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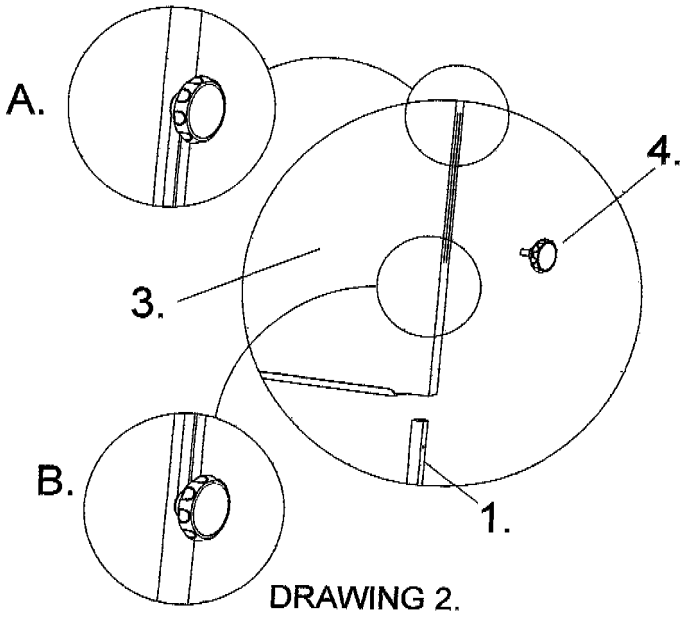
(54) **Means of height adjustment for flipcharts**

(57) The device invented has two highly significant characteristics on which the whole principle is based: the multi-layering of the metal plate (3) and the two slots located in the narrow edges of the board (one on each side)

The plate's multi-layering (3) acts as a guide for the unit made up of the interior melamine structure (5) together with the 2 tubes (1) located on each side of this. These metal tubes (1) have a hole at one end through which the thread of the knob (4) passes, up to the central melamine structure (1) where the anchor thread is located (this knob (4) means that no kind of tool is required).

The side slots delimit the range of adjustment with a maximum (board height 190cm) and minimum (board height 170cm). This adjustment can be assisted by 1 or 2 springs (6) to help move the board with the minimum of effort.



DRAWING 2.

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Description

[0001] The present invention, as set out in the presentation of this descriptive memorandum, refers to a height adjustment device for tripod flipchart boards (3 support points), which has been conceived and produced with the aim of obtaining advantages in comparison with other existing devices with similar purposes. This same system is also used for mobile flipcharts.

[0002] The device is designed for both tripod and wheeled flipchart boards to be adjustable in height, in a safe and very practical manner. This goal is achieved by means of a specific design of the writing board and longitudinal slots in the edges of the board which limit its movement. By pressing a small knob in the central melamine structure, the height of the flipchart can be adjusted.

[0003] By means of the slots, the highest and lowest position of the board can be fixed safely and quickly. Safely, because the ends of the slot and the knob prevent the metal leg from falling (with the risk of injuring the presenter or damaging material); and quickly, since the slot itself establishes the ends of the run.

BACKGROUND OF THE INVENTION

[0004] Numerous efficient devices or means exist for adjusting the height of a flipchart board.

[0005] There are models that operate by means of telescopic tubes (one inside the other) and pressure fixing. This system does not allow the end stop of the internal tube to be fixed, with the risk of falling, and there is no reference of the height to which it is being adjusted. The same system exists with screw fixings, and there are also systems with preset positions (4 or 5) - but with the disadvantage that these positions may not coincide with the customer's requirements.

[0006] Numerous efficient devices or means exist for adjusting the height of a mobile flipchart.

[0007] There are models that operate by means of telescopic tubes (one inside the other) - this system requires greater effort, because all of the upper writing assembly of the board has to be moved (there are systems that incorporate a spring inside the tubes to facilitate this adjustment).

DESCRIPTION OF THE INVENTION

[0008] The device constituting the invention presents two very notable characteristics which form the basis of the entire principle. The invention makes use of the hollow structure of the metal board and two longitudinal slots located in its vertical edges (one slot in each edge)

[0009] The vertical cavities in the structure of the board allow the two front legs (made of square-section metal tube) to slide vertically inside it. At the top end of each leg there is a hole through which the thread of a fixing knob passes to engage a threaded insert in the central melamine structure (this knob avoids the use of any type of tool).

[0010] The movement of the tube and the melamine board is limited by the longitudinal lateral slot and the fixing of the knob. This 3-piece assembly allows one or two springs to be incorporated to enable the board to be moved with the minimum effort.

[0011] The legs, apart from permitting the height adjustment function, also give the board greater structural strength.

[0012] The longitudinal slots located in the vertical edges of the board are placed at a specific position in such a manner that its run has two end points, maximum and minimum. The maximum height of the board is 190 cm and the minimum is 170 cm. This 20 cm run can be modified during the production process, if necessary.

[0013] Once the end positions have been set, the slot permits a uniform run to fix the flipchart at the height required by the customer. It is fixed by means of two knobs, accessible from either the front or back of the board, that press the leg against the panel of the board.

BRIEF DESCRIPTION OF THE INVENTION

[0014]

Figure 1.- Shows an exploded perspective view of the parts composing the device described above and forming the subject matter of the invention, along with the assembled board.

Figure 2.- Shows a perspective detail view of the fixing of the knob and the maximum and minimum positions.

DESCRIPTION OF AN IDEAL FORM OF CONSTRUCTION

[0015] In the figures, it can be seen that the device is basically composed of three parts, 1, 3 and 4, which are coupled together, part 1 being formed by square-section metal legs, each having at the top end a hole that houses the fixing knob (4).

[0016] Part 3 consists of the panel of the board, which has longitudinal slots in each vertical edge that allow it to slide up or down the legs (1) and to be fixed in the desired position by means of threaded knobs (4). The longitudinal slots are located at a specific height to establish by default a maximum position of 190 cm (detail A) and a minimum position of 170 cm (detail B)

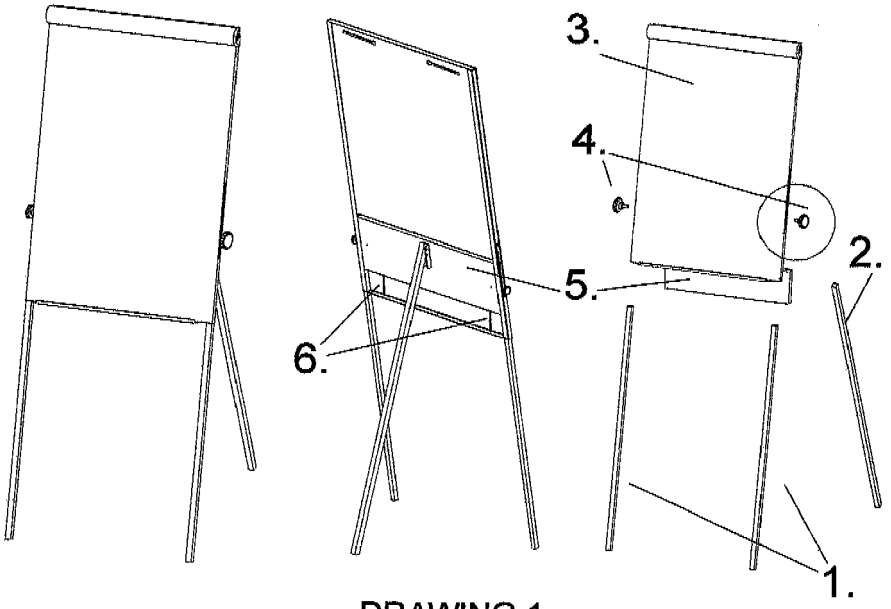
[0017] The knobs (4) allow the board to be fixed in the required position without the need for any tool.

Claims

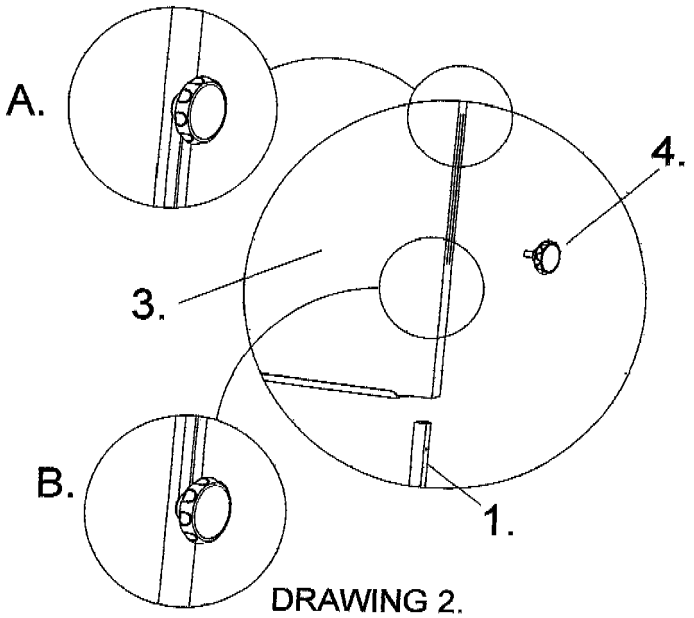
1. A HEIGHT ADJUSTMENT DEVICE FOR FLIPCHART BOARDS, consisting of two square-section metal front legs **(part n° 1),** at the top end of which

there is a bore hole. A third square-section metal leg **(part n° 2)** has two bore holes at the top end. There is a writing surface made of a hollow punched metal panel **(part n° 3),** and two round polymer knobs **(part n° 4),** each with a threaded metal insert. The parts described above are fixed to an internal structure **(part n° 5)** made of rectangular-section melamine. Finally, two optional internal springs **(part n° 6)**, made of metal wire, can be incorporated. This same system can be adapted to boards with wheels, by attaching the base to the assembly described above.

2. A HEIGHT ADJUSTMENT DEVICE FOR FLIP-CHART BOARDS, according to claim n° 1, consisting of a writing surface made of a hollow punched metal panel **(part n° 3)** which has a longitudinal slot in each side to limit the adjustment run. An internal melamine structure **(part n° 5)** is introduced into this panel and runs longitudinally inside it along with the tube. This melamine structure allows two optional springs **(part n° 6)** to be fitted to facilitate the height adjustment movement. Two square-section metal legs **(part n° 1)** are fitted between the melamine structure and the metal surface, and the board is fixed at the required height using the round polymer knobs **(part n°4)** which pass through bore holes in the legs. A third square-section metal leg **(piece n° 2)** is fixed to the rear of the melamine structure by means of its anchoring points.



DRAWING 1.



DRAWING 2.