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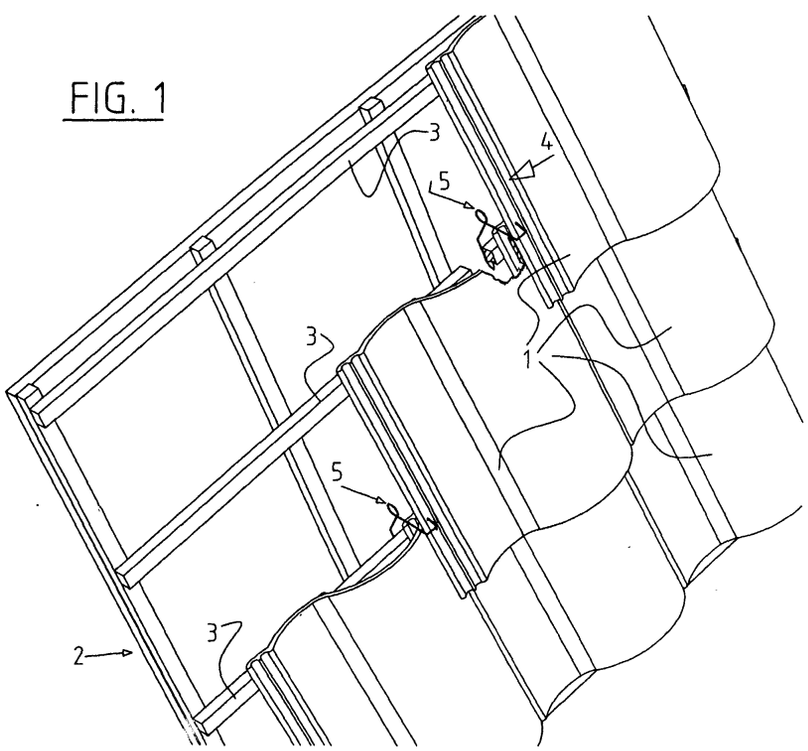
(54) Device for securing roof covering elements on a roof construction and method for mounting thereof

(57) The present invention provides a device for securing one or more roof covering elements on a roof construction, comprising:

- a hook-shaped part for engaging on an edge of a roof covering element;
- a body part which connects onto the hook part and which is provided with a resilient piece; and
- a fixing part which extends substantially transversely of the body part and which is provided with a backward pointing piercing part for fixing in a component of the roof construction.

FIG. 1



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Description

[0001] Roof tiles are increasingly being fixed to a roof construction by means of so-called tile hooks in order to prevent the possibility of the tiles being dislodged at strong wind force and causing injury to persons and damage.

[0002] The European patent specification EP-A-0 687 337 describes a tile hook, wherein two tiles are clamped onto each other between a hook-like bend and a shoulder. This known tile hook is needlessly complicated in construction and therefore costly.

[0003] Known from the British patent GB-A-2 101 172 is a tile hook of wire material which is provided on one side with a pin which engages in a tile batten and on the other side with a hook-shaped outer end which engages over an edge of a roof tile. The holding force exerted by this known tile hook, particularly on the underside of a tile batten, is found in practice to be inadequate.

[0004] The present invention has for its object to provide an improved tile hook which is comparatively simple to manufacture at low cost price and which has a sufficient holding force for the roof tiles, for instance more than 150 Newton and preferably more than 200 Newton.

[0005] The present invention provides a device for securing one or more roof covering elements on a roof construction, comprising:

- a hook-shaped part for engaging on an edge of a roof covering element;
- a body part which connects onto the hook part and which is provided with a resilient piece; and
- a fixing part which extends substantially transversely of the body part and which is provided with a backward pointing piercing part for fixing in a component of the roof construction.

[0006] The backward pointing piercing part ensures that the tile hook hooks firmly into a tile batten.

[0007] The resilient piece is preferably formed by a loop in the wire part forming the body of the device according to the present invention.

[0008] A bend is preferably situated in the wire part at some distance from the piercing part so as to prevent the possibility of the piercing part being pulled out of a tile batten in the case of load.

[0009] The present invention further provides a roof, in addition to a method for arranging a roof covering on a roof construction.

[0010] Further advantages, features and details of the present invention will be elucidated on the basis of the following description of a preferred embodiment thereof with reference to the annexed drawings, in which:

fig. 1 shows a view in perspective of a partly arranged roof which is arranged as according to the present invention;

fig. 2 is a partly broken-away view of detail II of fig. 1; and

fig. 3 shows a view in perspective of a preferred embodiment of a device according to the present invention.

[0011] Roof tiles 1 are laid in overlapping manner on a roof boarding 2 of which tile battens 3 form part. A tile hook 5 is arranged over an edge 4 of roof tile 1, for instance round every other roof tile (see also fig. 2 and 3).

[0012] Tile hook 5 is preferably manufactured from wire material preferably of stainless steel (SS) and comprises at a distance from a first outer end 10 a perpendicular bend 11 through roughly 90° (fig. 2, 3), from which position the wire material extends to a second bend 12 of roughly 90°, wherein the distance of the part 13 between bends 11 and 12 roughly corresponds with the width W of the edge of a roof tile 1.

[0013] From bend 12 the wire material extends via a loop 14, which ensures an adequate spring action of tile hook 5, up to a bend 15 with an angle of about 135°, from which position a piece of wire material 16 extends to a piercing part 17 which extends at an acute angle of roughly 30-45° relative to part 16 and which is provided on the outer end with a sharp point which is obtained for instance by cutting the wire material. The end 10 of tile hook 5 is arranged manually over an edge of roof tile 1, whereafter the piece of wire material 16 is placed behind tile batten 3. Due to the spring action of tile hook 5 the sharp point of tile hook 5 is attached fixedly in tile batten 3, whereby tile hook 5 remains tightly fixed in tile batten 3 even under load. The spring action of tile hook 5 will moreover compensate possible differences in tile batten thickness.

[0014] The present invention is not limited to the above described preferred embodiment; the rights sought are defined by the following claims, within the scope of which many modifications can be envisaged.

Claims

1. Device for securing one or more roof covering elements on a roof construction, comprising:

   - a hook-shaped part for engaging on an edge of a roof covering element;
   - a body part which connects onto the hook part and which is provided with a resilient piece; and
   - a fixing part which extends substantially transversely of the body part and which is provided with a backward pointing piercing part for fixing in a component of the roof construction.

2. Device as claimed in claim 1, manufactured from a single piece of steel in the form of wire.

3. Device as claimed in claim 1 or 2, wherein the hook

part is formed by two bends in the steel.

4. Device as claimed in claim 1, 2 or 3, wherein the resilient piece is formed by a loop in the body part.

5. Device as claimed in claim 1, 2, 3 or 4, wherein the transition between the body part and the fixing part is formed by a bend.

6. Device as claimed in one or more of the claims 1-5, wherein the piercing part is provided with a chamfered point.

7. Device as claimed in any of the claims 1-6, wherein the piercing part points backward through an angle of more than 90°.

8. Roof comprising a roof covering, roof covering elements such as roof tiles, and one or more devices as claimed in one or more of the claims 1-7.

9. Method for arranging a roof covering on a roof construction, wherein a roof covering element such as a roof tile is laid on a roof construction and a preceding roof covering element, wherein the hook part is clamped over an edge of the roof covering element and the piercing part is pulled into a wooden beam of the roof construction.

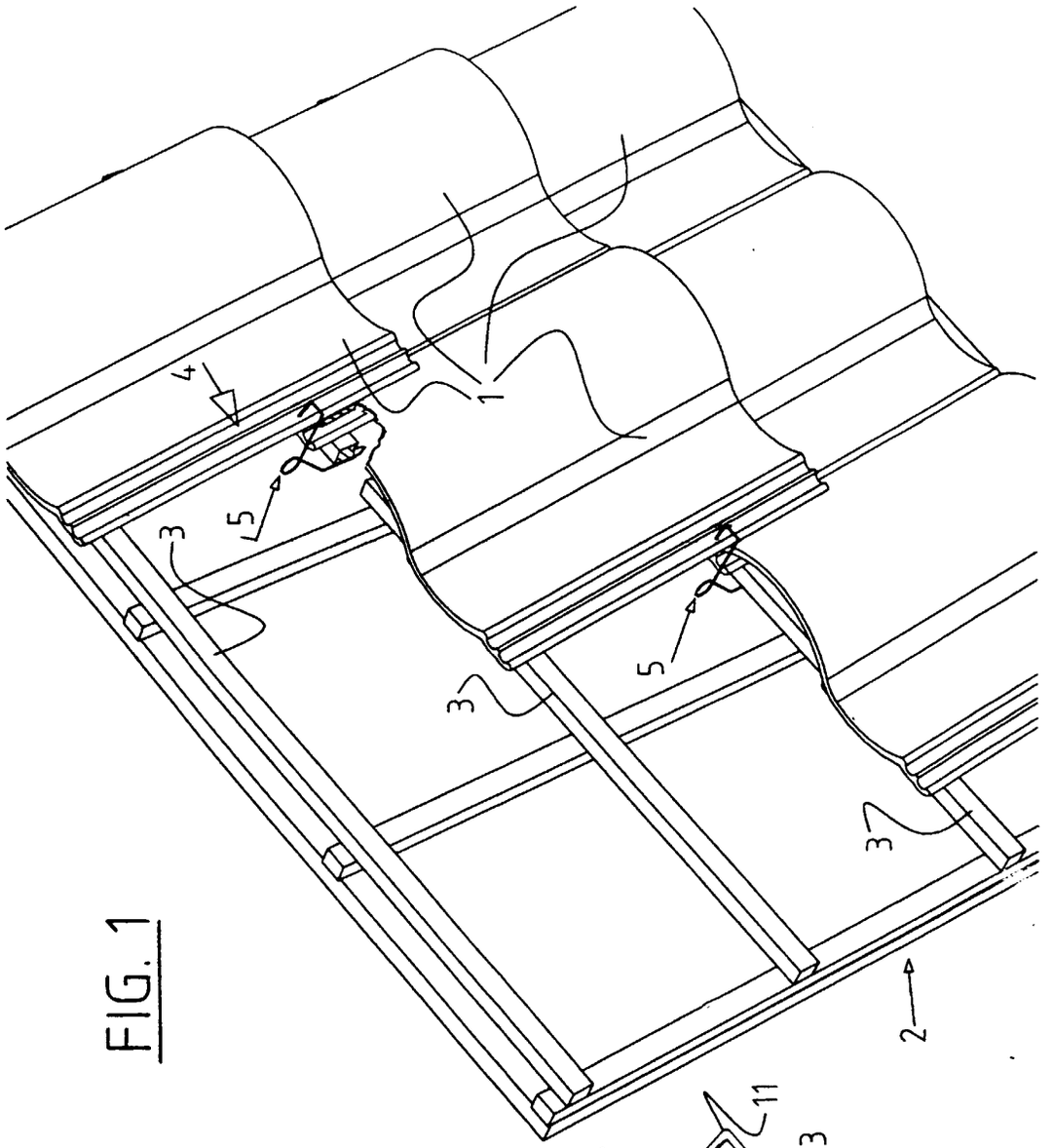

FIG. 1

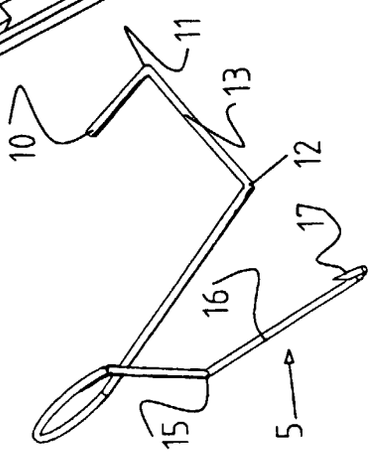

FIG. 3

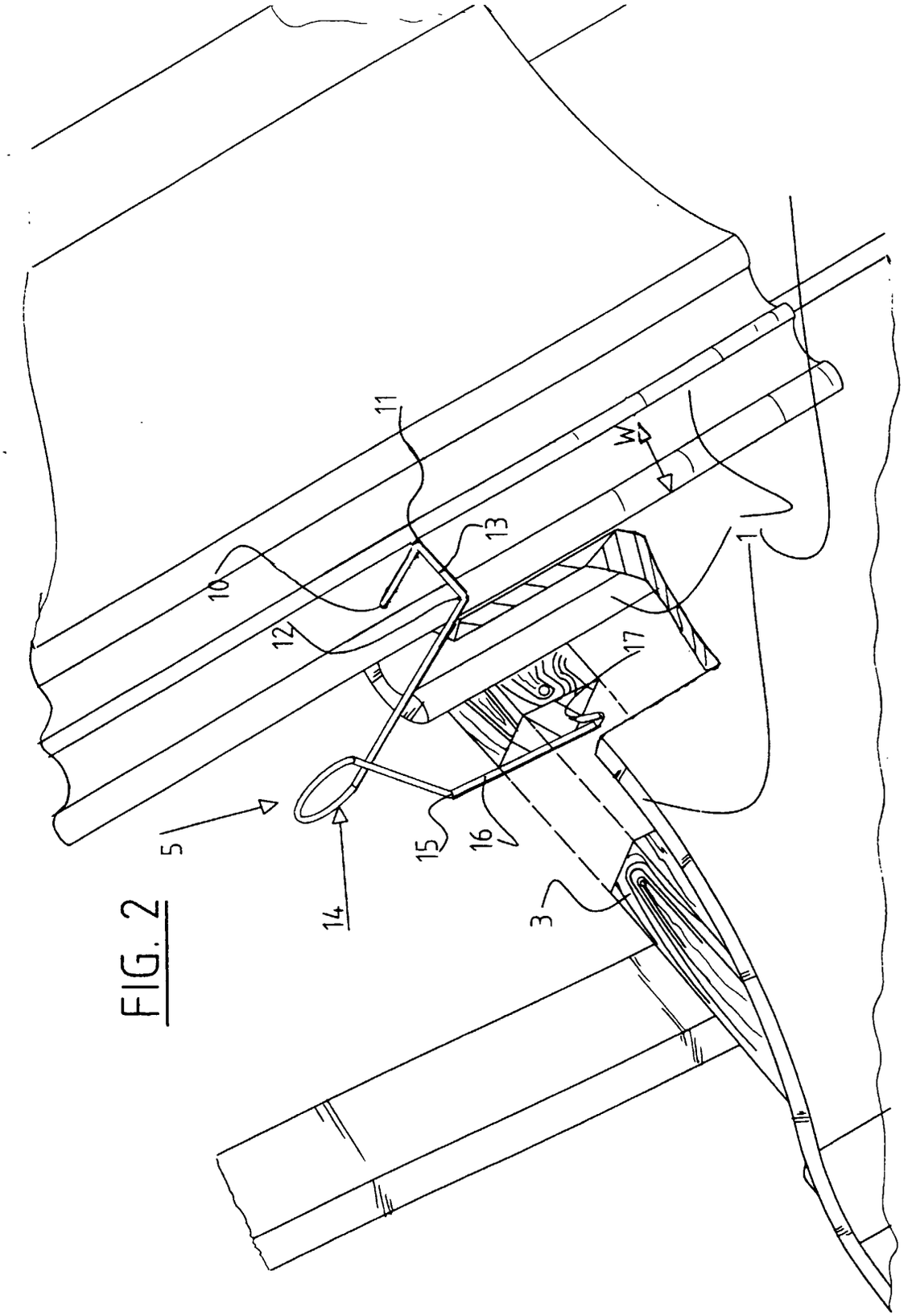

FIG. 2