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(71) Applicant: **AKIFIX S.P.A.**
39100 Bolzano (IT)

(72) Inventor: **PANDOLFI, Giovanni**
60037 MONTE SAN VITO (AN) (IT)

(74) Representative: **Baldi, Claudio**
Ing. Claudio Baldi S.r.l.
Viale Cavallotti, 13
60035 Jesi (Ancona) (IT)

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(54) **ANCHORING SYSTEM FOR FALSE CEILINGS**

(57) An anchoring system for false ceilings (2) comprises a section (15) that partially defines a supporting frame (16) for a false ceiling (2), and is limited by two external sides (17) disposed in opposite position, and a supporting bracket (11) that is mounted between the section (15) and a ceiling (15), and is blocked on the section

(15) by means of a blocking device (19) defined by an anchoring plate (20) anchored to the supporting bracket (11) and provided with two anchoring arms (23) disposed on opposite sides of the section (15) and frictionally coupled with the external sides (17) of the section (15).

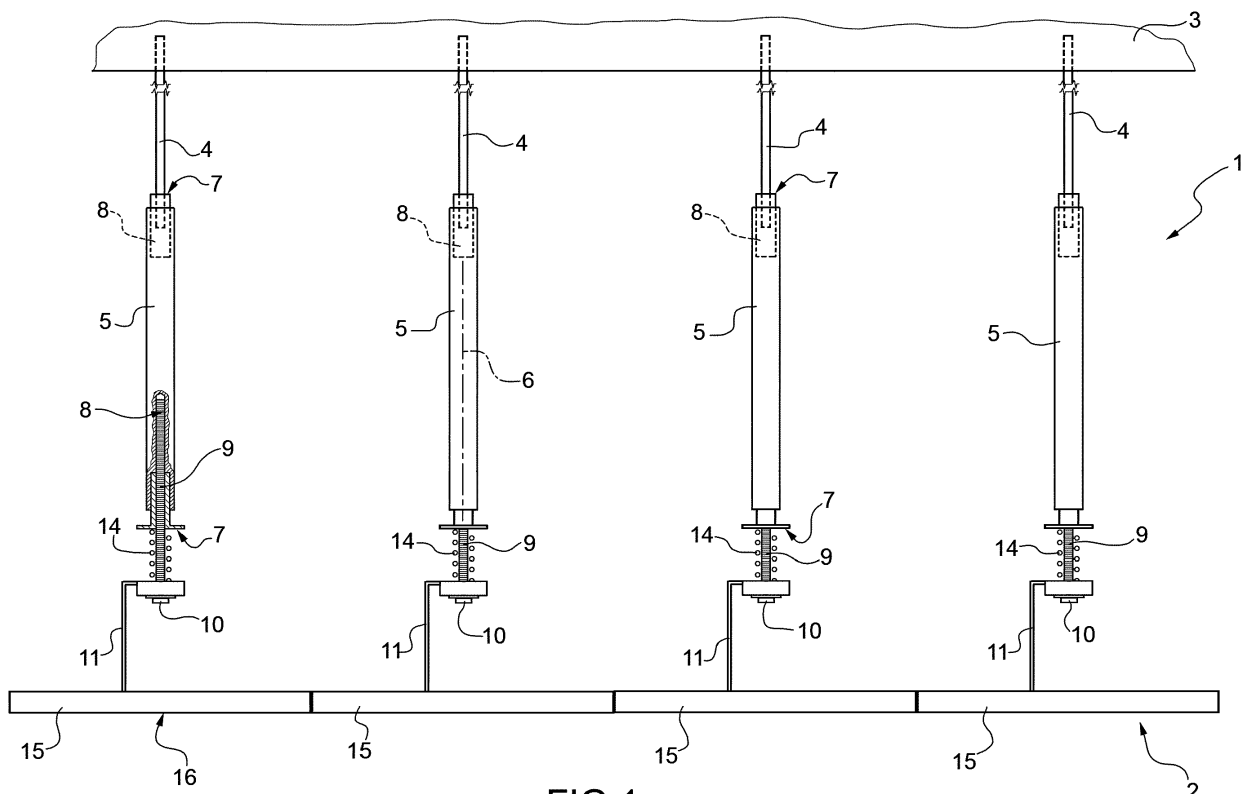


FIG.1

Description

[0001] The present invention relates to an anchoring system for false ceilings.

[0002] Anchoring systems are known in the building industry to anchor a plasterboard false ceiling to a ceiling of a building, in such a way to create an empty space for passing a plurality of cables of various types.

[0003] The anchoring system comprises a plurality of threaded rods disposed in parallel position that are anchored to the ceiling and protrude downwards from the ceiling.

[0004] For each threaded bar, the anchoring system also comprises a coupling bar that is screwed into a lower free end of the threaded rod, and is connected to a supporting bracket anchored to a section that partially defines a supporting frame for a false ceiling.

[0005] The supporting bracket has an upper ring that is engaged with a maneuvering head of an adjustment screw screwed in the coupling bar, and is additionally provided with a lower foot that is slidably coupled with the section, and is blocked on the section by means of a blocking device.

[0006] The anchoring systems for false ceilings of the prior art are impaired by some drawbacks that are mainly caused by the fact that the blocking devices that are normally used to block the supporting brackets on the sections are relatively complicated and expensive, and do not guarantee a reliable blocking.

[0007] The purpose of the present invention is to disclose an anchoring system for false ceilings that is deprived of the aforementioned drawbacks, is simple and inexpensive to make.

[0008] According to the present invention, an anchoring system for false ceilings is disclosed, as claimed in the appended claims.

[0009] The present invention is described with reference to the appended drawings, which illustrate a non-limiting embodiment, wherein:

Fig. 1 is a diagrammatic side view of a preferred embodiment of the anchoring system of the present invention;

Fig. 2 is a diagrammatic perspective view of a first detail of the anchoring system of Fig. 1;

Fig. 3 is a diagrammatic perspective view of the mounting system of a second detail of the anchoring system of Fig. 1; and

Fig. 4 is a diagrammatic perspective view of a detail of Fig. 3.

[0010] With reference to Figs. 1, 2 and 3, an anchoring system 1 used for anchoring a false ceiling 2, in particular made of plasterboard, to a ceiling 3 of a building is disclosed.

[0011] The anchoring system 1 comprises a plurality of anchoring rods 4 disposed in parallel position and anchored to the ceiling 3 according to the prior art, protrud-

ing downwards from the ceiling 3.

[0012] For each rod 4, the anchoring system 1 also comprises a coupling bar 5 that is provided with a longitudinal axis 6, and is axially limited by two ending sides 7 that are substantially perpendicular to the axis 6.

[0013] The bar 5 has two threaded cavities 8, and each of them opening outwards in correspondence of a relative side 7, and being a blind cavity limited by a bottom wall (not shown) that is substantially perpendicular to the axis 6.

[0014] The upper cavity 8 is screwed into a lower threaded end of the rod 4, whereas an adjustment screw 9 with a polygonal maneuvering head 10 is screwed into the lower cavity 8.

[0015] The anchoring system 1 also comprises a supporting bracket 11 provided with an upper ring 12 that is revolvably coupled with the screw 9 in axially sliding mode, protrudes downwards from the ring 12, and is provided with a lower foot 13.

[0016] The head 10 defines a lower end stop suitable for axially stopping the ring 12 and consequently the bracket 11, which is coupled with the bar 5 with the interposition of a shock-absorbing spring 14.

[0017] As shown in Figs. 3 and 4, the foot 13 is anchored to a section 15 that partially defines a supporting frame 16 of the false ceiling 2, has a U-shape and is limited by two external sides 17 that are substantially disposed in parallel opposite position.

[0018] Moreover, the section 15 comprises two upper edges 18 that are folded over in such a way to define a pair of guides that are slidably engaged by the foot 13.

[0019] The foot 13 is blocked on the section 15 by means of a blocking device 19 comprising an anchoring plate 20 that comprises an anchoring fork 21 coupled with the section 15 and an anchoring tab 22 coupled with the bracket 11.

[0020] The fork 21 has a substantially planar shape, is provided with two anchoring arms 23 disposed on opposite sides of the section 15 and additionally comprises a central tooth 24 disposed between the arms 23 and engaged in the foot 13 of the bracket 11.

[0021] Each arm 23 is provided with a toothed section 25 that is frictionally coupled with a relative side 17 of the section 15.

[0022] The tab 22 extends in perpendicular direction relative to the fork 21, is engaged in a slot 26 obtained through the bracket 11, and has a larger maximum width than the slot 26.

[0023] With reference to Fig. 3, the bracket 11 is blocked on the section 15 by inserting the tab 22 in the slot 26 (Figs. 3a and 3b), rotating the plate 20 by 90° (Fig. 3c), and lowering the plate 20 in such a way to engage the tooth 24 in the foot 13 and frictionally couple the toothed section 25 of the arms 23 with the sides 17 (Fig. 3d).

[0024] The engagement of the tab 22 in the slot 26 and the toothed section 25 of the arms 23 guarantee a firm and safe blocking of each bracket 11 on the section 15.

Claims

1. Anchoring system for false ceilings (2) comprising a section (15) that partially defines a supporting frame (16) for a false ceiling (2), and is limited by two external sides (17) disposed in opposite position; a supporting bracket (11) disposed between the section (15) and a ceiling (3); and a blocking device (19) to block the supporting bracket (11) on the section (15); **characterized in that** the blocking device (19) comprises an anchoring plate (20) that is suitably configured for being anchored to the supporting bracket (11), and is provided with two anchoring arms (23) disposed on opposite sides of the section (15) and frictionally coupled with the external sides (17) of the section (15). 5
2. The anchoring system of claim 1, wherein each anchoring arm (23) has a toothed section (25) that is frictionally coupled with the external side (17) of the section (15). 10
3. The anchoring system of claim 1 or 2, wherein the anchoring plate (20) is basically shaped as a fork. 15
4. The anchoring system of any one of the preceding claims, wherein the anchoring plate (20) comprises an anchoring fork (21) with a basically planar shape, and provided with the two anchoring arms (23), and a fastening tab (22) that is disposed in perpendicular position relative to the anchoring fork (21), and is engaged in a slot (26) obtained through the supporting bracket (11). 20
5. The anchoring system of claim 4, wherein the maximum width of the fastening tab (22) is higher than a maximum width of the slot (26). 25
6. The anchoring system of claim 4 or 5, wherein the supporting bracket (11) is provided with a coupling foot (13) that is slidingly coupled with the section (15). 30
7. The anchoring system of claim 6, wherein the anchoring fork (21) has a central tooth (24) that is obtained between the two anchoring arms (23) and engages the coupling foot (13). 35
8. The anchoring system of any one of the preceding claims, also comprising a coupling bar (5) that is mounted between the supporting bracket (11) and the ceiling (3), has a first free end suitable for being screwed into a threaded rod (4) that protrudes downwards from the ceiling (3) and a second free end disposed in opposite position to the first free end. 40
9. The anchoring system of claim 8, also comprising an adjustment screw (9) screwed in the second free end of the coupling bar (5). 45
10. The anchoring system of claim 9, wherein the supporting bracket (11) is revolvingly coupled with the adjustment screw (9), is moved by the adjustment screw (9) along a parallel direction relative to a longitudinal axis (6) of the coupling bar (5), and is slidingly coupled with the adjustment screw (9) with the interposition of a shock-absorbing spring (14) mounted between the coupling bar (5) and the supporting bracket (11). 50

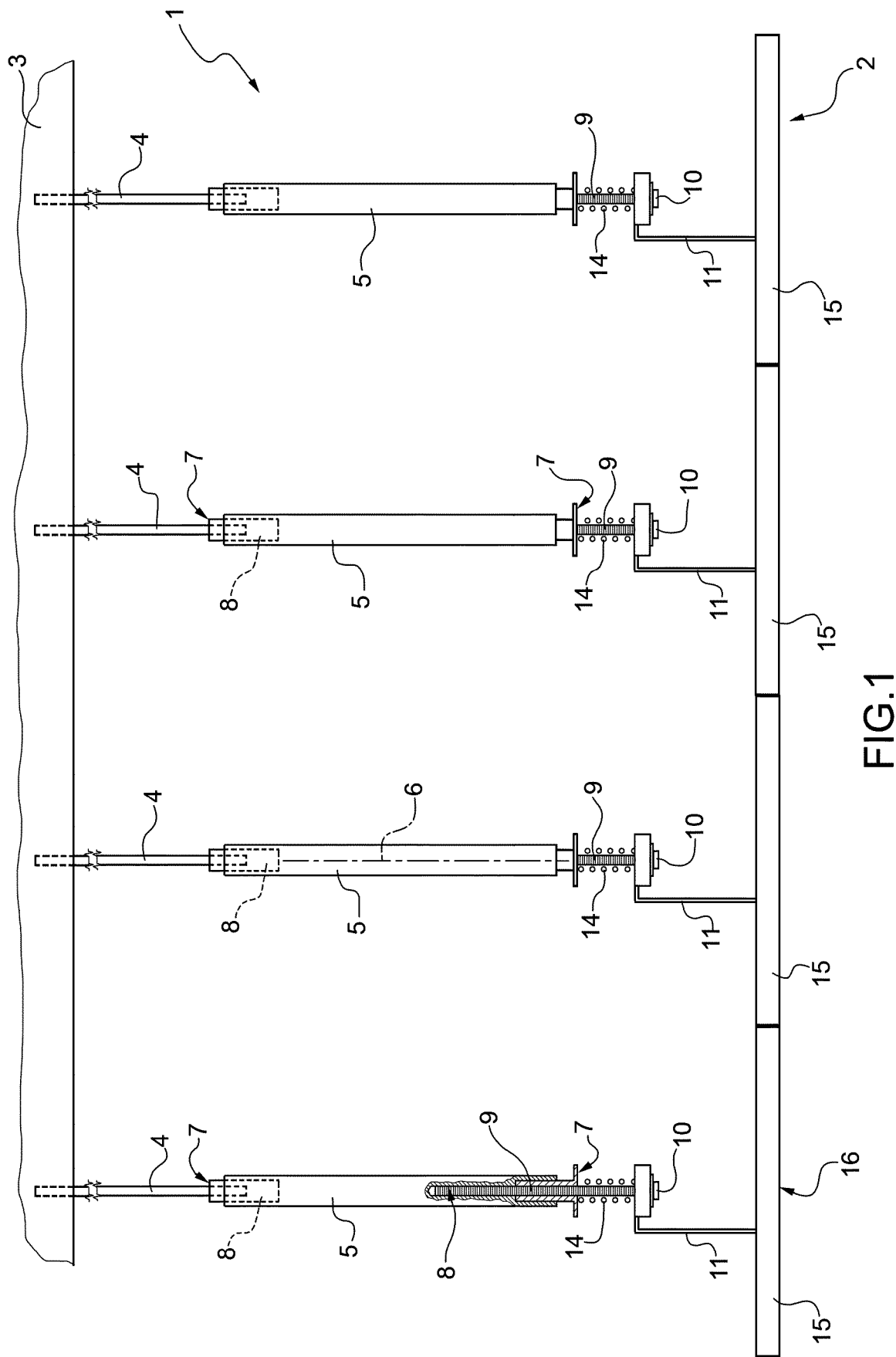


FIG.1

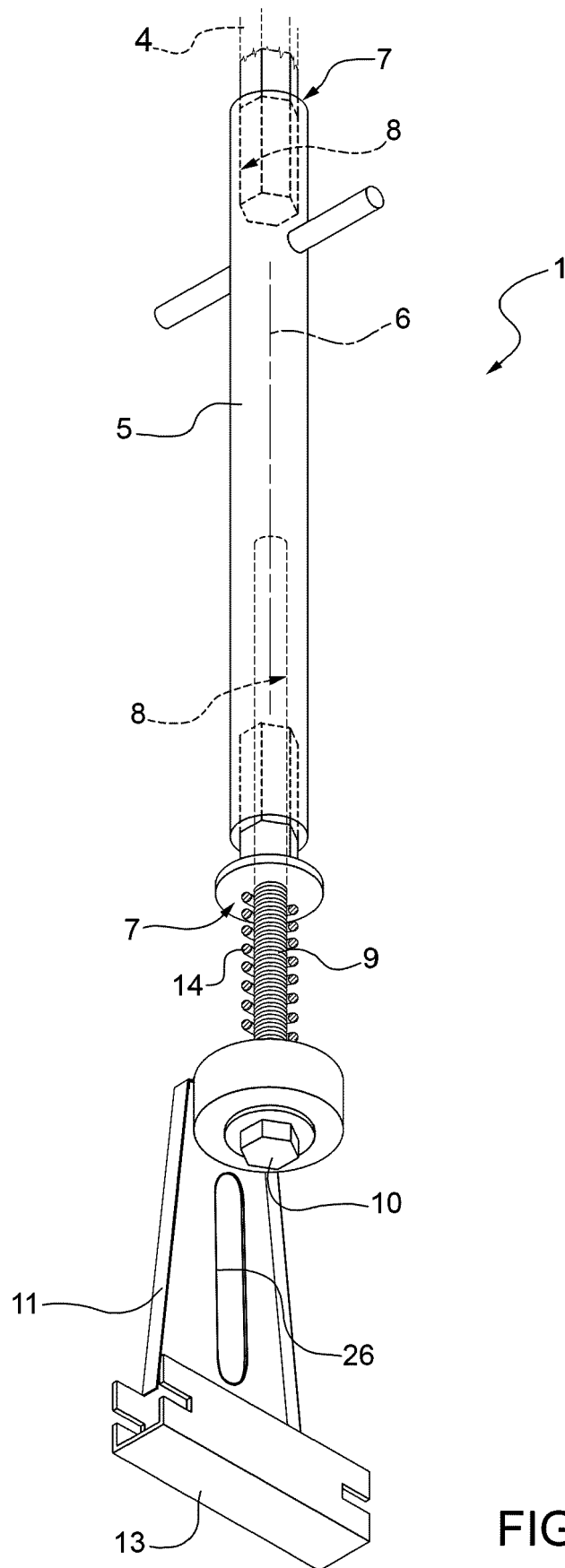


FIG.2

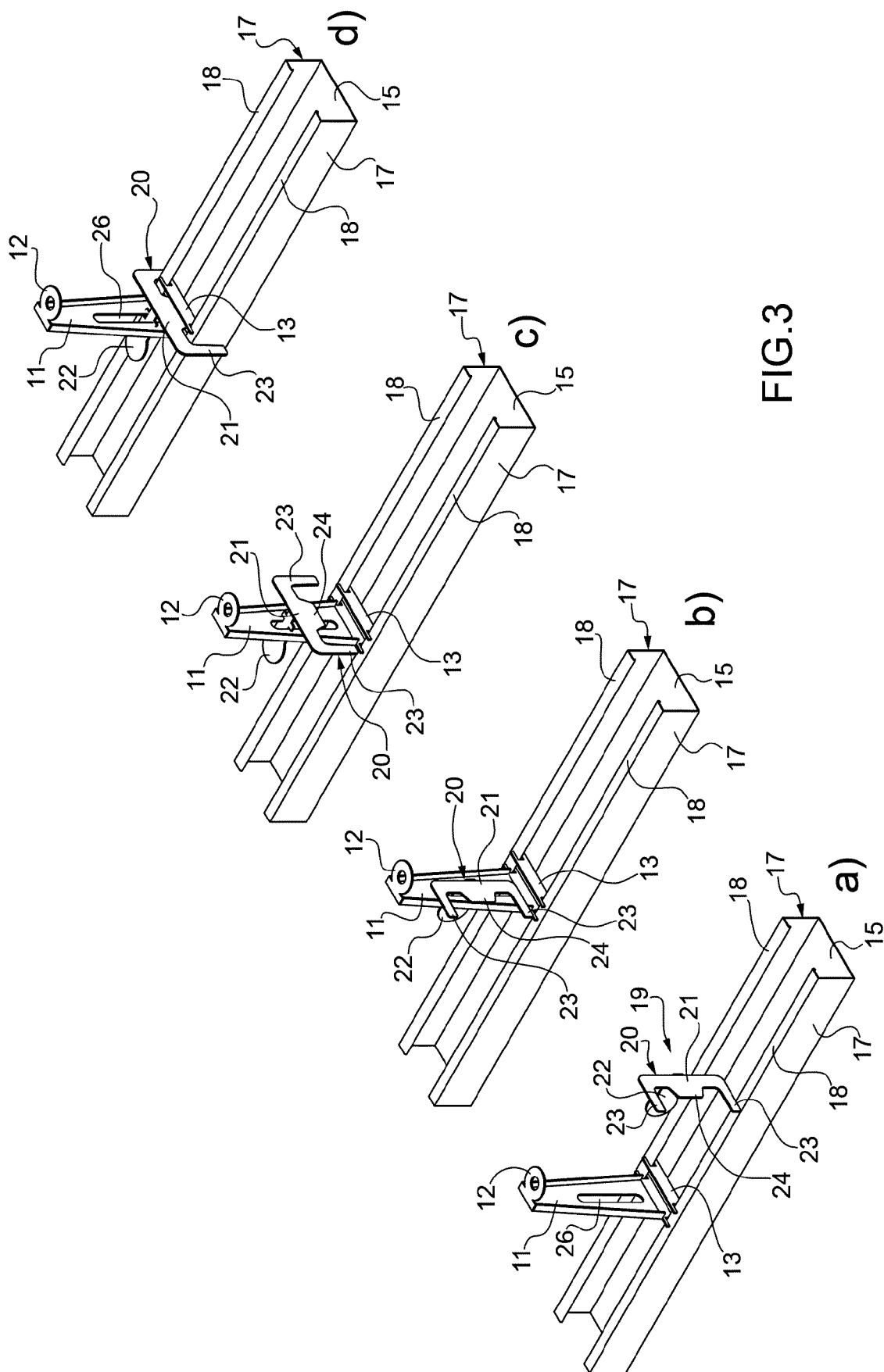


FIG.3

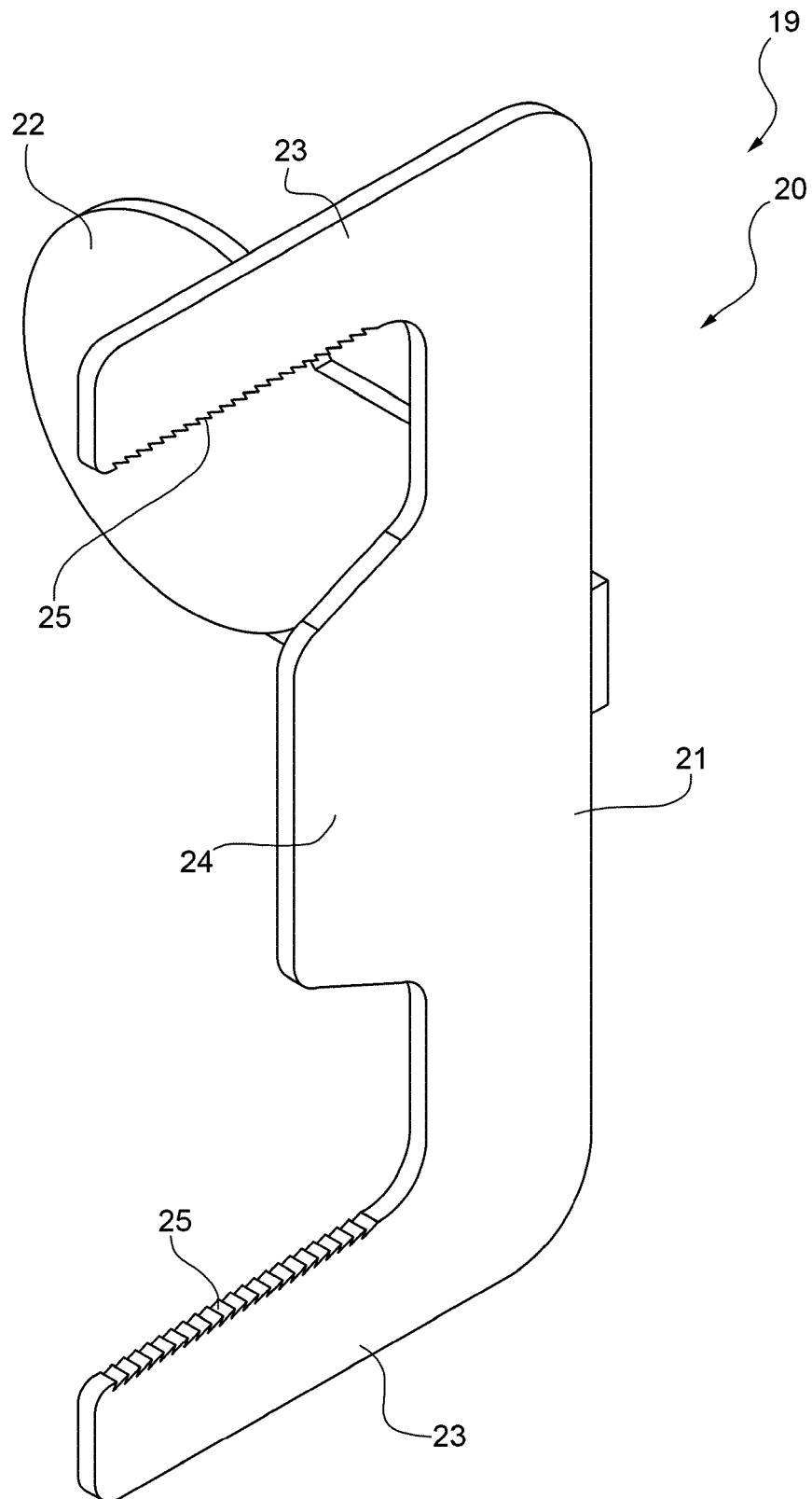


FIG.4