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(54) **Welded netting mesh**

(57) The invention relates to a reinforcing netting (1)
consisting of welded mesh of welded longitudinal (2)
and transverse (3) wires, in which the mesh has indents

(4) for fixing the mesh to the wall. The mesh is generally
flat and large flat surfaces are present between two ad-
jacent rows of indents (4).

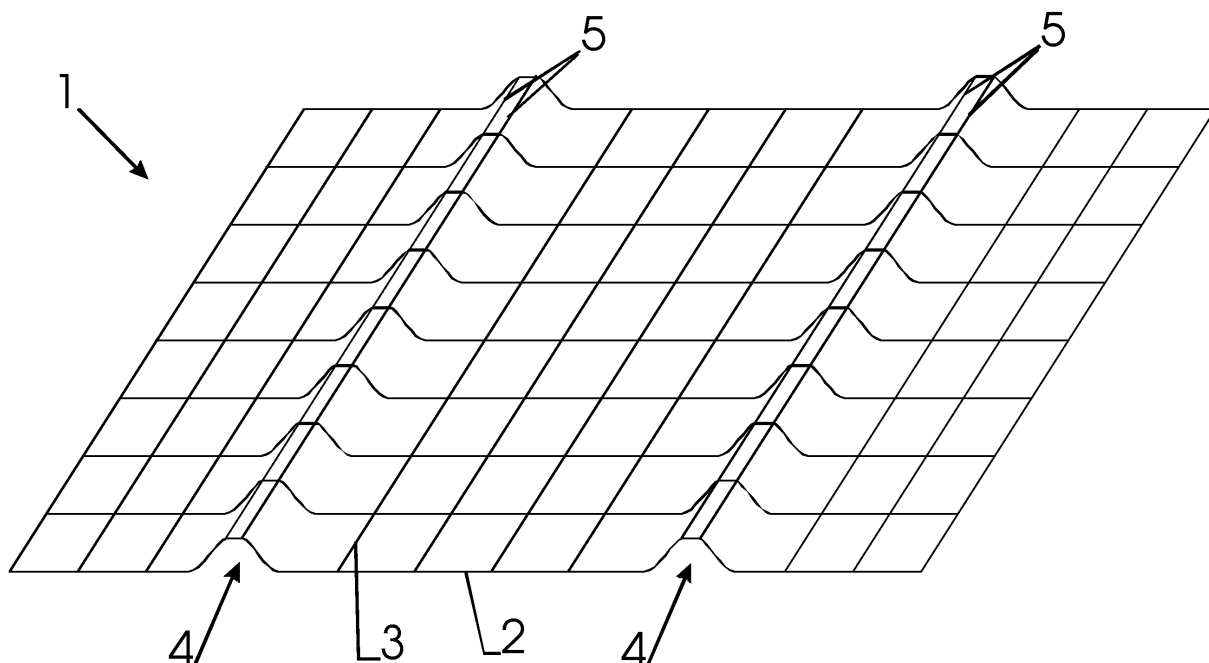


Fig. 1

Description

[0001] The invention relates to a reinforcing netting consisting of welded longitudinal and transverse wires, especially used for tunnel constructions, in which the mesh has indents for fixing the mesh to the wall to be covered.

[0002] Such a reinforcing netting is e.g. known from the European patent 059466.

[0003] The use of welded mesh for the reinforcement or armouring of concrete is generally known. This is amongst others the case for the reinforcement of walls in the construction of tunnels. It is also known to make indents in this welded mesh to give it a three-dimensional shape and to fix it with the indents to the wall that has to be reinforced or covered.

[0004] The invention intends to provide for a reinforcing netting that can be easily and quickly fixed to the wall to be covered.

[0005] Furthermore, the invention intends to provide for a new type of reinforcing netting, offering an excellent reinforcing of the concrete or mortar mass with a minimum of reinforcement materials.

[0006] Therefore the invention proposes for a netting of the type described in the opening lines wherein the mesh is generally flat and wherein large flat surfaces are present between adjacent rows of indent. The large surfaces may have a width which is substantially larger than the width of the indents.

[0007] The indents may be practically trapezoidal.

[0008] In a preferred embodiment of the netting according to the invention the small base of the trapezoidal indents consists of two transverse wires that are situated at a small distance of one another.

[0009] Preferably, the depth of the trapezoidal indents is larger than the small base of the trapezoidal indents.

[0010] The invention will be further explained in the following description by means of the accompanying drawing. In the drawing, figure 1 shows in perspective a part of a welded netting mesh 1 according to the invention.

[0011] The mesh 1 consists of welded longitudinal 2 and transverse 3 wires. The meshes of the welded netting 1 are practically square or rectangular in shape. The longitudinal and transverse wires 2, 3 are preferably made of stainless steel.

[0012] The mesh 1 has at regular intervals indents 4, that are practically trapezoidal. The trapezoidal indents 4 stretch out over the entire width of the mesh 1.

[0013] The small basis of the trapezoidal indents 4 consists of two transverse wires 5 that are situated at a short distance of one another. An important advantage is that the mesh 1 can very easily and quickly be attached to the wall to be covered, e.g. in the event of the construction of a tunnel, by means of these two transverse wires 5, just by making sure that the fixing means clamp both transverse wires 5.

[0014] Preferably, the depth of the trapezoidal indents

4 is larger than the small basis of these indents 4.

[0015] The meshes of the welded netting are e.g. approximately 50 mm in square, in which the distance between the two transverse wires 5 amounts to approximately 12 mm and the depth of the indents 4 to approximately 16 mm. In this case, the coating thickness of the tunnel wall to be covered with concrete, mortar or a mixture thereof is between 40 to 50 mm. It means that the welded netting mesh is situated at 1/3 depth of the coating thickness of the tunnel coating.

[0016] In the embodiment of the mesh 1, shown in figure 1, the indents 4 are situated at each five meshes or five rows of meshes are present between two successive trapezoidal indents 4. The proportion between the surfaces of one row of indents to the surfaces of five rows of meshes is approximately 12/250 or 4,8 %.

[0017] It is now possible to change the number of rows of meshes between two successive trapezoidal indents 4 :

- with two rows of meshes, the proportion is approximately 12/100 or 12 %;
- with three rows of meshes, the proportion is approximately 12/150 or 8 %;
- with four rows of meshes, the proportion is approximately 12/200 or 6 %;
- with six rows of meshes, the proportion is approximately 12/300 or 4 %.

[0018] It has now been found that this proportion is preferably situated between 4 to 8 %.

Claims

1. Reinforcing netting (1) consisting of welded mesh of welded longitudinal (2) and transverse (3) wires, in which the mesh has indents (4) for fixing the mesh to the wall, **characterized in that** said mesh is generally flat and that large flat surfaces are present between two adjacent rows of indents.
2. Reinforcing netting (1) according to claim 1 wherein said large flat surfaces are substantially larger than the width of the indents.
3. Reinforcing netting (1) according to claim 1 or 2, wherein the indents (4) are practically trapezoidal.
4. Reinforcing netting (1) according to claim 3, **characterized in that** the small base of the trapezoidal indents (4) consists of two transverse wires (5) that are situated at a small distance of one another.
5. Reinforcing netting (1) according to claim 3 or claim 4, **characterized in that** the depth of the trapezoidal indents (4) is larger than the small base of the trapezoidal indents (4).

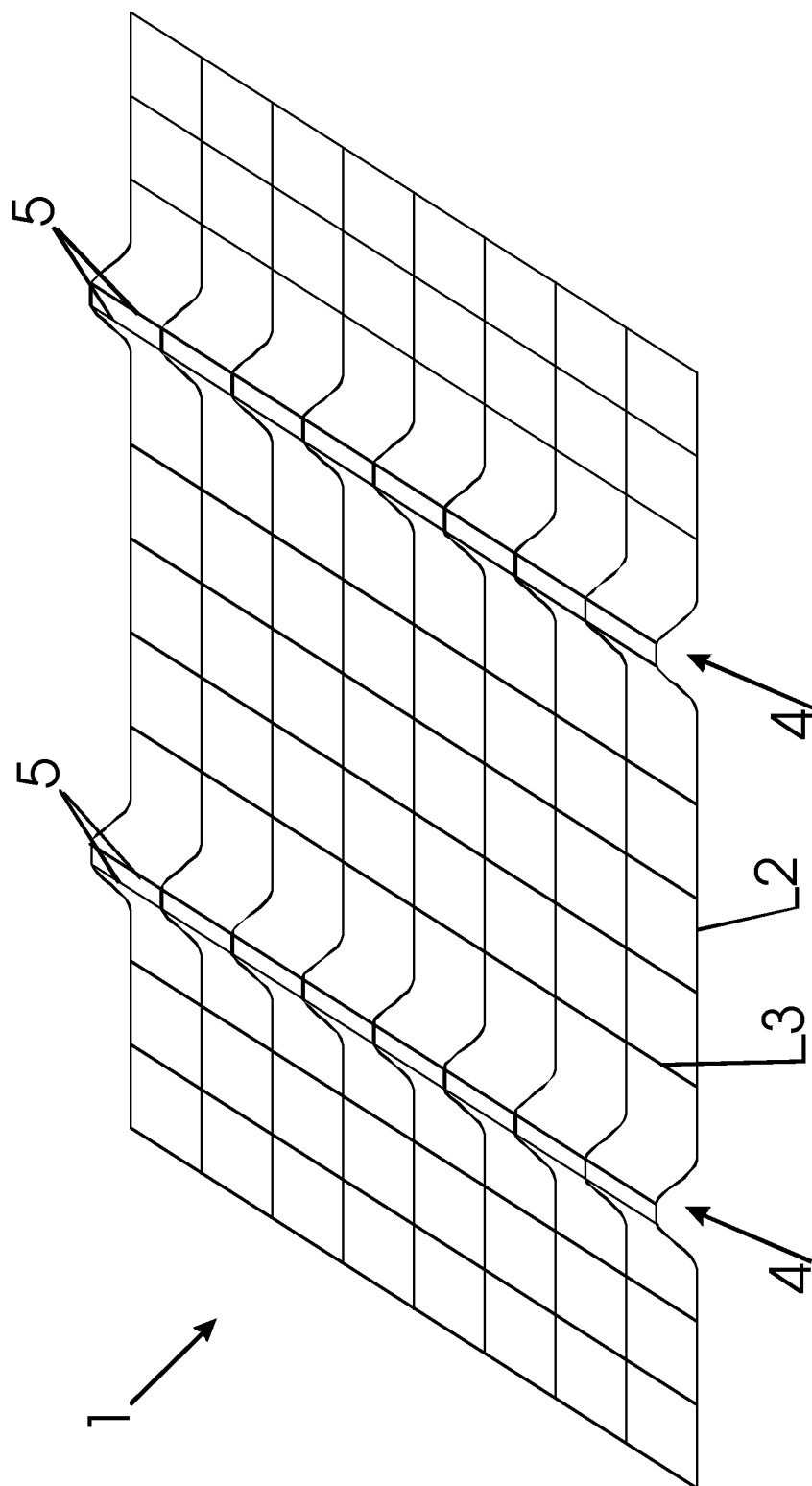


Fig. 1