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(54) **Fitting for the fastening of elements of a fence**

(57) Fitting **(1)** for the installation of elements of a fencing span constructed of metal rails and beams made of closed or open sections with an arbitrary cross-section, made of plastic or aluminium and having the shape of a closed or open section. On one of its ends it has a flange **(2)** and at least one springy external catch **(3)** and at least one springy internal catch **(4).** The springy external catches **(3)** are used to fix the position and lock the fitting on the transverse beam **(5),** and the springy internal catch **(4)** is used to fix the position and lock the rail **(6)** in the fitting **(1).**

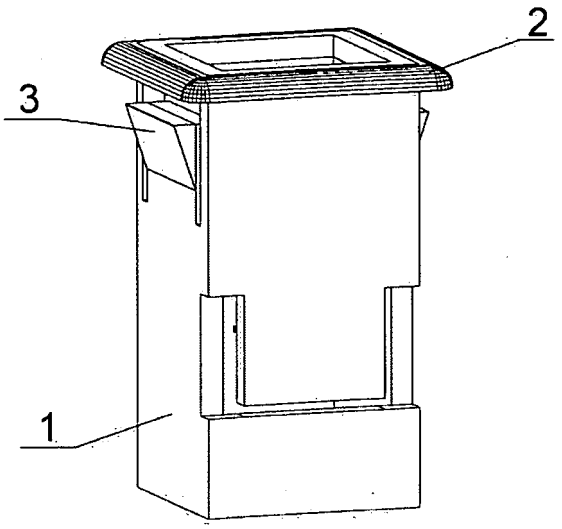

Fig 1

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Description

[0001] The subject of the invention is a fitting for the fastening of elements of a fence span.

[0002] The known enclosure of estates, houses or other public utility buildings is constructed from netting, openwork grating and fencing, the latter made of wooden or metal spans connected to each other using fence posts connected to the ground or concrete, marble or stone foundations. Metal fence span is constructed from transverse beams and rails made of sections, which are permanently connected by heat bonding or welding. This connection means that the joints and welds undergo corrosion, which requires additional protection by galvanizing or painting.

[0003] The proposed solution enables the use of the fitting for the fastening of metal elements of a fence span and thus eliminates the heat bonding or welding processes.

[0004] The nature of the invention is a fitting for the fastening of rails with a metal fence span beam. The fitting is constructed from plastic or aluminium, has the shape of a closed or open section with an arbitrary shape and a collar on one side. The fitting contains at least one external springy catch and one internal springy catch. The springy external catch is used to fix the position and lock the fitting on the transverse beam. The springy internal catch is used to fix the position and lock the rail in the fitting. The rails and beams are constructed from closed or open sections with an arbitrary cross-section, preferably square. The rails have at least one opening with an arbitrary shape and have on one side plugs in the shape of a regular or truncated pyramid or a regular or truncated cone, with a cross-section corresponding to the cross-section of the rail. The beams have a through opening in an arbitrary shape which corresponds to the transverse cross-section of the fitting.

[0005] Mounting of metal rails in the transverse metal beams using fittings made of plastic or aluminium is simple and easy. Due to the springy catches the fitting ensures permanent and inseparable connection of materials, the connection of which would be impossible by heat bonding or welding in the known manner.

[0006] The subject of the invention in an example realisation was shown on the drawing, on which Fig.1 and Fig.2 show the fixture in an axonometric projection. Fig. 3 represents a slice of the span in an axonometric projection, and Fig.4 shows the transverse beam with a fitting and a rail after installation in a cross-section.

[0007] Fitting **1** as shown on the figure is constructed from plastic, has the shape of a closed section with a square cross-section and one side has a flange **2.** In the fitting **1** two external springy catches **3** and one springy internal catch **4** are located. Springy external catches **3** are used for fixing the position and locking the fitting in the transverse beam **5,** whereas the springy internal catch **4** is used for fixing the position and locking the rail **6** with a plug **7** in the fitting **1.**

[0008] In order to install the rail **6** with the plug **7** in the transverse beam **5** the fitting **1** should be placed in the opening of the beam **5** in order to place the collar **2** on the transverse beam **5.** Then the rail **6** with the plug **7** should be inserted from the top into the fitting **1,** until the moment when the springy internal catch **4** will be inserted in the opening **8** of the rail **6.** The number of rails **6** with plugs **7** and transverse beams **5** with fittings **1** installed in their openings depends on the size of the fencing span.

Claims

1. Fitting for the installation of elements of the fencing span consisting of metal rails and beams made of a closed or open sections with an arbitrary cross-section, preferably square, **wherein** the fitting **(1)** made of plastic or aluminium has the shape of a closed or open section, has on one of its ends a flange **(2)** and has at least one springy external catch **(3)** and at least one springy internal catch **(4),** whereas the springy external catch **(3)** to fix the position and lock the fitting on the transverse beam **(5),** and the springy internal catch **(4)** is used to fix the position and lock the rail **(6)** with the plug **(7)** in the fitting **(1).**

2. Fitting for the installation of elements of the fencing span in accordance with the claim **1, wherein** the fitting **(1)** has the shape of a closed or open section in an arbitrary shape, advantageously with a square cross-section.

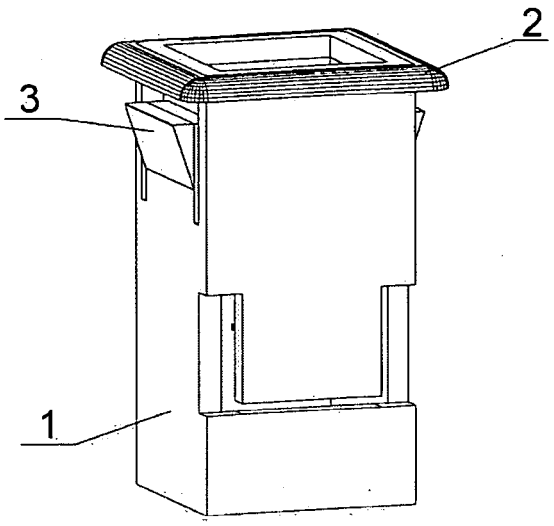

Fig 1

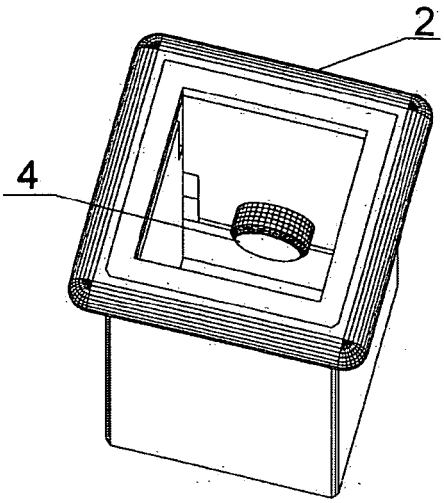

Fig 2

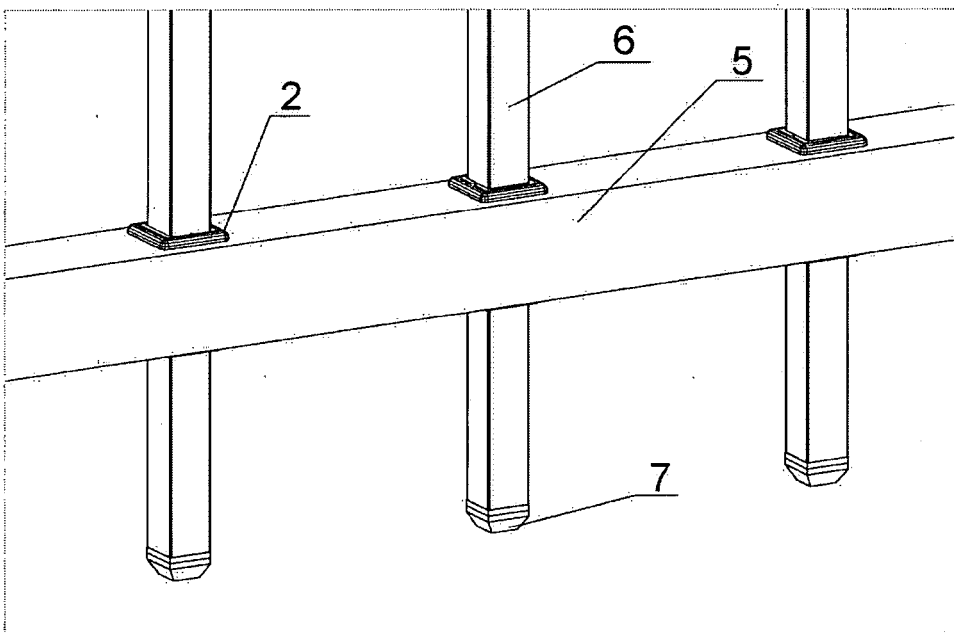

Fig 3

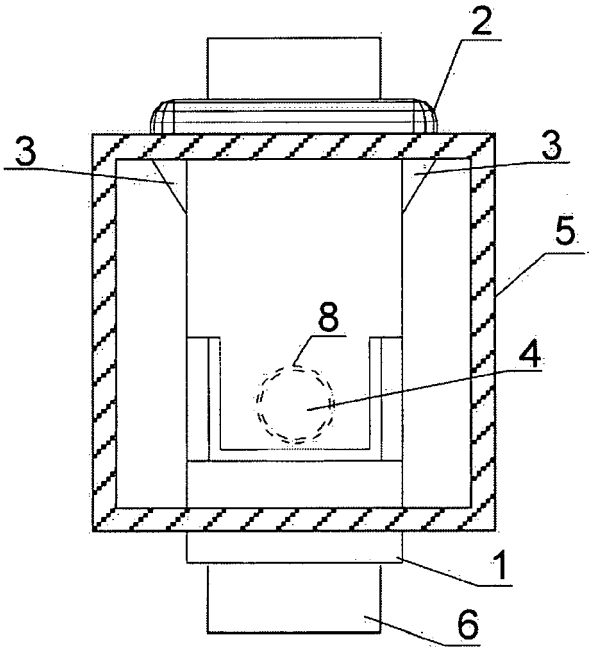

Fig 4