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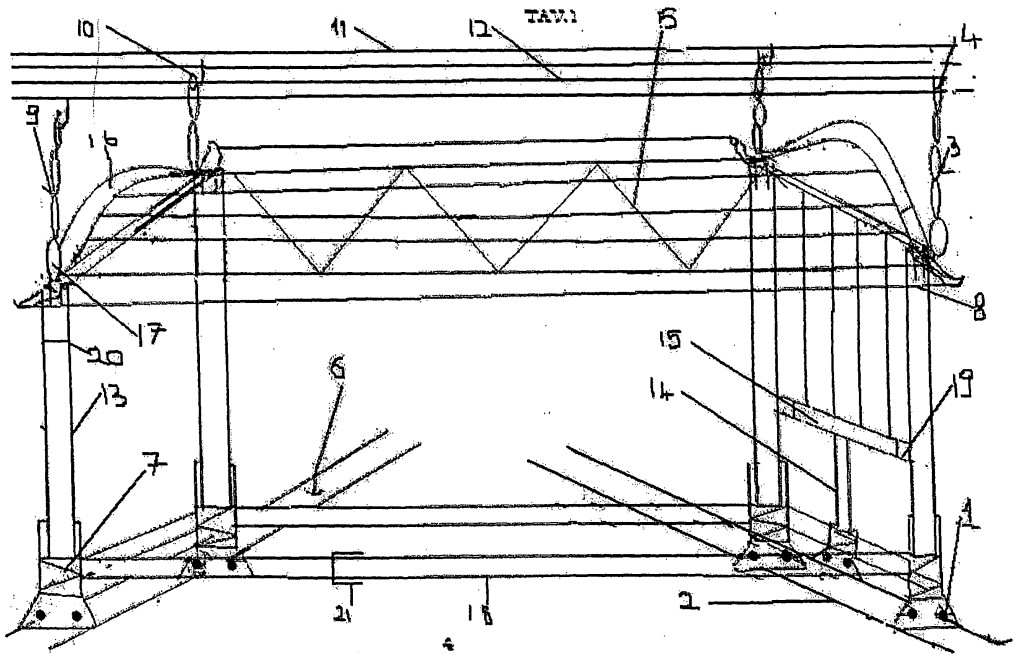
(54) **Anti-earthquake bed**

(57) THE SUBJECTS OF THIS INVENTION ARE BEDS TO BE USED AS PROTECTION TO DEFEND ONESELF AGAINST VARIOUS KINDS OF EARTHQUAKES. SUITABLE FOR ADULTS, CHILDREN, OLD AND SICK PEOPLE, THE BEDS ARE IDEAL WHERE THE SEISMIC PHENOMENON HAS ALREADY HAPPENED: MAINLY AS A PSYCHOLOGICAL HELP AS PEOPLE ARE ENCOURAGED TO GET BACK THEIR HOUSES AND WILL FEEL PROTECTED DURING THE NIGHT. THE BEDS ARE STRONG, SIMPLE, UNEXPENSIVE AND CAN PROTECT PEOPLE EVEN IN ALREADY CRACKED BUILDINGS. THE INVENTION DOESN'T INTEND TO REPLACE THE ANTI-EARTHQUAKE CONSTRUCTION TECHNIQUES: IT MEANS TO WORK IN SYNERGY WITH THEM TRYING TO SAVE SEVERAL HUMAN LIVES. AS FOR THE PRESENT STATE OF THE TECHNOLOGY, SOME BEDS COMPOSED OF VARIOUS METALS ALREADY EXIST, BUT THEY HAVEN'T THE SAME FEATURES AS THE PROPOSED STRUCTURE: THE LATTER IS ALWAYS READY TO BE USED WITHOUT ANY PARTICULAR DEVICES THANKS TO THE COMBINATION ROOF-ABSORBER POSTS - SAFETY SYSTEM WITH EIGHT LEANING POINTS THROUGH THE SECTION - BARS LEANING ON THE SIDE WALLS OF THE ROOF AND OF THE FLOOR.



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Description

[0001] The beds are about 2.10 metres high and 1.80 metre wide (for children bed ,wideness is reduced by half and it can be composed of one or two beds). There are four columns made of tubular iron of various diameter and thickness according to the part of the bed which they are used and they are fitted with a simple pressure (cap top). The roof is covered with a sheet-steel (no 05 plate 1)which obstructs the passage of any kind of material. The curves (no 16 plate 1) are subdivided into spaces of about 25 cm in which the horizontal hubs (24a plate 3) are welded. On these last ones ,the roof section bars -diameter 5 cm and thickness 3-4 mm -(5a plate 1) are inserted. The curves (16 plate 1) are inserted into the column posts (13 plate 1) for about 20 cm (20 plate 1) and are fixed with bolts (22a plate 2). The posts (13 plate 1) lean on greased and powerful springs ,through the round piston (32-33 plate 4) with return springs Tthe main function of the roof is to let falling masses slip,while the high flexure springs must cushion and repel materials. The last roof section-bar (plate 1 no 08) must move away any mass because it comes out 20 cm compared to the bed perimeter:the columns are four on the above floors ,and they can be six on the ground floor obviously , in the last case ,the foot-board must be built like the head -one

[0002] Furtermore two parallel section-bars crossing the bed and leaning on the lateral walls must be fixed from these last ones ,four spring clips come out and the chains (30 plate 3) and the bed -knobs (22 plate 2) are hooked to them other two section -bars crossing the floor horizzontally and leaning to the walls are fixed at the base and under the floor. The walls are perpendicularly positioned to the other ones and on the roof two columns are fixed through the holes (1 plate 1). In this way the bed has eight safety points,vital even in case of almost complete collapse chains must be very loose not to block in case of need ,the springs cushioning these section -bars must be, fixed both into the roof and into the floor for some centimetres to be invisible at the sides of the columns there are some hooks (36 plate 4) where the structure frames (18 plate 1) are inserted. The bed is fixed to the structure throught various kinds of u bolts (21 plate 1). The columns are equipped with screw cap (34-35 plate 4) to insert the piston pillar and the springs. The structure is properly covered with different materials (leather ,material etc...)to conclude ,execution details can be varied ,to improve safety and its services,but you mustn't go too far from the patent invention

PLATES ATTACHED DESCRIPTION

PLATE 1

[0003]

No 1 base column with holes to hook to the floor

No 2-6 Section-bars to insert under the floor and on which columns are fixed

No 3-9 Chains to hook to the roof section-bars

No 4 Spring clips to hook chains to the roof section-bars

No 5 Shaped sheet-steel covering the roof

No 7 Springs for base columns

No 8 Last bed bar external to the bed itself

No 10-12 Section-bars to insert into the roof

No 13 Post with plate leaning to the spring

No 14 Post for the head/foot-board columns (where expected)

No 15 Crosspiece bed-board

No 16 Curve bed- board

No 17 Knob with eyelet to hook the chain

No 18 Structure frame section - bars

No 19 Hubs to fix tubes

No 20 Curve hub

No 21 Various U bolts to hook the bed frame to the structure one

PLATES ATTACHED DESCRIPTION

PLATE 2

[0004]

No 22 Knobs
No 22a Bolts to fix the roof to the posts
No 23 Hubs inserted into the column post
No 24-24a- 24b - 22b Hubs to insert tubes
No 25 Central column post (where expected)

PLATE 3

[0005]

No 26-27 Roof section-bars
No 28-29 Floor section-bars
No 30 Spring clips to hook the chain
No 31 Floor section-bars holes to hook the column

PLATE 4

[0006]

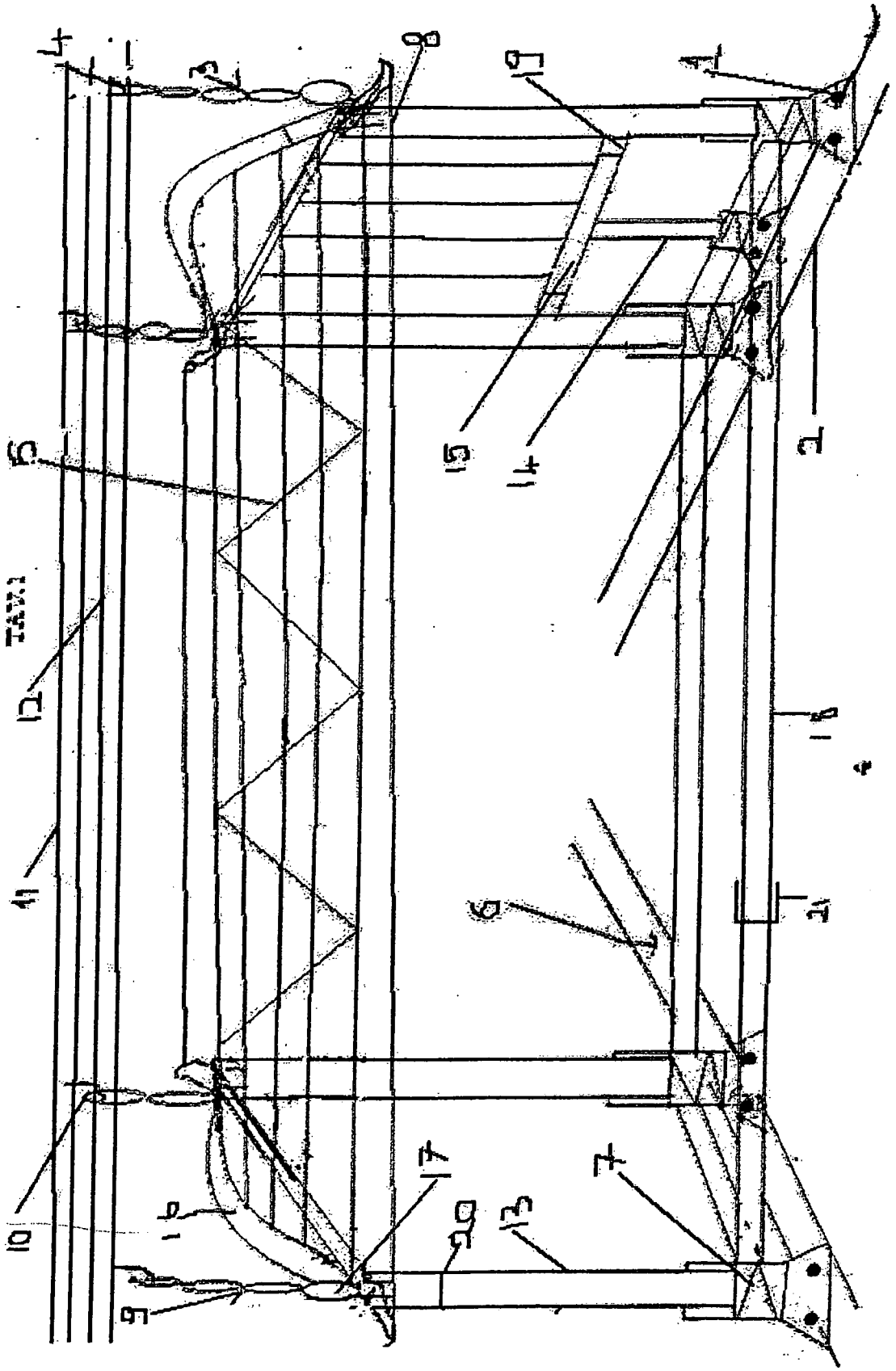
No 32-33 Post with plate
No 34 Column cap
No 35 Screw cap
No 36 Structure lateral frames hook
No 37 Piston return spring

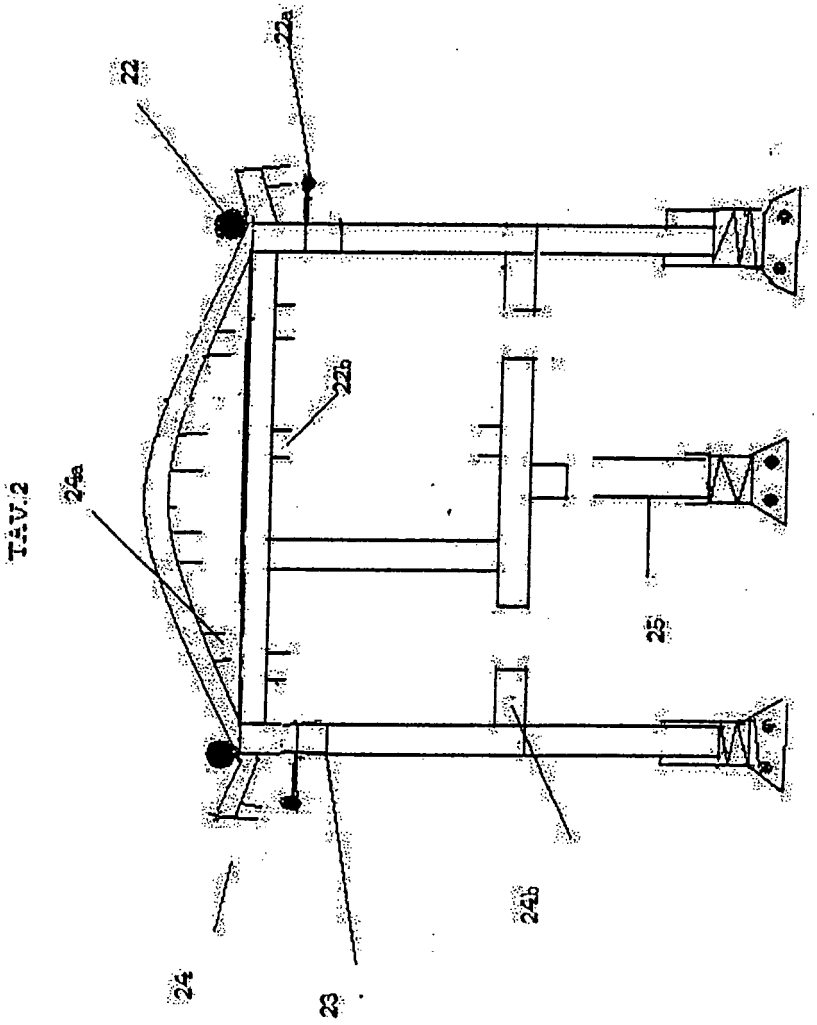
Claims

1. Iron structure with anti-earthquake features, **characterized by** a vaulted roof. The two uprights - plate 1 **(16) -** composed of large diameter pipes (12 cm), in which the various items forming the roof are inserted. these items are inserted into the two uprights. In particular this bed is formed by 4-6 absorber posts: they consist of a hard cylindric outer container with a round or square base provided with stiff springs in them driving back heavy loads. the four side uprights -plate 1(13) - lean on the springs (six if the central uprights - plate 1(14)- are taken into account) and, ending with a round dish, they form the piston head. Furthermore the structure has eight anti-earthquake safety points (for houses with several floors) in particular, the floor section-bars -plate 3(28-29) are inserted in which the absorber posts. The roof section-bars -plate 3(26-27)- are fastened to the bed knobs-plate 1 (17)trough chains or belts and to the spring clips-plate 3(30) sticking out of these section-bars.

2. As in the previous claim the feature of the four or six absorber posts which, together with the roof of the bed, are used to drive back very heavy falling masses.

3. As in claim 1, the eight anti-earthquake safety points expected for houses with several floors. Through the two section-bars the points are inserted into the floor and reach the side walls of the rooms where the absorber posts bases are screwed. The bed is hooked to the two section-bars of the roof through chains or belts fastened to the knobs and the spring-clips of the same section-bars. these bars , also cross the whole roof up to the side walls. In case of roof-collapse, this system allows the bed to cling to the side walls with more points through these section-bars.

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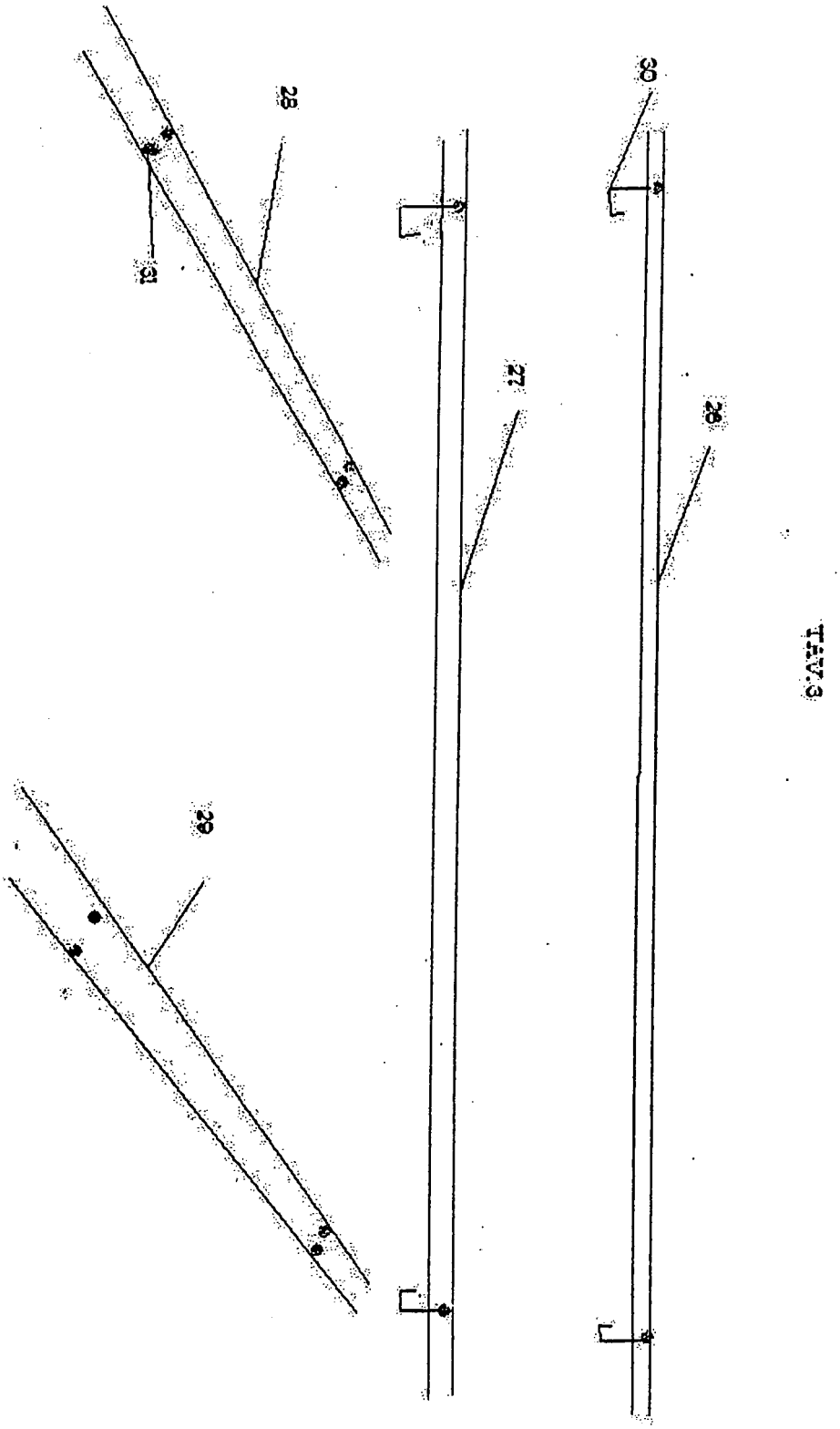
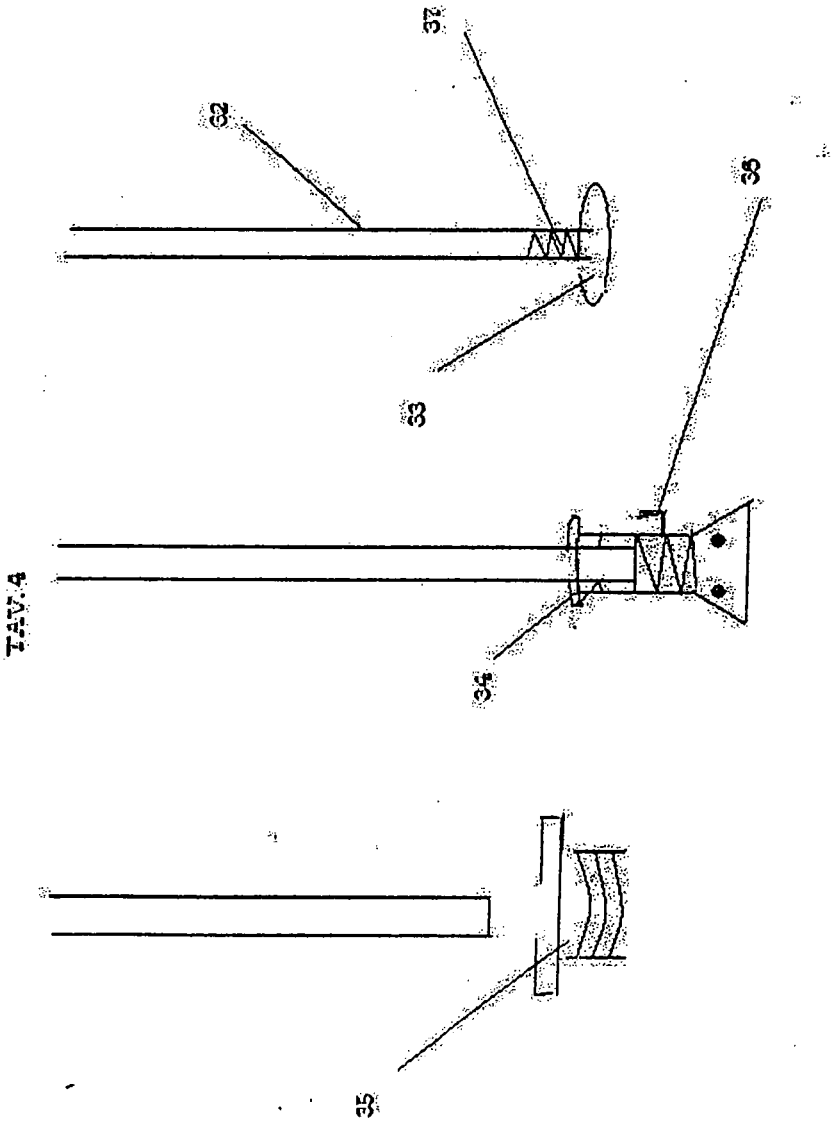


FIG.3



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EUROPEAN SEARCH REPORT

Application Number
EP 10 42 5224

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	5 November 2010	Kus, Slawomir

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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1 EPO FORM 1503 03.82 (P04C01)

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