

April 2, 1968

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3,376,007

HOLDING DEVICE

Filed Jan. 28, 1966

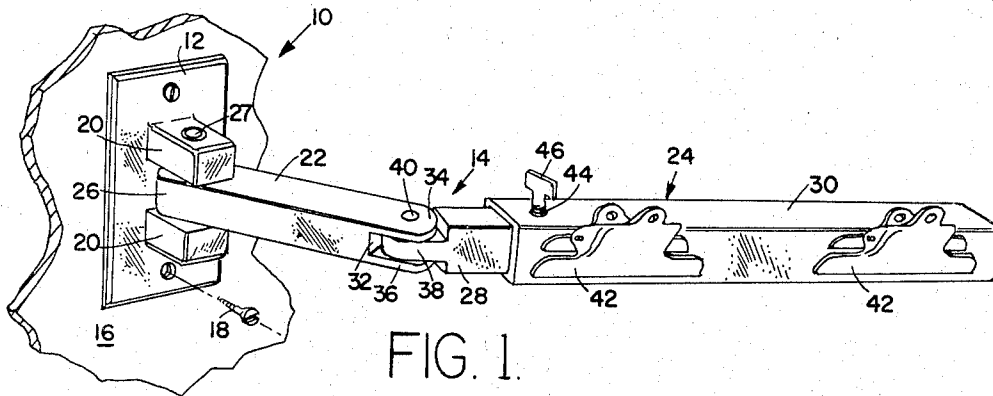


FIG. 1.

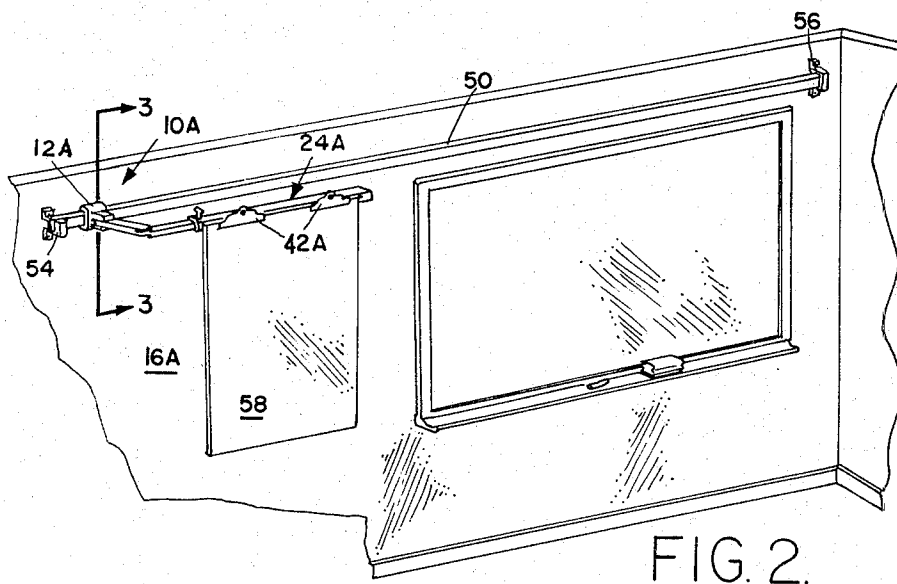


FIG. 2.

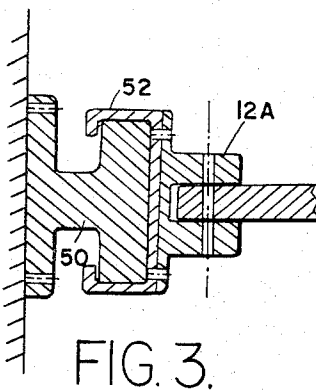


FIG. 3.

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1

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HOLDING DEVICE

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Filed Jan. 28, 1966, Ser. No. 523,701

3 Claims. (Cl. 248—282)

ABSTRACT OF THE DISCLOSURE

A holding device for display pads having a mounting block, an arm member pivotally attached to the mounting block, the arm assembly including a plurality of sections arranged in telescoping relationship to selectively vary the length of the arm, clamping means connected to the arm assembly for holding a display pad.

The present invention pertains to a holding device, and more particularly to a holding device which can be mounted upon walls and the like and which is adapted to hold large display pads, such as the type used for presentations.

Many problems are encountered with the present-day display devices used in the graphic presentation of material during lectures, business meetings, conferences and the like. Present devices are bulky, require a substantial amount of time to assemble and are not readily disassembled and stored. These devices are often unattractive in appearance and distract attention from the illustrative material being presented. Also, they have a great tendency to interfere with the speaker, thus hampering his presentation. Another problem presented by the use of complex prior art display equipment, such as easels and the like, is that it takes up considerable floor space and requires careful positioning in order to be in clear view of everyone without blocking the speaker.

There is therefore a present need for devices capable of holding large display pads of the type used in presentations, which can be permanently mounted upon one of the walls of a room. Devices of this sort are not, of course, in constant use; therefore there is also a need for such a device which may readily be stored in a neat, unobtrusive manner and which may be efficiently stored without requiring dismounting.

This type of device would enable persons having extremely busy schedules to arrange conferences and business meetings with minimal advance notice and without complicated advance arrangements for presentation of illustrative material. Further, such a device makes it possible to make almost any room a "conference room" without the allotment of floor space customarily required for graphic display. Thus, when it is desired to display information for the benefit of a small group, an ordinary office could be used. The need for advance reservation of a "conference room" is thus eliminated, as is the wasteful practice of having only a few people in an area designed for large groups.

Additionally, this type of device would not require a speaker to remain stationary or restrict his movement to a very small area, as is the case in present-day display apparatus. The present invention would, on the contrary, permit the speaker great freedom of movement.

It is therefore the primary object of the present inven-

2

tion to provide a holding device which can be mounted upon a wall of a room and which can hold large display pads so as to easily exhibit the information on the sheets of said pads, during a presentation, and which can be readily stored against the wall when not in use.

It is another object of the present invention to provide a holding device having an articulated arm construction which permits the display pads to be oriented at various angles with respect to said wall.

It is yet another object of the present invention to provide a holding device wherein one of the members of the articulated arm has a plurality of telescoping sections which permit the display pads to be oriented at various distances away from the wall and at various places within the room.

It is a further object of the present invention to provide a holding device having spring-type clamping members which secure the display pads to the holding device and also enable the individual sheets of the display pads to be removed from view when there is no longer any reference thereto.

It is yet a further object of the present invention to provide a holding device which can be slidably inserted in a track which is mounted upon a wall in a room, by means of which the holding device can be slidably moved along the track, thus allowing greater latitude in positioning the holding device within the room.

It is still a further object of the present invention to provide a holding device which can be manufactured simply and easily and whose cost is relatively inexpensive.

These and other objects, features and advantages of the invention will become more apparent when considered in conjunction with the accompanying drawings, wherein:

FIG. 1 is a perspective view of the holding device of the present invention mounted upon the wall of a room;

FIG. 2 is a perspective view of the holding device of the present invention mounted for slidably horizontal movement along a track, which track is secured to the wall of a room; and

FIG. 3 is a sectional view taken on the line 3—3 of FIG. 2.

Referring now to the drawings, and more particularly to FIG. 1 thereof, there is shown the holding device 10 of the present invention. The holding device 10 includes a mounting block 12 and an articulated arm 14 pivotally connected thereto in a manner to be described in more detail hereinafter. The mounting block 12 is secured to the wall 16 by means of screws 18. The block 12 has a pair of laterally extending, vertically spaced flanges 20, said flanges having vertical bores (not shown) therein.

The articulated arm 14 consists of an arm member 22 and an arm assembly 24. The inner end 26 of the arm member 22 has a vertical bore (not shown) therein, and the end is disposed between the flanges 20 of the block 12. A pin or rivet 27 is placed through the vertical bores in the flanges 20 and the end 26, thereby pivotally connecting the arm member 22, and thus the articulating arm 14, with respect to said mounting block.

The arm assembly 24 is of telescope construction and includes a rod 28 and a sleeve 30, said sleeve being slidably mounted upon said rod. The outer end of the arm 22 has a slot 32 formed therein which defines two flange members 34 and 36. The flange members 34 and 36 have an arcuate configuration and have vertically disposed bores (not shown) formed therein. The inner end of the

rod 28 has a centrally disposed, laterally extending flange member 38 which also has an arcuate configuration. The flange member 38 is interposed between the flanges 34 and 36 and has a vertical bore (not shown) therein which is aligned with those bores in the members 34 and 36. A pin or rivet 40 is inserted into said bores to pivotally connect the rod 28 and thus the telescoping arm assembly 24 with respect to the arm member 22. The pin 40 may be of the type commonly known as a roll-pin. It is to be noted that the arm assembly is also pivotable with respect to the block 12.

The sleeve 30 has spring-type clamps 42 secured thereto, which clamps are fastened to said sleeve in any suitable manner, such as by riveting. The sleeve 30 has a threaded bore 44 formed in the upper portion thereof, into which is inserted a clamping screw 46. The screw 46 serves to unlock and lock the arm assembly 24 at any desired length. Sliding movement of said sleeve 30 upon the rod 28 is permitted when screw 46 is loosened. After extension to an appropriate length, the screw 46 is tightened and engages the upper surface of said rod. This prevents further slidable movement of said sleeve, and locks the telescoping arm assembly 24 in place.

It is herein to be noted that, although the arm assembly has been described as having one telescoping member, the same may be fabricated having three or more members. The holding device 10 may be formed of metal, plastic or any other suitable material, or any combination thereof. Although the present invention has been described as utilizing spring-type clamps to detachably fasten the display pad to said holding device, any other suitable clamping or fastening means may be equally well utilized. Also, although the members of the holding device are illustrated as having a substantially rectangular cross-section, any geometrical cross-sectional configuration that permits of the aforescribed function may be equally well utilized; an example would be members having circular cross-sections. In this regard it should be noted that the sleeve 30 and that portion of the rod 28 which extends beyond the flange member 38 may be formed having circular cross-sections. This would make the sleeve 30, and thus clamps 42, rotatable about the longitudinal axis of the members 28 and 30. This configuration would permit vertical adjustment and also angular adjustment with respect to the vertical of the display pad, should such adjustment be desired. The screw 46 will then serve the dual purpose of locking the arm assembly 24 against both longitudinal and rotational movement. In this respect, it will be appreciated that, should the holding device be employed on a raised stage or platform, the audience would be seated below the line of sight of the display pad. The feature of angular adjustment of the display pad with respect to the vertical permits the full effect of the graphic illustration to be imparted to the audience by adjusting the angular disposition of the display pad such that the line of sight of the audience seated below the platform is perpendicular to the plane of the graphic illustration. The same effect would be imparted to an audience seated above the platform by angularly adjusting the display pad in an upward direction. An additional advantage of the angular adjustment of the display pad is that it will substantially eliminate incidental light reflection from the surface of the graphic illustration on the display pad.

In the utilization of the holding device, the individual sheets of the display pad which are no longer required for the presentation may be folded rearwardly over the articulated arm assembly, so as to bring the next sheet into view. The individual sheets may also be torn from the display pad and set aside for future use, or they may be disposed of.

Another embodiment of the present invention is shown in FIG. 2, wherein similar parts are denoted by similar reference numerals. In this embodiment, the holding device 10A is substantially the same as holding device 10 shown in FIG. 1, except that it is slidably mounted on a

track or rail 50, which is secured to the wall 16A in any well-known manner.

The block 12A (as seen in FIG. 3) has a C-shaped member 52 connected thereto on the rear surface thereof. The member 52 may also be formed integrally with said block. The holding device is slidably mounted upon the rail 50 by slidably placing the C-shaped member thereon. A locking member 54 is then placed at the left end portion of the rail (as seen in FIG. 2), and a stop member 56 is secured to the right end of said rail (as seen in FIG. 2). A display pad 58 is secured to the arm member 24A by means of the spring-type clamps 42A.

It is thus seen that I have provided a new and novel holding device for display pads and the like, which can be manufactured easily and inexpensively, and which permits great latitude in the positioning of said pads within a room.

While I have shown and described the preferred embodiments of my invention, there are many changes and modifications which may be made therein by one skilled in the art without departing from the spirit and scope of the invention as defined in the appended claims.

What is claimed is:

1. A holding device for display pads and the like, said holding device comprising:
 - a mounting block,
 - an arm member, and
 - an arm assembly including,
 - a plurality of sections arranged in telescoping relationship to selectively vary the length of said arm assembly, and
 - locking means operatively associated with said telescoping sections to prevent any movement of said sections relative to one another after the desired length of said arm assembly has been selected,
 means connected to said arm assembly for holding said display pads, means pivotally connecting said arm member to said mounting block including,
 - a pair of laterally extending flange members connected to said block in spaced relationship with one another,
 - one end of said arm member, and
 - a rivet,
 - each of said flange members having a transverse bore formed therein and being interposed between said flange members with the transverse bore thereof in axial alignment with the transverse bores of said flange members, and
 - said rivet being positioned within said axially aligned bores,
 means pivotally connecting said arm assembly to said arm member to thereby pivotally connect said arm assembly with respect to said mounting block including,
 - a slot formed in the other end of said arm member defining two laterally extending flanges,
 - a centrally disposed tongue extending laterally from the inner one of said telescoping sections, and
 - a rivet,
 - each of said flanges having a transverse bore formed therein,
 - said tongue having a transverse bore formed therein and being disposed within the slot in said other end of said arm member,
 - the transverse bore of said tongue being an axial alignment with the transverse bores of said flanges, and
 - said rivet being positioned within said axially aligned bores.
2. A holding device in accordance with claim 1, wherein said holding device comprises at least one spring-type clamp.
3. A holding device in accordance with claim 1, where-

5

in said device is adapted to be slidably mounted upon a track and including, mounting means connected to said mounting block to slidably mounting said block upon a track.

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