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(54) Benævnelse: **System med et beslag, anvendelse af systemet og fremgangsmåde**

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DESCRIPTION

[0001] The invention relates to a system comprising a bracket suited for fastening of bird comb.

[0002] The invention also relates to the application of the system and the method for fastening a bird comb to a roof construction. It is known to mount ventilated bird comb in roof constructions.
The ventilated bird combs are mounted between roofing panels such as tile and typically the eaves flashing, which is mounted on the base of the roof. The object of mounting a ventilated bird comb is to maintain an acceptable air ventilation in the roof construction and animals preferably birds are prevented from entering the roof.

[0003] Ventilated bird combs are with the hitherto known technique mounted by leading screws through the bird combs down through the eaves flashing for fastening by screwing in the below roof construction, typically base of the roof.

[0004] It has been found, however, that there are some drawbacks of this known technique, including that the holes, which are made in the eaves flashing by penetration of screws for fastening bird combs, can form basis for moisture and water, which subsequently can create rot in the roof construction, resulting in that the roof subsequently becomes destroyed and must be replaced.
From WO 2007122502 A2 (CRICONIA et al.) is known a bracket for fastening a special type of roof tile, which has an exterior, which is partially circular. The brackets are fastened to the roof construction, which is to be covered by the roof tiles with a screw bracket. For the special partially circular roof tiles, there is also developed a partially circular bird comb, which can be fastened by the brackets screwn into the roof construction.
The from WO 2007122502 A2 known technique however also involves some drawbacks, since the technique can only be used for special roof tiles and for that purpose specially adapted bird combs, and it is a drawback that the brackets must be fastened with screw brackets, which is both time consuming and material demanding and thereby relatively costly to install.

[0005] Another technique is known from DE 203 03 875 U1 wherein a bird comb is fastened to the eaves flashing.

[0006] It is therefore an object of the invention to improve the known methods and techniques. The object of the invention is achieved by a system according to claim 1. The bracket can be used for fastening bird combs without making hole in eaves flashing since the "U" shaped part of the bracket can squeeze around a lath in the roof construction and thereby can be fastened to the roof construction without application of screw brackets or tools whereby openings for moisture and water are not made to the below roof construction and the bracket is also quick and inexpensive to mount and can be used for ordinarily shaped bird combs, which fit most types of roof tiles.

[0007] Further appropriate embodiments of the system are stated in the dependent claims. The invention, as mentioned, also includes the application of said system for fastening a bird comb including a ventilated bird comb for roof constructions. The invention will now be explained more fully with reference to the drawings, in which:

Fig. 1 shows a setup, which includes a part of a roof construction where a bracket is made ready for mounting.

Fig. 2 shows how a ventilated bird comb is made ready for tool free mounting for two brackets.

Fig. 3 shows a ventilated bird comb, which is mounted to two brackets.

Fig. 4 shows how the ventilated bird comb after mounting to the brackets easily can be lifted up from the eaves flashing whereby cleaning becomes very easy to perform.

Fig. 5 shows a mounted ventilated bird comb with a mounted tile roofing panel.

Fig. 6 shows a bracket for fastening a ventilated bird comb seen from the side.

Fig. 7 shows a bracket for fastening a ventilated bird comb seen from above.

Fig. 8 shows a preferred embodiment of a bracket for fastening of ventilated bird comb.

Fig. 9 shows mounting of ventilated bird comb with preferred version of mounting bracket.

Fig. 10 shows an example of mounting of ventilated bird comb with application of preferred version of mounting bracket.

Fig. 11 shows another example of mounting of ventilated bird comb with application of preferred version of mounting bracket.

Fig. 12 shows a third example of mounting of ventilated bird comb with application of preferred version of mounting bracket.

Fig. 13 shows different designs of preferred embodiments of brackets.

Fig. 14 shows fastening of non-ventilated bird combs with a bracket of a system according to the invention.

In fig. 1 is with 1 shown a bracket for fastening to a roof construction 4 by for example fastening by screwing through a mounting hole 3.
The bracket 1 is shaped with shapes 2 for fastening a ventilated bird comb.
The shapes 2 are in the shown preferred embodiment manufactured as connected holes with varying diameter or width.

[0008] The bracket 1 reaches out so it fully or partially covers the eaves flashing 5, which shields for the below roof construction.
Fig. 2 shows a ventilated bird comb 6, which in the mounting surface is provided with items 7,

which are shape complementary to the shapes 2 in the brackets 1.

[0009] The items 7 are in the shown preferred embodiment shaped as the top of screw heads.

[0010] Fig. 3 shows a ventilated bird comb 6, which is mounted to brackets 1, which is done without application of tools and without application of penetrating fittings such as screws or nails.

[0011] Fig. 4 shows how the ventilated bird comb 6, mounted to the brackets 1, can easily be lifted whereby cleaning the roof can be carried out quickly and efficiently.

[0012] Fig. 5 shows how a roofing panel 8 is mounted on the ventilated bird comb 6.

[0013] Fig. 6 shows a bracket 1, seen from the side, whereby it will appear that the bracket in the shown preferred embodiment is curved 15 in the longitudinal direction, whereby mounting is simplified and the bracket gets an appropriate spring effect.

[0014] Moreover, it is seen that the bracket in the end with fastening holes 3 is shaped as a hook for appropriate adaption to the roof construction 4 to which the bracket 1 is to be fastened.

[0015] Fig. 7 shows a bracket 1, seen from above, with multiple shapes 2 for fastening of ventilated bird comb 6.

[0016] The multiple shapes 2 make it easy to find an optimum mounting position for fastening ventilated bird combs 6.

[0017] Bracket 1 and ventilated bird combs 6 can be manufactured from all suited materials including metallic and / or polymeric.

[0018] In fig. 8 is shown a preferred embodiment of a bracket 9 of a system for fastening a ventilated bird comb 6.
The bracket 9 is characterized in that it is "U" shaped from a first end piece 10 preferably by the first end piece 10 via a bend continues to a part piece 14, which via a bend continues to a length piece 11 where the distance 17,18 between the first end piece 10 and the length piece 11 is reduced from the part piece 14 towards the free end 19 of the first end piece 10.

[0019] It is hereby achieved that the "U" shaped part of the bracket 9 can squeeze around a lath in a roof construction and can thereby be fastened to the roof construction without application of screw brackets and thereby mounted without application of tools.

[0020] In fig. 9 is shown how the bracket 9 can be used for mounting a ventilated bird comb 6.
It is a special characteristic of mounting ventilated bird combs 6 with brackets 9 that tools or

accessories such as screws or nails are not needed for the mounting.
With the mounting, as shown in fig. 9, the bracket 9 is fastened to the roof construction 4 by squeezing since the bracket 9 is lead in over the roof construction 4 and squeezes around this with the bracket parts 10 and 11.
The brackets 9 can be manufactured from corrosion-proof metals such as steel. The "U" shaped end parts 12 can be used for adjustment of the distance between the roof construction 4 and the ventilated bird comb 6.

[0021] In fig. 10 is shown how the second end 13 of the bracket 9 can be used for mounting a ventilated bird comb 6, which is shaped for the purpose with a hole for fastening of the bracket end 13.

[0022] Fig. 11 shows how the outermost "U" shaped end part 12 of a bracket 9 can be used for mounting a ventilated bird comb 6.

[0023] In fig. 12 is shown how a non-outermost "U" shaped end part can be used for mounting a ventilated bird comb 6.

[0024] In a mounting situation as the one shown in fig. 12, the excess part of the bracket 9 can, if necessary, be removed by for example cutting.

[0025] In fig. 13 is shown 3 preferred embodiments of bracket 9, 9A, 9B, where it is seen that the length piece 11 is provided with a bend 15 preferably opposite the free end of the first end piece 10.

[0026] Fig. 14 shows an example of mounting of a non-ventilated bird comb 16, which is fastened by a bracket 9B, which is fastened to a lath in the roof construction 4 and fastens the bird comb 16 by impact from a pressure force.

[0027] In a preferred embodiment, the bracket 1,9, 9A, 9B is manufactured from a metallic guy or wire.

REFERENCES CITED IN THE DESCRIPTION

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- WO2007122502A2 **[0004]** **[0004]**
- DE20303875U1 **[0005]**

Krav

1. System omfattende et beslag (1, 9, 9A, 9B), et fuglegitter og en tagkonstruktion til befæstigelse af fuglegitteret (6, 16) til tagkonstruktionen (4), hvori beslaget (1, 9, 9A, 9B) har en "U" formet del, den "U" formede del har et først endestykke (10) med en fri ende (19), det første endestykke (10) strækker sig via en bøjning ind i et delstykke (14), som via en bøjning strækker sig ind i et længdestykke (11), **kendetegnet** ved at afstanden (17, 18) mellem endestykket (10) og længdestykket (11) mindskes fra delstykket (14) mod den frie ende (19) af endestykket, og hvor beslaget er konfigureret således at beslagets (1, 9, 9A, 9B) "U" formede del er i stand til at blive klemt omkring en lægte i tagkonstruktionen (4), og fuglegitteret (6, 16) kan befæstiges til beslaget (1, 9, 9A, 9B) uden at lave huller i fodblikket.

2. System ifølge krav 1, **kendetegnet** ved at længdestykket (11) ender med et antal "U" formede endedele (12), som ender i et anden endestykke (13).

3. System ifølge krav 2, **kendetegnet** ved at længdestykket (11) ender med én "U" formet endedel (12).

4. System ifølge krav 2, **kendetegnet** ved at længdestykket (11) ender med to "U" formede endestykker (12).

5. System ifølge ethvert af kravene 1 – 4, **kendetegnet** ved at længdestykket (11) er forsynet med en bukning (15), fortrinsvis ud for den frie ende af endestykket (10).

6. System ifølge ethvert af kravene 1 – 5, **kendetegnet** ved at beslaget (1, 9, 9A, 9B) er fremstillet af et metallisk stag eller tråd.

7. Anvendelse af systemet ifølge ethvert af kravene 1 – 6 til befæstigelse af et fuglegitter, såsom et ventileret fuglegitter, til en tagkonstruktion (4).

8. Fremgangsmåde til befæstigelse af et fuglegitter (6, 16) til en tagkonstruktion (4) uden at lave huller i fodblikket ved at anvende et beslag (1, 9, 9A, 9B) med en "U" formet del, den "U" formede del har et første endestykke (10) med en fri ende (19), det første

endestykke (10) strækker sig via en bøjning ind i et delstykke (14), som via en bøjning strækker sig ind i et længdestykke (11), hvor afstanden (17, 18) mellem det første endestykke (10) og længdestykket (11) mindskes fra delstykket (14) mod den frie ende (19) af endestykket (10), hvori:

- den "U" formede del af beslaget (1, 9, 9A, 9B) klemmes omkring en lægte i tagkonstruktionen (4), og
- fuglegitteret (6, 16) befæstiges til beslaget (1, 9, 9A, 9B).

9. Fremgangsmåde ifølge krav 8, hvori befæstigelsen af fuglegitteret (6, 16) til beslaget (1) foretages ved hjælp af midler (7) tilvejebragt på monteringsfladen af fuglegitteret (6, 16), hvor midlerne (7) er udformede komplementært til udformninger (2) i beslaget (1).

10. Fremgangsmåde ifølge krav 9, hvori udformningerne (2) i beslaget (1) er huller.

11. Fremgangsmåde ifølge krav 8, hvor beslaget (9, 9A) ifølge ethvert af kravene 2 – 6 anvendes, hvori det anden endestykket (13) af beslaget (9, 9A) anvendes til at montere et ventileret fuglegitter (6, 16), som er udformet til anvendelsen med et hul til befæstigelse til beslagenden (13).

12. Fremgangsmåde ifølge krav 8, hvor beslaget (9, 9A) ifølge ethvert af kravene 2 – 6 anvendes, hvori ét af antallet af "U" formede endedele (12) af beslaget (9, 9A) anvendes til montering af et ventileret fuglegitter (6, 16).

13. Fremgangsmåde ifølge krav 8 til montering af et ikke-ventileret fuglegitter (16), hvori fuglegitteret (16) befæstiges med et beslag (9B), der er fæstnet til en lægte i tagkonstruktionen (4) og fæstner fuglegitteret (16) ved påvirkning af en trykkraft.

DRAWINGS

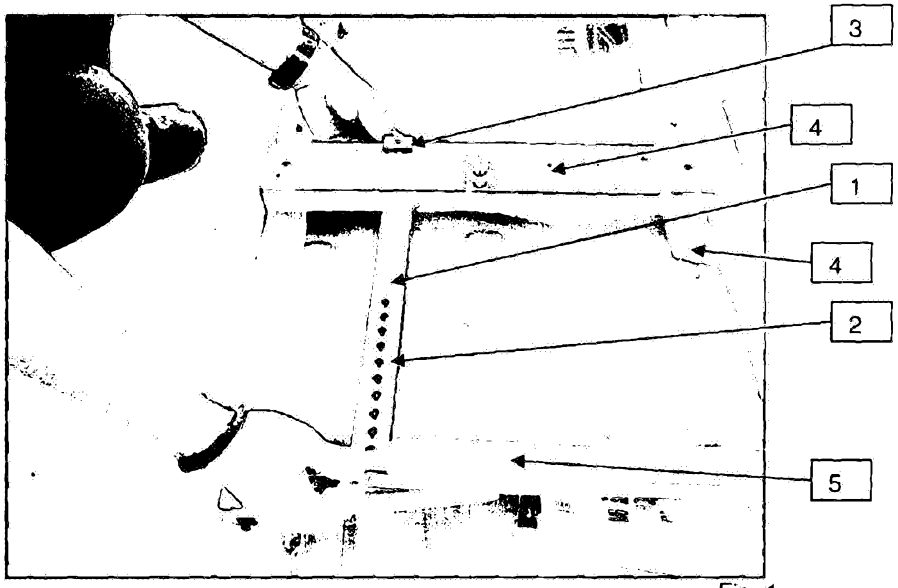


Fig. 1

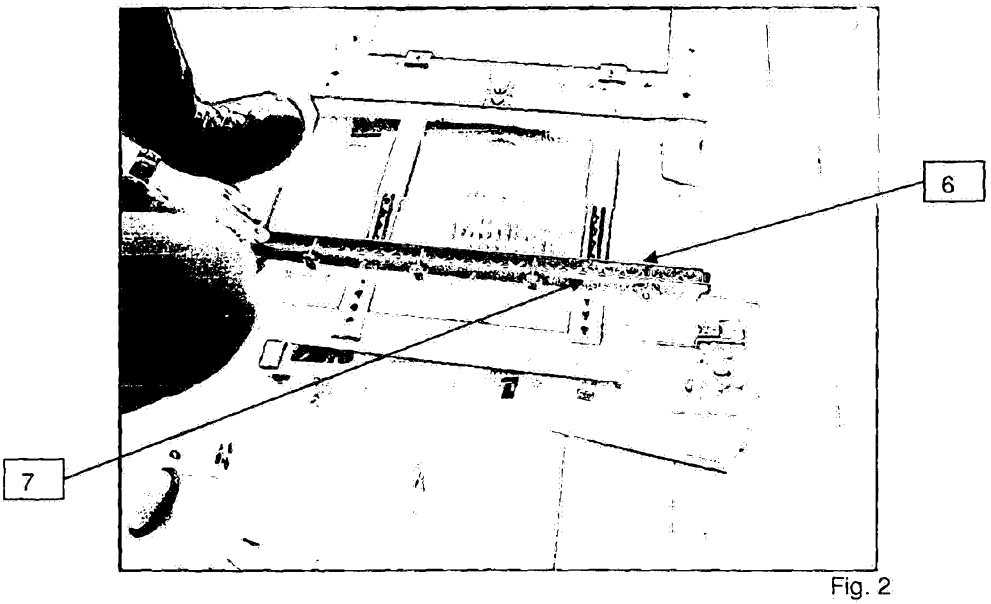


Fig. 2

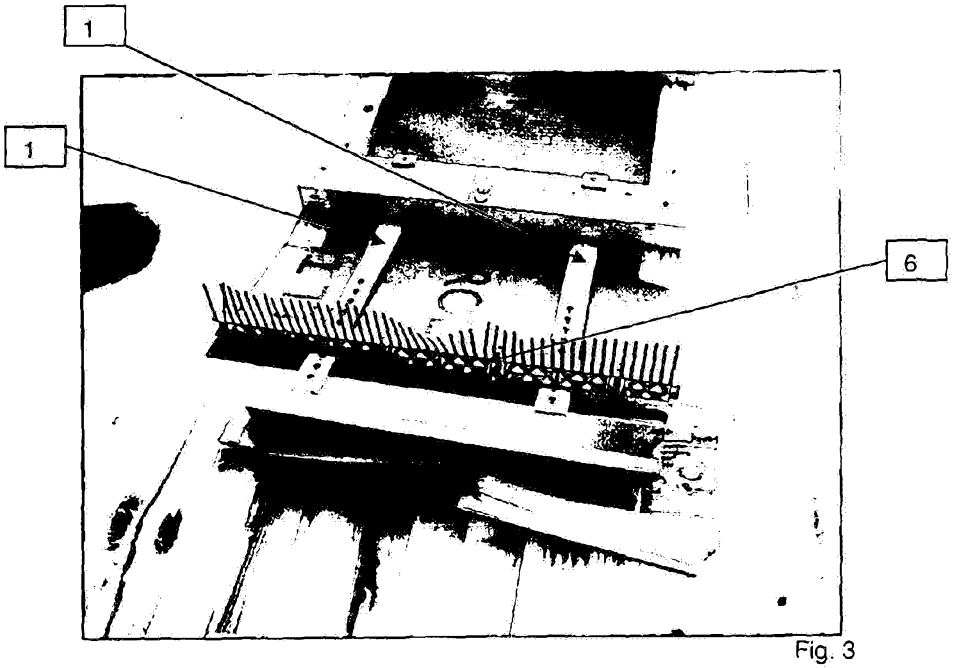


Fig. 3

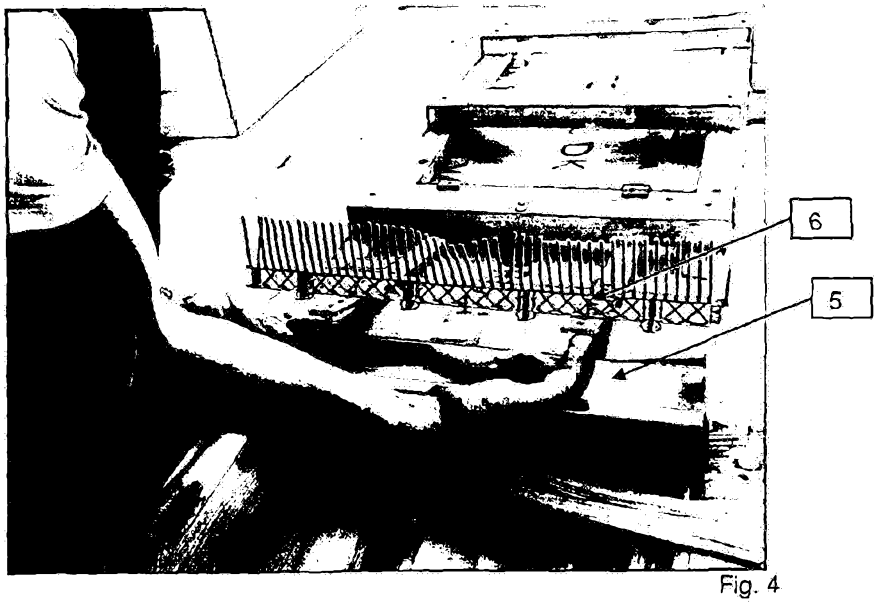


Fig. 4

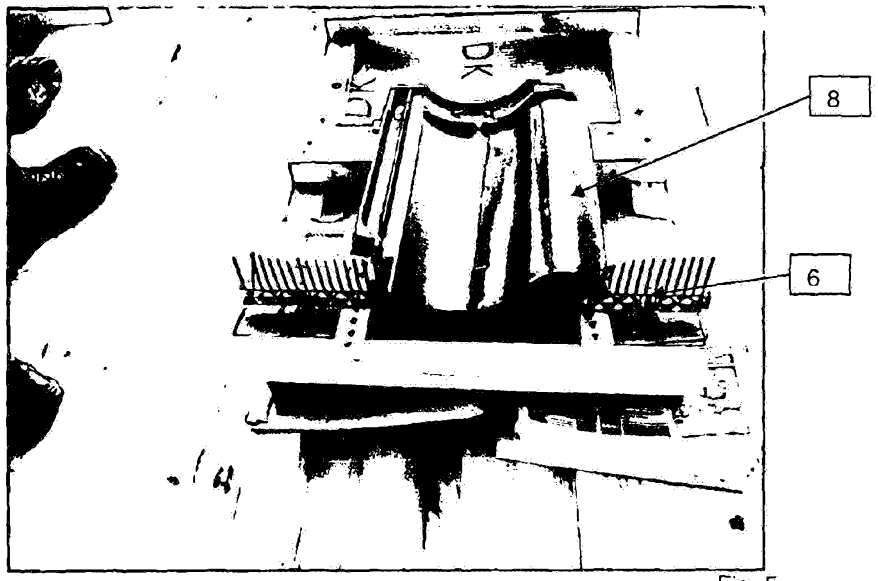


Fig. 5

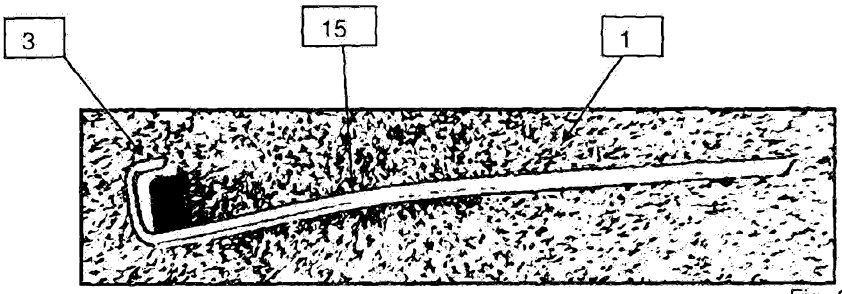


Fig. 6

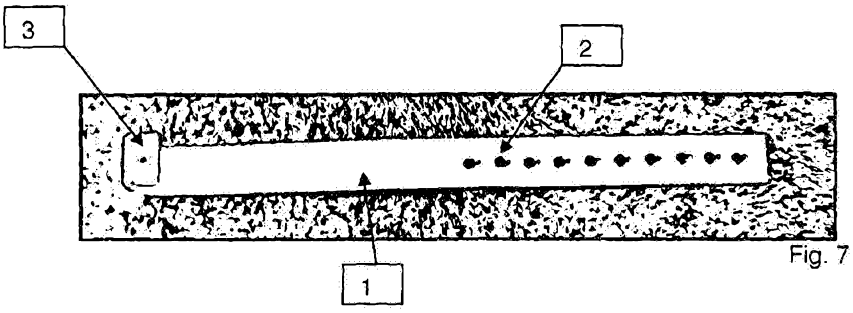


Fig. 7

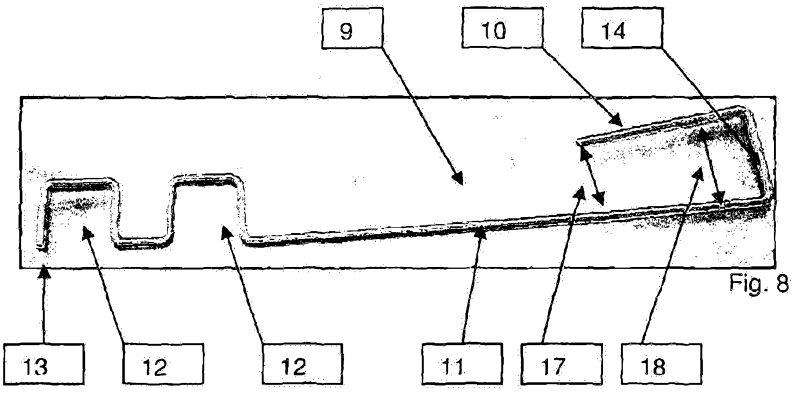


Fig. 8

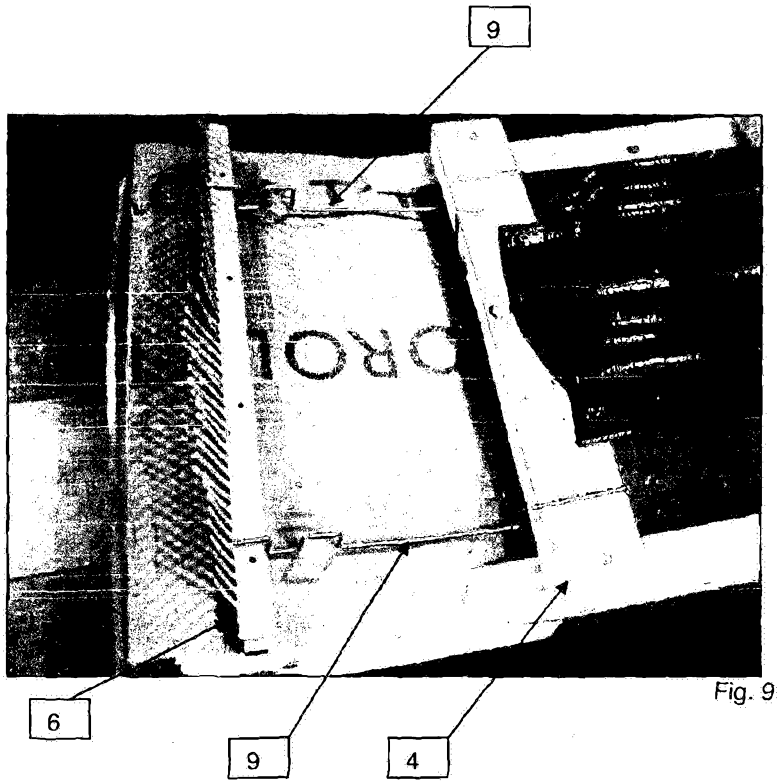


Fig. 9

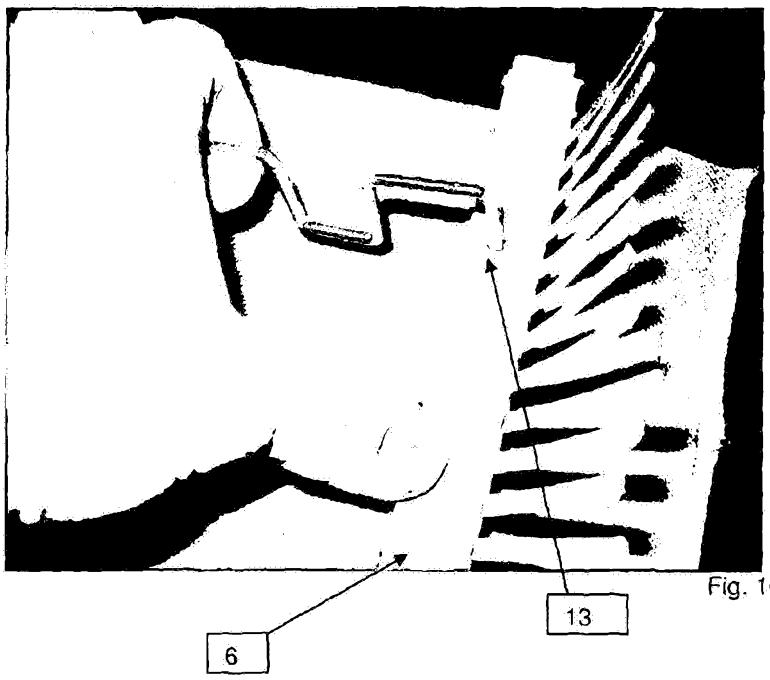


Fig. 10

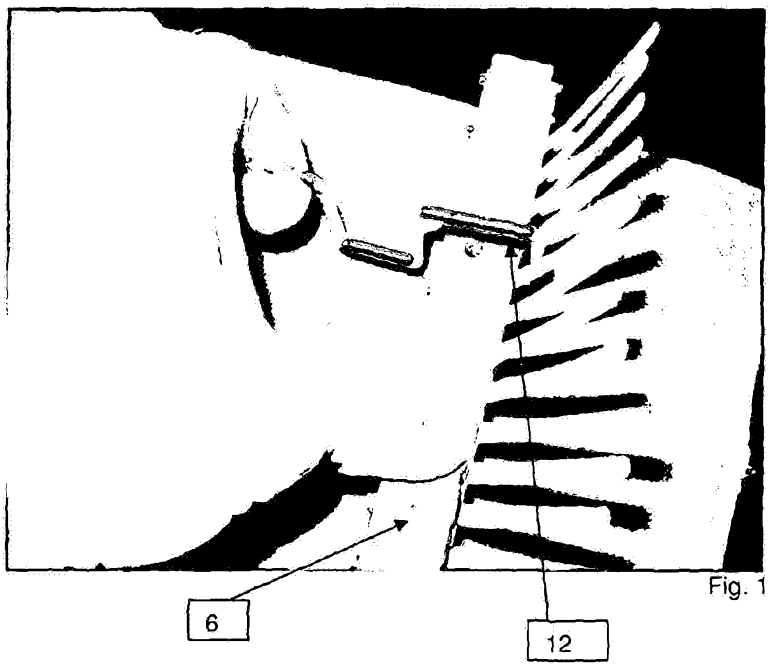


Fig. 11

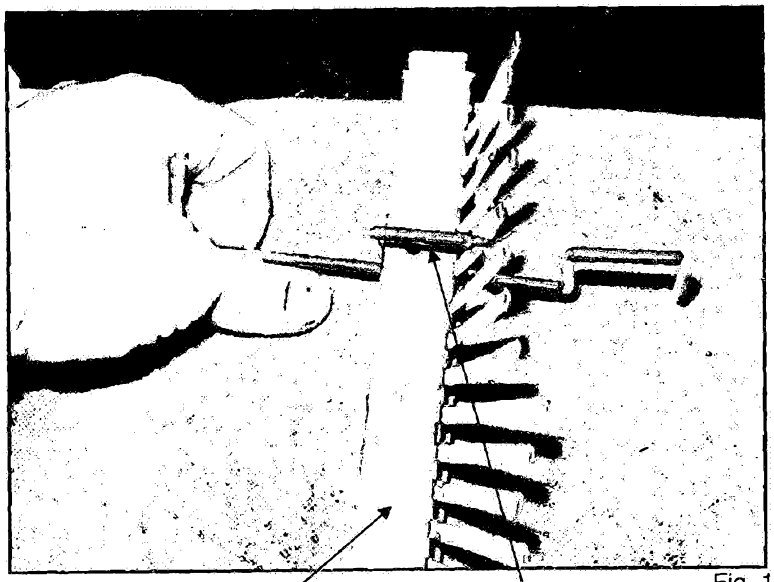


Fig. 12

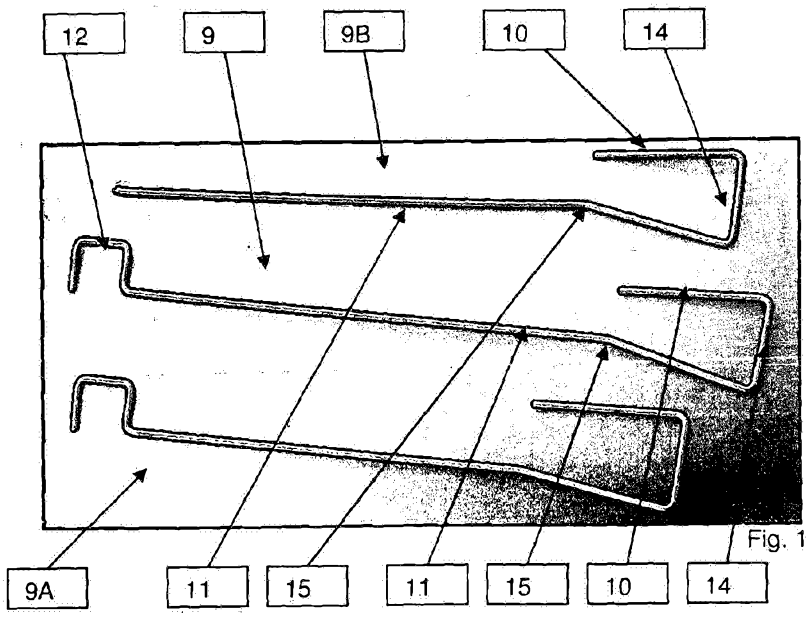


Fig. 13

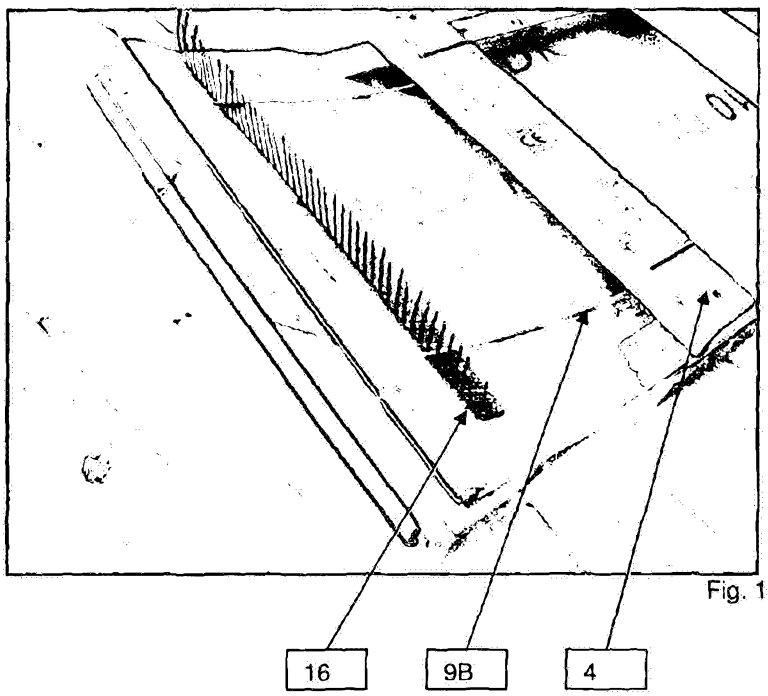


Fig. 14