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## (54) Safety post for making fencings in construction sites

(57) A safety post for making protective fencings in construction sites, comprising a tubular cylindrical body (13) in which a bottom base (13a) and a top base (13b) are defined, said body (13) being hollow at least over a section (15) opening at the bottom base (13a) so as to allow fitting the post onto one of the reinforcement iron rods generally present in a building structure under construction, said body (13) further including a number of brackets (17) in order to bear as many boards, bars, crosspieces and the like that will form the protective fencing, and a screw or bolt (19), extending into the body (13) through a threaded hole (21) near the bottom base (13a) of the body (13), in order to firmly lock said iron rod inside the body (13).

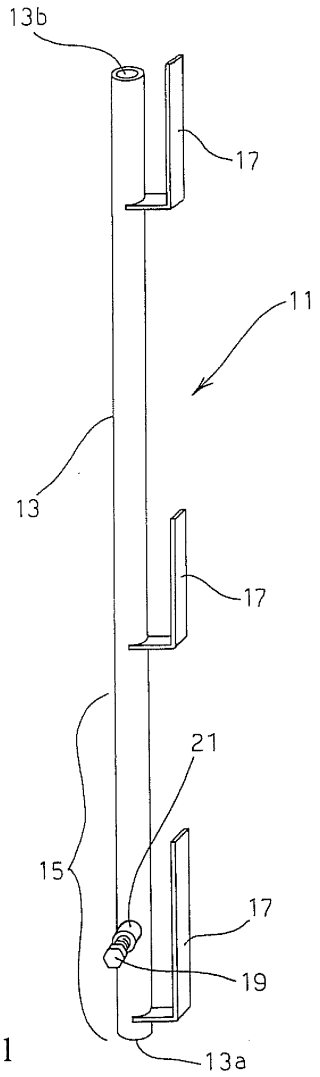


FIG. 1

EP 2 243 899 A2

## Description

*Technical field*

**[0001]** The present invention relates to a safety post for making protective fencings in construction sites.

**[0002]** More precisely, the invention concerns a safety post for the building industry, to be used for making protective fencings for construction sites and the like.

*Prior art*

**[0003]** Device for making protective fencings for construction sites are well known in the art.

**[0004]** For instance, CH 0 677 255 discloses a safety fencing for the building industry, comprising vertical posts with which horizontal crosspieces are associated. The vertical posts are secured at their bottom ends to suitable brackets equipped with folded irons, which are inserted into holes or slots provided in the structure, for instance on top of a wall under construction.

**[0005]** ES 1 048 984 discloses a support device for making protective fencings for the building industry, to be installed on buildings under construction and comprising a tubular structure equipped at its bottom with a pair of jaws intended to secure the device to a structure, such as for instance the edge of a slab of a building under construction.

**[0006]** Other examples of similar devices are disclosed in EP 1 598 503, US 3 883 106, GB 1 260 565 and GB 2 443 884

**[0007]** The prior art devices are however rather complex to be made and require a long time for being installed and removed.

**[0008]** On the contrary, there is a need in the field for a device that allows making protective fencings in a very short time and that is very cheap, so that also people scarcely sensitive to safety problems in construction sites is encouraged to use it.

**[0009]** This object is attained by the invention as defined in the appended claims.

*Description of the invention*

**[0010]** Advantageously, the safety post according to the invention is shaped as an elongated tubular body, which is hollow at least over a section opening to the outside in order the post can be fitted on the reinforcement iron rods projecting from the concrete structures and typically present in a building under construction.

**[0011]** Advantageously, the post according to the invention is further equipped with a locking screw that prevents it from coming off the reinforcement iron rod onto which it has been fitted, the screw preferably having a diameter of at least 16 mm.

**[0012]** Advantageously, the locking screw is preferably of the kind with a hexagonal head of 22 mm, similar to the screw used for scaffolding joints, and therefore it can be turned by the same key as used for assembling and disassembling a scaffolding.

**[0013]** Advantageously, the post is equipped with brackets for supporting boards, crosspieces and the like that will form the protective fencing. Preferably, said boards will be at least 30 mm thick.

**[0014]** A further advantage of the invention results from the provision of a signalling cap or hood, preferably of a bright colour, applied on the top end of the post.

*Brief Description of the Figures*

**[0015]** A preferred embodiment of the invention, given by way of non limiting example will now be described with reference to the accompanying drawings, in which:

- Fig. 1 is a perspective view of the invention;
- Fig. 2 shows the invention in a first situation of use;
- Fig. 3 shows the invention in a second situation of use.

*Description of a preferred embodiment*

**[0016]** Referring to Fig. 1, the safety post according to the invention, generally denoted 11, comprises a tubular cylindrical body 13 in which a bottom base 13a and a top base 13b are defined.

**[0017]** Said body 13 is hollow at least over a section 15 opening at bottom base 13a so as to allow fitting post 11 onto one of the reinforcement iron rods of a building structure, such as a slab, a pillar, a concrete substrate for floors and the like, as it will become apparent from the exemplary uses of the invention that will be described hereinbelow.

**[0018]** According to the invention, said body 13 further includes some L-shaped brackets 17, three brackets equally spaced along the body of said post in the illustrated example, in order to bear as many boards, bars, crosspieces and the like that will form the protective fencing.

**[0019]** A screw or bolt 19, radially extending into body 13 through a threaded hole 21, is provided near base 13a of body 13 in correspondence of section 15, in order to firmly lock the iron rod inside body 13.

**[0020]** Referring to Fig. 2, there is shown a first situation of use of the invention for building a protective fencing along the edge of a slab SL from which some iron rods TD project. In such a situation of use, posts 11 according to the invention are each fitted onto a corresponding iron rod TD and locked by means of screw 19. Boards 21 or the like are horizontally placed onto L-shaped brackets 17 in order to build a protective fencing for people working onto the slab.

**[0021]** Referring to Fig. 3, there is shown a second situation of use of the invention, which allows building a protective banister MN along a staircase SC under construction at a building site. In such a situation of use, posts 11 according to the invention are fitted onto corre-

sponding iron rods TD projecting from the concrete structure of staircase SC and are locked by means of screws 19. Boards 21 are obliquely placed onto brackets 17 of posts 11 in order to build a corresponding provisional protective banister at the side of staircase SC.

**[0022]** According to the invention, body 13 is preferably obtained from a metal tube with circular or square cross section. Also brackets 17 are preferably made of metal, are welded along body 13 and are L-shaped.

**[0023]** In the alternative, device 11 can be made of plastics.

**[0024]** Always according to the invention, top end 13b of body 13 is equipped with a cap or hood 23 or the like (shown in Fig. 3), for instance of plastics, in order to prevent penetration of water or dirt. The cap can have a bright colour, for instance bright red, in order to signal the presence of the fencing, thereby enhancing its safety properties.

**[0025]** Post 11 according to the invention may have different lengths and cross-sectional sizes depending on the uses: for instance, it may be 1.5 to 2.0 m long with a cross-sectional size of about 5.0 cm, whereas hollow section 15 will be at least 10 cm long in order to allow a firm locking of post 11 onto the reinforcement iron rod.

## Claims

1. A safety post for making protective fencings in construction sites, comprising a tubular cylindrical body (13) in which a bottom base (13a) and a top base (13b) are defined, said body (13) being hollow at least over a section (15) opening at the bottom base (13a) so as to allow fitting the post onto one of the reinforcement iron rods generally present in a building structure under construction, said body (13) further including a number of brackets (17) in order to bear as many boards, bars, crosspieces and the like that will form the protective fencing, and a screw or bolt (19), radially extending into the body (13) through a threaded hole (21) near the bottom base (13a) of the body (13), in correspondence of the hollow section (15), in order to firmly lock said iron rod inside the body (13).

2. The post as claimed in claim 1, wherein said brackets are L-shaped.

3. The post as claimed in claim 1 or 2, wherein three brackets are provided and are equally spaced along the body of said post.

4. The post as claimed in any preceding claim, wherein the body (13) is obtained from a metal tube with circular or square cross section, and the brackets (17) are also made of metal and are welded along the body (13).

5. The post as claimed in any of claims 1 to 3, wherein the body (13) is made of plastics.

6. The post as claimed in any preceding claim, wherein the top end (13b) of the body (13) is equipped with a cap or hood (23) or the like for preventing penetration of water or dirt, said cap or hood or the like having a bright colour in order to signal the presence of the fencing, thereby enhancing its safety properties.

7. The post as claimed in claim 6, wherein said cap or hood or the like is made of bright red plastics.

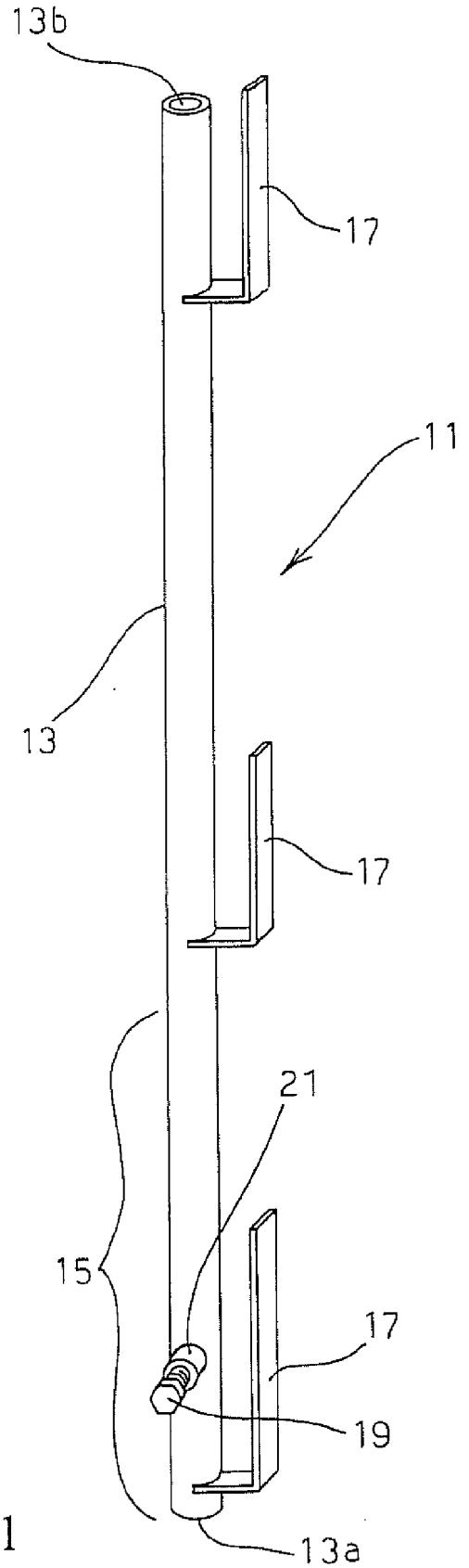


FIG. 1

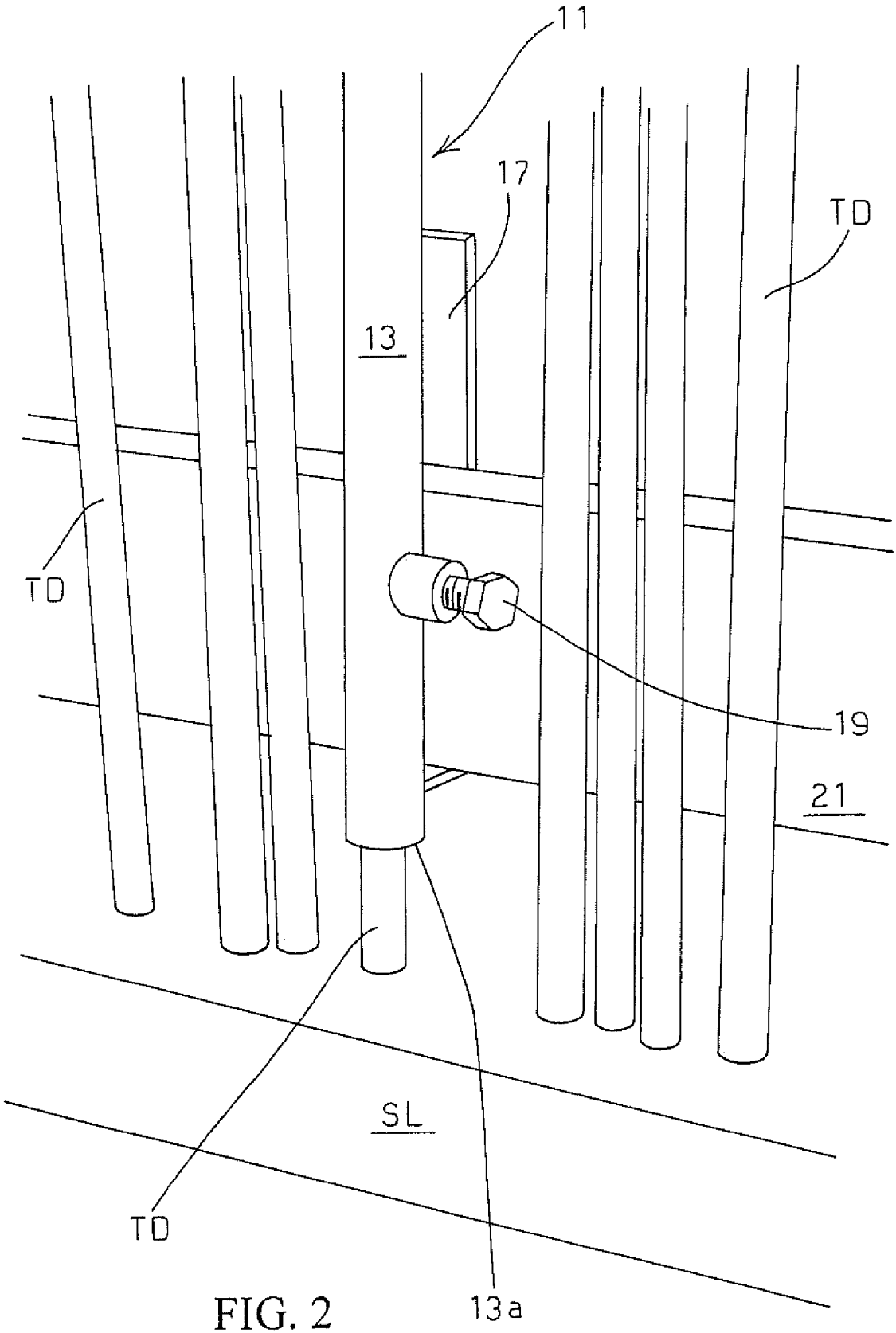


FIG. 2

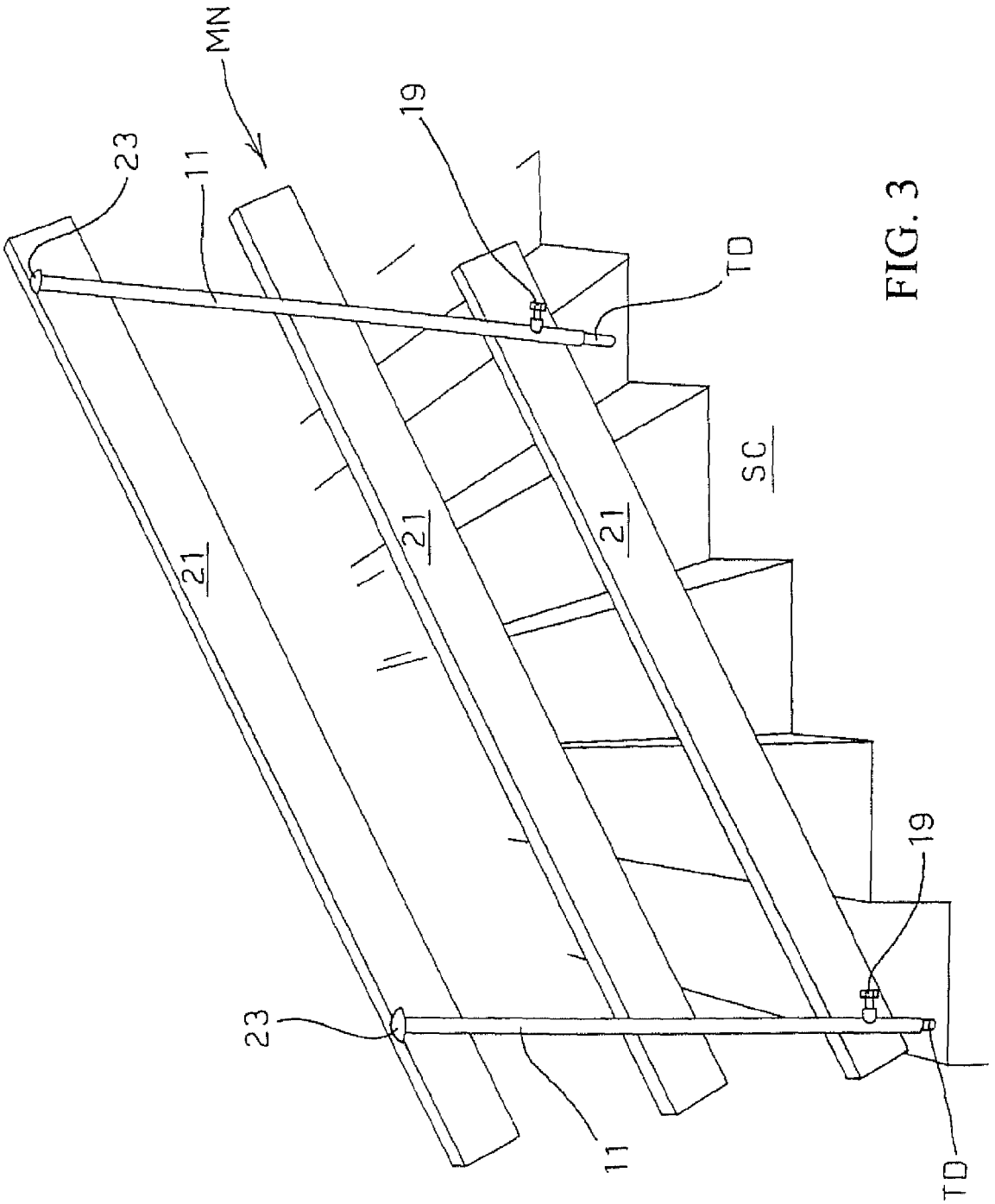


FIG. 3

## REFERENCES CITED IN THE DESCRIPTION

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