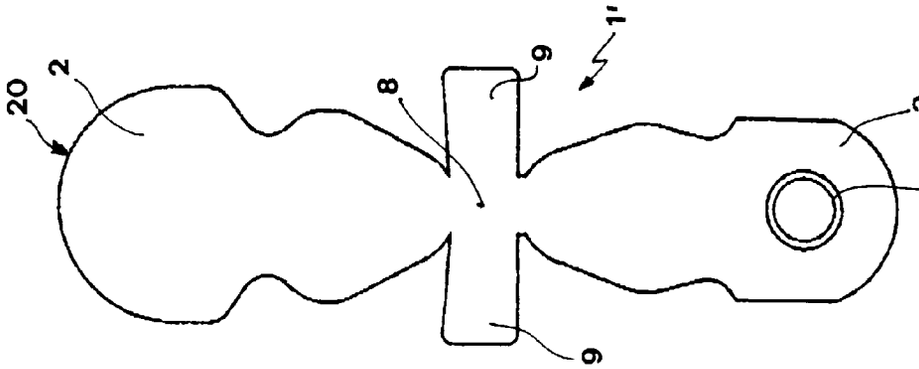

Fig. 11

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 83 0747

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	GB 194 884 A (J. PAGE) * the whole document *	1-8	A43C3/00
X	DE 35 546 C (G. KLOTZ) * the whole document *	1-4	
A	FR 1 019 189 A (A.C.F.A) 21 January 1953 * the whole document *	1	
A	FR 2 414 307 A (G. MELIARD) 10 August 1979 * the whole document *	1	
A	US 1 368 971 A (A. ROSS) 15 February 1921 * the whole document *	1	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

A43C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	17 March 1999	Declerck, J

CATEGORY OF CITED DOCUMENTS

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17-03-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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FR 1019189 A	21-01-1953	NONE	
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