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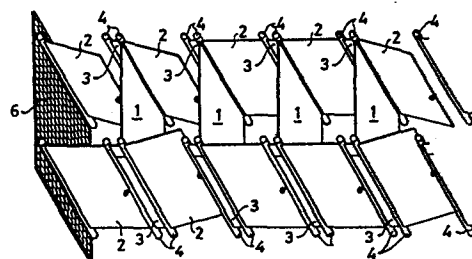
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54 **An enclosed room such as a cabin, assembled from wall or door panels and corner post designed for such a cabin.**

57 The invention concerns an enclosed room composed of panels (1-3) and load-bearing corner posts (4) with longitudinally extending recesses (10) into which fit an edge of said panels, thus forming cabins interconnected through said corner posts.

The dimensions of the panels belonging to said chain of cabins, from a series of the FIBONACCI-type.



An enclosed room such as a cabin, assembled from wall or door panels and corner post designed for such a cabin.

The invention relates to an enclosed room, assembled from flat wall or door panels which form part of a system of panels, each having at least one dimension which constitutes an element of an ascending series of measurements.

5 In the design and manufacture of, for instance, garages, summer houses and similar holiday chalets, in the past efforts have been made to apply a certain systematization in order to keep the cost of the structure to be supplied as low as possible. In so doing, however, it has been necessary
10 to accept the fact that such rationalization involved a significant restriction in the choice of dimensions for the planned structure, which is so important to the purchaser.

It is an object of the present invention to provide a system which combines a number of advantages - some known per se -
15 and thus creates a product which is simple to assemble, allows a wide choice of dimensions and offers the manufacturer a greater flexibility with fewer different components.

These objectives are achieved according to the invention in that the panels, with the aid of load-bearing corner-posts, form the sides of an, otherwise open, cabin, joined by the said corner posts to at least one similar cabin also
5 assembled from panels having a dimension in the same series as the first cabin, this series being of the FIBONACCI type.

The application of the series of dimensions of the FIBONACCI type has previously been described in GB-A-1 524 690 and
10 EP 81 201 332.4. The objective of the combination of measures indicated above is to obtain the advantages of this known dimensional system in the design and construction of cabins.

15 In a favourable embodiment each corner post of the cabin according to the invention comprises a profiled rod with circular cross-section, with longitudinally extending recesses, into which an edge of a panel can be fitted, the diameter of the corner posts being at least three times the thickness
20 of the panels. This feature results in the exceptionally favourable situation that the width of each panel (which width is a term from the assumed series of dimensions of the FIBONACCI type) can be calculated from the centre of each corner post, so that no corrections need be made in
25 the design when determining the distance between the corner posts.

The invention is also embodied in a corner post designed for the cabin as described above. According to the invention

said corner post is formed by a hollow tubular rod, the cross-section of which comprises an outer bush divided internally into four identical sectors by partitions. Depending on the function of the relevant corner post, it may be
5 provided with one or more recesses to allow a panel to be fitted into each of the said recesses.

The characteristics of the invention described hereinbefore and further characteristics will be explained in more detail
10 with reference to the accompanying drawings which show several embodiments of the cabin according to the invention and various details thereof.

Figures 1 A-C show a top plan view of three embodiments of the cabin according to the invention, in an oblique position.
15 Figure 2 shows the joining of two panels with a corner post on an enlarged scale and in a dismantled state.

Figure 3 shows, on an enlarged scale, a cross-sectional profile of a corner post into which a door hinge has been
20 introduced.

Figures 4 A-H are lateral views of a number of variants of the corner post according to the invention, with a cross-section above each figure.

Figure 5 shows the application of the invention as a partition
25 wall or notice board.

Figs. 1A, 1B and 1C show the cabin according to the invention as a WC, shower unit or changing room. Each cabin is assembled

from one or more wall panels 1 and one or more door panels 2. In the embodiments of the said three figures, next to each door panel 2 there is also an intermediate panel 3 with a considerably smaller width than that of the panels 1 and 2. With the aid of load-bearing corner posts 4, all the panels 1-3 form the sides of a cabin open at the top. In figs. 1A and 1B use is made of an existing angled wall 5, so that not all the sides of the cabin are formed by the panels 1-3. In the embodiment of fig. 1C the cabins are built against an existing straight wall 6.

Each cabin is joined, via the corner posts 4, to at least one similar cabin, which is also assembled from panels 1-3. The system of panels 1-3 is so composed that the width of each panel has a dimension, the numerical value of which constitutes an element from an ascending series of dimensions of the FIBONACCI type. In fig. 1A a water closet 7 is installed in each cabin. The cabins of fig. 1B each have a shower head 8 with a regulator tap 9. The partition wall between two adjacent cabins in this figure is assembled from two wall panels 1 which are joined together by a corner post 4. In the three cabins shown on the left-hand side of fig. 1B, this corner post is used to fix a freely projecting intermediate panel 3, which forms a partition between the wet part proper of that cabin and the drier part, in which the user's bathing or sports clothes can be hung temporarily. This same intermediate corner post 4 enables a smaller or different proportioned cabin to be produced using the same three types of panels 1-3. As can be seen in fig. 1C, each cabin of this

variant is provided with two door panels 2 opposite to each other.

Fig. 2 shows that each corner post 4 consists of a profiled rod with circular cross-section, with longitudinally extending
5 recesses 10 into which an edge of a panel 1-3 can be fitted. The diameter of the corner posts 4 is at least three times the thickness of the panels 1-3. At the top of the corner post 4 an auxiliary part 11 is provided for fixing the post to the ceiling or other supporting structure. If the corner
10 post 4 is to be mounted against an existing wall (see figs. 1A-C), a plug 12 with distance piece 13 may be used. The door panel 2 shown in fig. 2 may consist of a sheet of melamine with a thickness of 12 mm. At the side there is provided a lock 14 which may possibly indicate on the outside whether
15 the cabin is vacant or engaged. At the bottom the corner post 4 can be anchored on or into the ground with the aid of a single bolt 15, in conjunction with a foot 16.

The sectional view of fig. 3 illustrates that the corner post 4 is formed by a hollow tubular rod, the cross-section of
20 which consists of an outer bush 17 divided internally by partitions 18, into four identical sectors 19. The said partitions are tangential to an imaginary cylinder which is coaxial with the outer bush 17 so that a square core 20 is formed in the centre of the corner post 4. The partitions
25 18 are joined to the outer bush 17 on only one long side and form an additional projection 21 beyond the intersection with the partition situated perpendicular thereto.

One of the sectors 19 is opened by the removal of the relevant part of the outer bush 17. In this open sector or recess 10 a pivot 22 (see also fig. 2) is mounted for the rotatable fitting of a vane 23. This vane is fitted against the side
5 of the door panel 2.

It can be seen from figs. 4A and 4B that in a corner post 4 used for the fitting of a door panel 2, a number of mounting holes 24 have been made for fixing several pivots 22. In
10 figs. 4C-F a slot 25 can be seen, which may be used to accommodate the locking bolt 26 of the lock 14. Depending on whether the relevant door panel 2 is designed to open inwards or outwards, the slot 25 is provided in a partition 18 (figs. 4C and 4E) or in the outer bush 17 (figs. 4D and 4F). Fig. 4G again
15 shows a different design of corner post which serves as an abutment for a rotatable door panel. Fig. 4H shows that the corner post 4 may be provided with a wide slotted aperture 27 for the fitting of a wall panel 1 or an intermediate panel 3.

20 Finally fig. 5 illustrates that the system of the invention can also be used for a permanent or temporary partition wall or notice board assembled from two wall panels 1, set up in a staggered arrangement and joined together by an intermediate panel 3, which encloses an angle greater than 90° with
25 the two wall panels 1. This arrangement can be obtained in a simple manner by inserting the required slotted apertures 27 into the relevant corner posts 4 at the desired angles to each other. In this embodiment a light fitting 28 may be mounted above each wall panel 1 in the relevant corner posts 4.

In order clearly to illustrate the advantages of the present invention, a number of dimensions (widths) for the panels 1-3, which may be used in the cabins of figs. 1A-C, are given below. The said dimensions form a series of the FIBONACCI type, based on standard panels with a length of 2550 and 2750 mm.

The actual FIBONACCI series then becomes:

2717,65; 1679,60; 1038,05; 641,55; 396,50; 245,05.

10 Allowing for the core of the corner post, the following series of component dimensions is thus obtained:

2649,87; 1637,71; 1012,16; 625,55; 389,61, 238,94.

It is observed that the reference numerals in the claims are not intended to restrict the scope thereof, but are only
15 denoted for clarification.

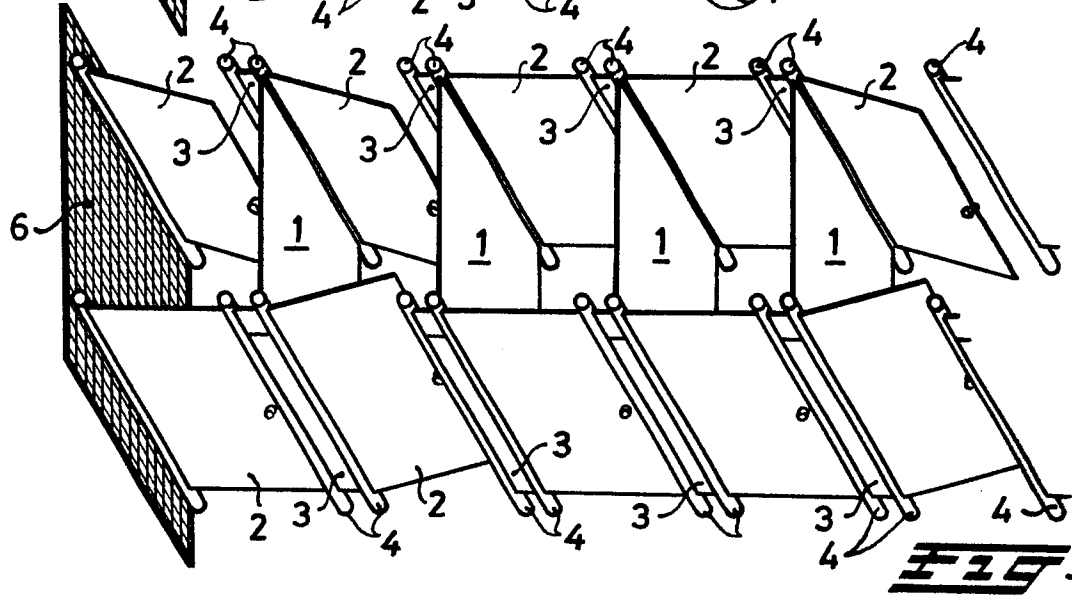
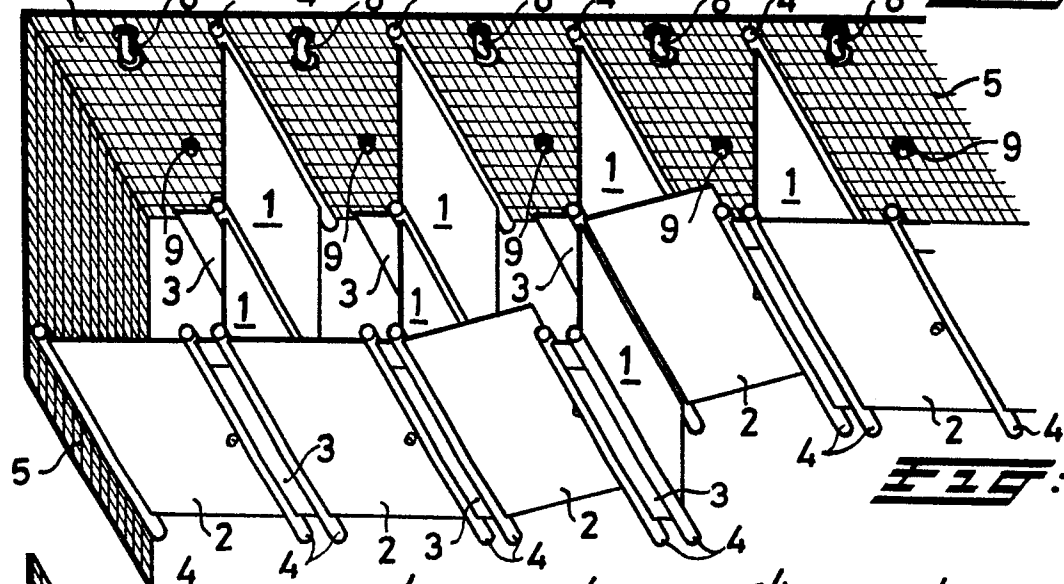
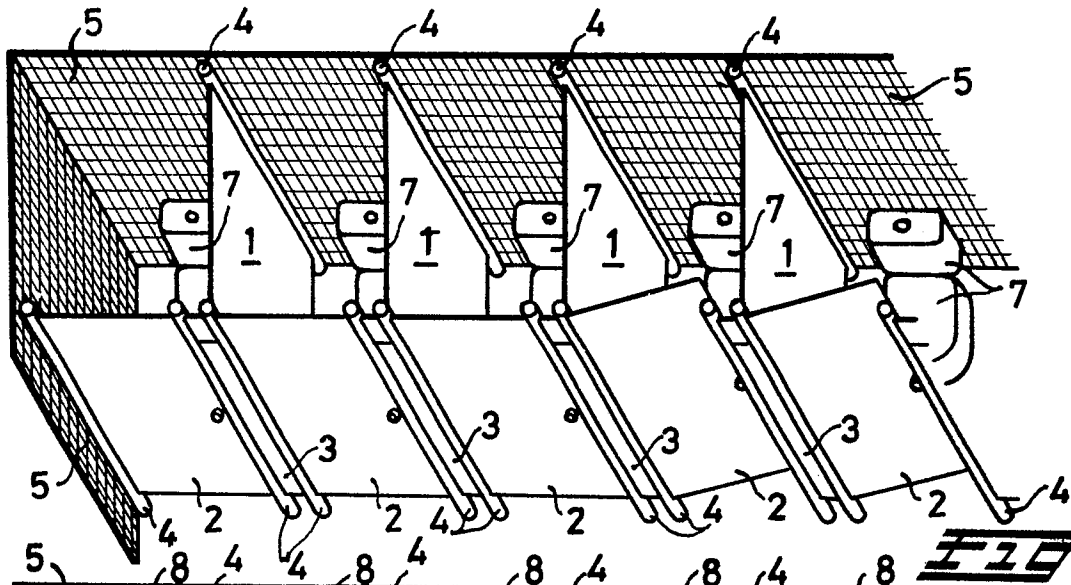
Claims:

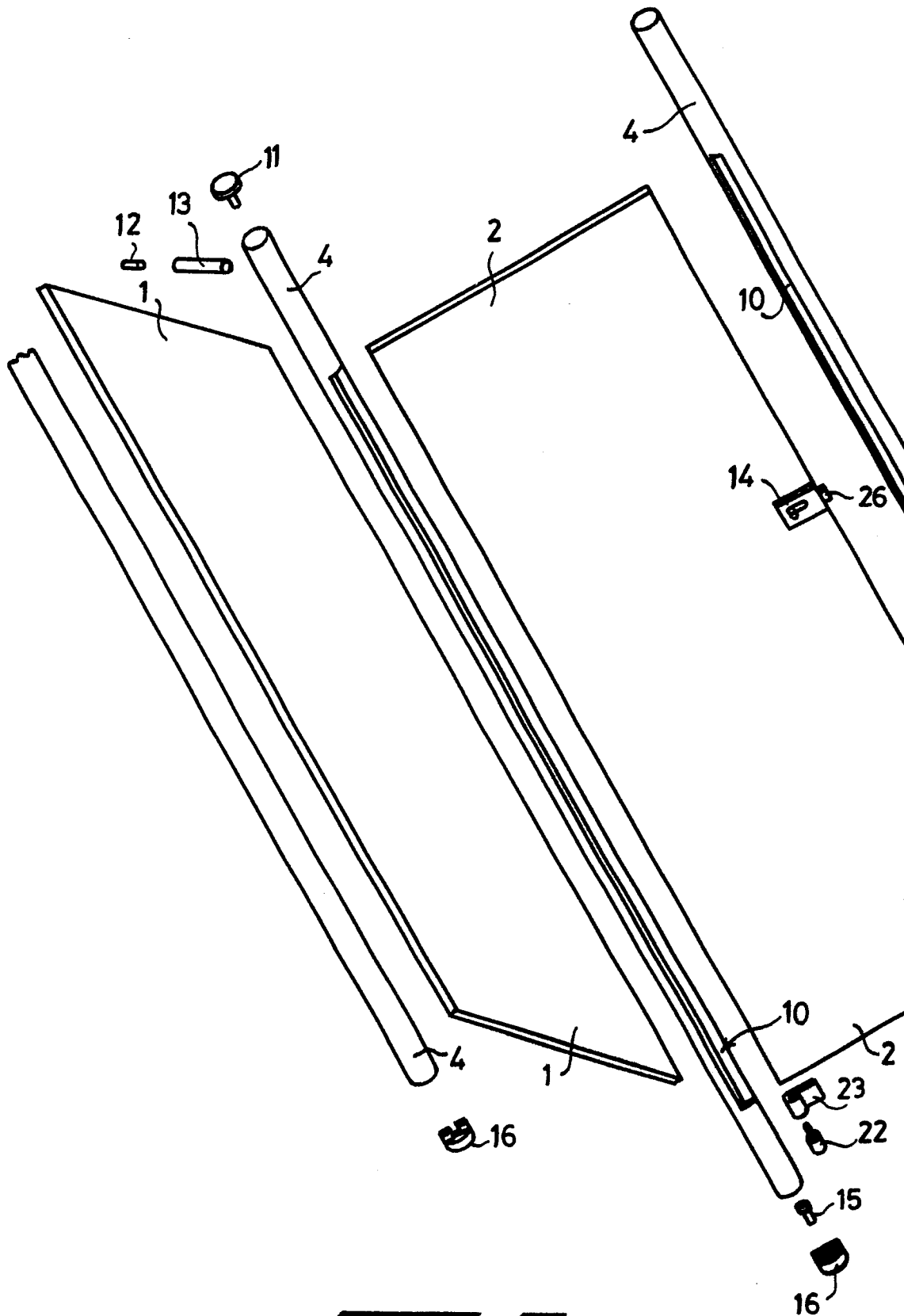
1. An enclosed room, assembled from flat wall or door panels which form part of a system of panels, each having at least one dimension which constitutes an element of an ascending series of measurements, characterized in that the panels (1-3), with the aid of load-bearing corner posts (4), form the sides of an, otherwise open, cabin, joined by the said corner posts to at least one similar cabin also assembled from panels having a dimension in the same series as the first cabin, this series being of the FIBONACCI type.
2. A cabin according to claim 1, characterized in that each corner post (4) comprises a profiled rod with circular cross-section, with longitudinally extending recesses (10) into which an edge of a panel (1-3) can be fitted, the diameter of the corner posts being at least three times the tickness of the panels.
3. A corner post designed for the cabin as claimed in claim 1 or 2, characterized in that the corner post (4) is formed by a hollow tubular rod, the cross-section of which comprises an outer bush (17), divided internally by partitions (18) into four identical sectors (19).
4. A corner post according to claim 3, characterized in that the partitions (18) are tangential to an imaginary

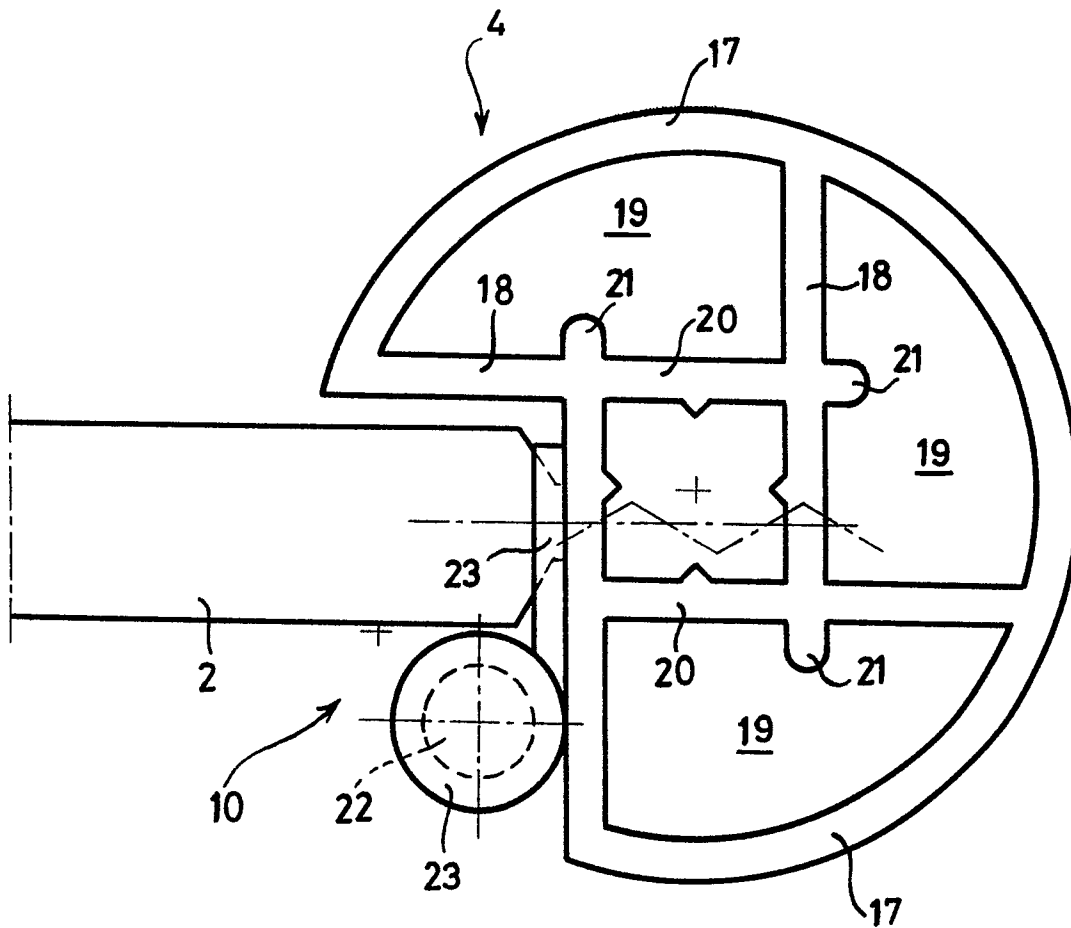
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cylinder, which is coaxial with the outer bush (17), so that a square core (20) is formed in the centre of the corner post (4), the partitions being joined to the outer bush only on one long side.



**FIG. 2.**

**FIG. 3.**

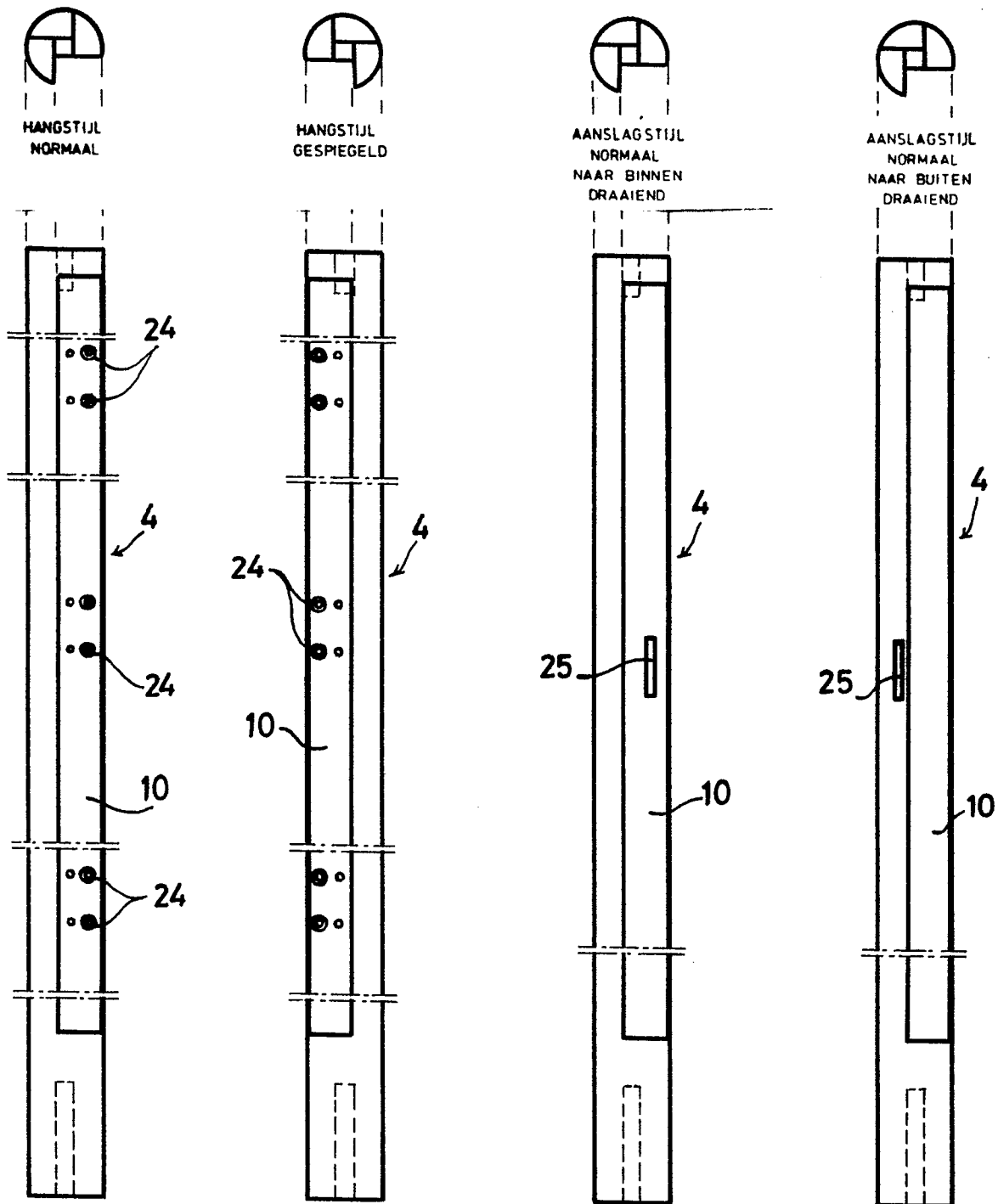
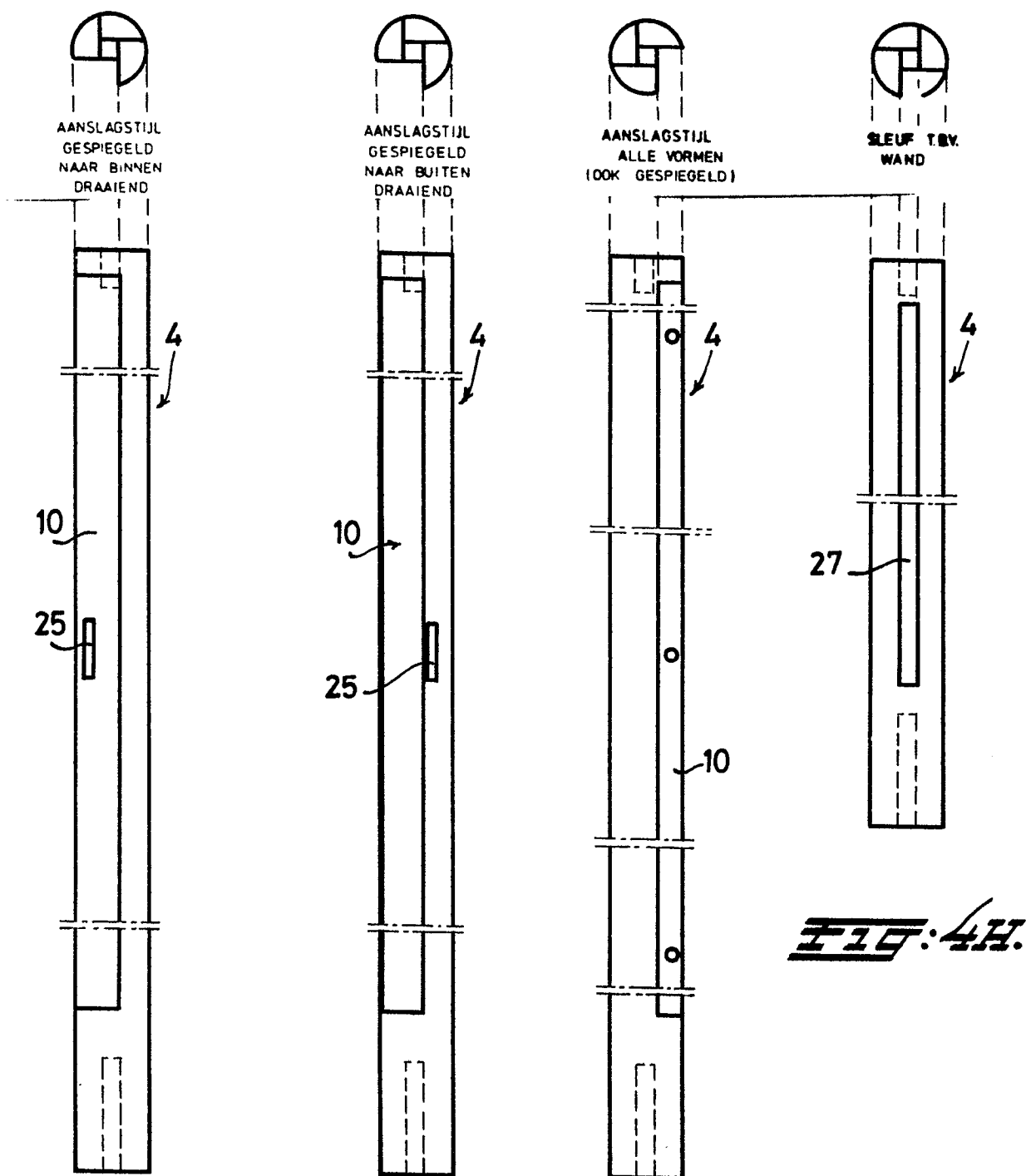
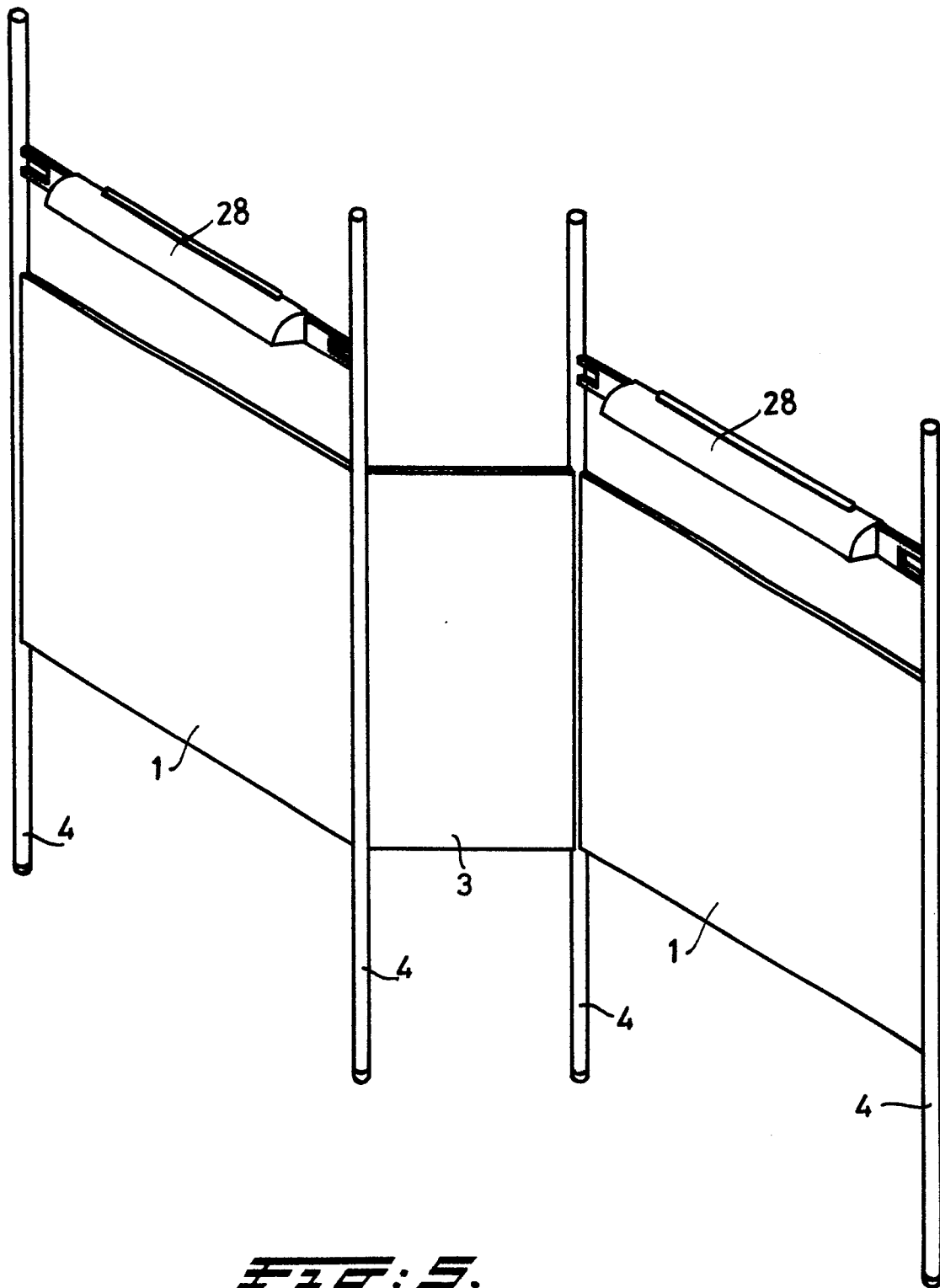


FIG: 4A. FIG: 4B. FIG: 4C. FIG: 4D.



**FIG. 5.**



European Patent
Office

EUROPEAN SEARCH REPORT

0107227

Application number

EP 83 20 1396

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A, D	GB-A-1 524 690 (COHEN)		E 04 H 1/00 E 04 H 1/12
A	FR-A- 996 664 (JEANNERET)		
A	US-A-3 733 759 (SCHULTE)		
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			E 04 H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12-01-1984	Examiner SCHOLS W.L.H.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	