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54 **Table.**

57 The table has a base structure 1 which is pivotally coupled via a connecting member 15 and an intermediate member 16 to a top 2. By standing the base on either of two adjacent sides and pivoting the top by the connecting member 15, the top can be rested on the base at two different heights. The top is formed by two hinged leaves 31 and 32, and at either height the top can be swivelled on the intermediate member 16 and opened out to provide an extended surface area. In the higher position the top can also be fixed in an inclined position for use as a drawing board.

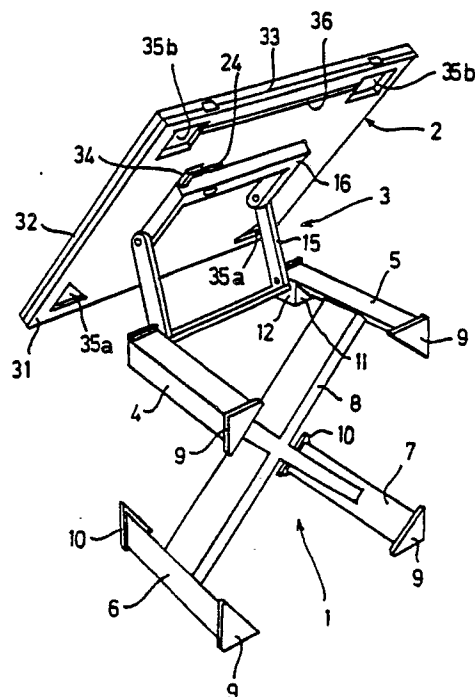


FIG. 1

TABLE

TECHNICAL FIELD OF THE INVENTION

This invention relates to tables, and particularly those including means by which they can be adjusted in height.

BACKGROUND

GB 598 783 discloses a table comprising a base structure which is arranged to be stood with either of two adjacent substantially perpendicular surfaces uppermost such that in the two positions the two surfaces will be at two different heights, a connecting structure which is pivotally coupled to the base structure for rotation about a first axis which extends substantially parallel with the junction between the said surfaces, and a table top which is coupled to the connecting structure to rest on either of the two surfaces. The top is slidably connected to the connecting structure, but the use of a slidable connection is generally undesirable since it can easily result in jamming.

An aim of this present invention is to provide a table which can easily be manipulated to a range of configurations and which is also inexpensive to manufacture.

SUMMARY OF THE INVENTION

The present invention proposes that the table top is pivotally coupled to the connecting structure for rotation about a second axis which is substantially parallel to, but spaced from, the first axis. The slidable connection is thereby eliminated providing a potentially smoother action.

It is further proposed that the base structure may be provided with locating means for positively locating an edge of the top which extends substantially parallel to the first and second axes so as to support the top in an inclined position.

The top may further include first and second sections which are hinged together at a pair of common edges thereof, the first section being pivotally coupled to the connecting structure via an intermediate structure which is in turn pivotally coupled to the first section of the top to permit the top to swivel about a third axis extending substantially perpendicular to the first section and offset from the centre thereof such that when the two sections of the top are opened out into substantially coplanar positions the top can be pivoted about the third axis to be supported in its approximate centre by the base structure.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention is exemplified in the accompanying drawings, in which:

5 Figure 1 is a perspective view of a table of the invention shown in a suitable configuration to reveal the underside of the table top,

Figure 2 is a perspective view of a linking structure which joins the top and base of the table,

10 Figure 3 is a section through the linking structure taken transverse to its pivot axes,

Figure 4 is a perspective view of the table in a small, low level configuration,

15 Figure 5 is a perspective view of the table during movement from the configuration of Fig. 4 to an extended configuration,

Figure 6 is a perspective view of the table in the extended configuration,

20 Figure 7 is a perspective view of the table in a small, high level configuration,

Figure 8 is a perspective view of the table during movement from the configuration of Fig. 7 to an extended configuration,

25 Figure 9 is a perspective view of the table in the extended, high level configuration, and

Figure 10 is a perspective view of the table in a drawing board configuration.

30 DETAILED DESCRIPTION OF THE DRAWINGS

Referring firstly to Fig. 1, the table includes a base structure 1 which is connected to a top 2 via a linking structure 3.

35 The base 1 comprises four substantially parallel legs 4-7 which are fixed to a cross-shaped frame 8. The legs are all of triangular cross section and have laterally projecting triangular feet 9 secured to one end. The opposite ends of an adjacent pair of legs 6, 7 carry similar triangular bearing plates 10. The other two legs, 4 and 5, have pivot blocks 11 secured to their inner faces at the opposite ends to the feet 9, these blocks 11 providing the legs 4 and 5 with a pair of substantially parallel opposed faces 12.

45 The linking structure 3 is shown in more detail in Figs 2 and 3 and comprises a pair of U-members 15 and 16 each formed of a cross piece 17 having a pair of substantially parallel arms 18, 19 extending from opposite ends. One of the U-members 16 is slightly smaller than the other such that the smaller fits within the larger, and the two U-members are coupled together by axially aligned pivots 20, 21 at the free ends of the arms 18 and 19. The cross piece 17 of the larger U-member 15

extends between the internal faces 12 of the blocks 11 to which it is coupled by axially aligned pivots 22 and 23. The cross piece 17 of the smaller U-member 16 contains a further pivot pin 24 which extends substantially perpendicular to the general plane of the U-member and is offset from the longitudinal centre of the respective cross piece 17. One end of the pin is secured to an attachment plate 25 which rotates against an adjacent side face of the cross piece 17 whereas the opposite end of the pin is threaded to receive a locking nut 26 which is recessed into the opposite side face of the cross piece 17.

Referring back to Fig. 1, the table top 3 comprises a pair of substantially identical leaves 31 and 32 which are hinged together at a pair of common edges 33. The attachment plate 24 is secured in an off-centre position to the underside of one of the leaves 31, and an L-shaped stop 34 is also secured to the underside of the same leaf to co-operate with the cross piece 17 of the smaller U-member 16.

The underside of leaf 31 further has four recesses 35 located in its four corners, two of the recesses 35a being triangular to receive the bearing plates 10 and the other two 35b being square to receive the blocks 11 together with the ends of the legs 4 and 5. Thus, when the base structure is positioned such that the four feet 9 stand flat on the ground and the top is in a folded configuration as shown in Fig. 4, the top is positively located to prevent rotation about the axis of pivot pin 24. In this configuration the two U-members 15 and 16 are substantially coplanar with the smaller U-member lying within the larger, the cross piece 17 of the larger U-member 15 being received in a channel 36 (Fig. 1) joining the two square recesses 35b.

Whilst in this low configuration the top can be extended by lifting it slightly to disengage the legs from the recesses 35 and rotating it about the axis of pivot pin 24 as shown in Fig 5 until the hinged edge 33 lies above the centre of the base structure 1. This position is positively determined by engagement of the stop 34 with the cross member 17 of the smaller U-member 16. The two leaves 31 and 32 can then be unfolded to the extended position shown in Fig. 6. The top can be returned to the folded configuration by the reverse sequence.

To increase the height of the table, the folded leaves 31 and 32 are lifted together allowing the pivoted legs 4 and 5 to swing up until the legs 6 and 7 are resting parallel on the ground, as shown in Fig. 1. The top is then lowered onto the upper legs 4 and 5, as shown in Fig. 7. During this movement the larger U-member 15 rotates about the axes of pivots 20, 21 and 22, 23 to a position in which the two U-members are again substantially

coplanar but with the cross pieces 17 lying substantially on opposite sides of the pivots 20 and 21. The two leaves 31 and 32 can again be rotated about the axis of pivot pin 24 (see Fig. 8) until the hinged edge 33 lies above the centre of the base structure 1, this position again being determined by engagement of the stop 34 with the cross member 17 of the smaller U-member 16. The leaves can then be unfolded to the extended position shown in Fig. 9. The leaves can be returned to the folded configuration by the reverse sequence of movements.

From the high configuration of Fig. 7 the table can also be manipulated into a drawing board configuration as shown in Fig. 10. The folded leaves are again lifted so that the larger U-member 15 rotates about the axes of pivots 20, 21 and 22, 23. The top can then be rested in an inclined position on the projecting feet 9 which are secured to the legs 4 and 5. In order to firmly secure the top 2 in this position a pair of wire stays 41, 42 may be provided. Each stay comprises a straight middle portion 43 with its ends 44 and 45 extending in opposite directions. One end 44 is inserted into a respective triangular recess 35a whilst the opposite end 45 is inserted into holes 46 provided at the roots of arms 18 and 19 of the larger U-member.

It will be appreciated that the base structure 1 could take various forms and that the particular arrangement shown in the drawings is purely illustrative.

Claims

1. A table comprising a base structure (1) which is arranged to be stood with either of two adjacent substantially perpendicular surfaces uppermost such that in the two positions the two surfaces will be at two different heights, a connecting structure (15) which is pivotally coupled to the base structure for rotation about a first axis which extends substantially parallel with the junction between the said surfaces, and a table top (2) which is coupled to the connecting structure to rest on either of the two surfaces, characterised in that the table top (1) is pivotally coupled to the connecting structure for rotation about a second axis which is substantially parallel to, but spaced from, the first axis.

2. A table according to Claim 1, in which the base structure (1) is provided with locating means (9) for positively locating an edge (33) of the top (2) which extends substantially parallel to the first and second axes so as to support the top in an inclined position (Fig. 10).

3. A table according to Claim 1 or 2, in which

the top includes first and second sections (31, 32) which are hinged together at a pair of common edges thereof (33), the first section (31) being pivotally coupled to the connecting structure (15) via an intermediate structure (16) which is in turn pivotally coupled to the first section (31) of the top to permit the top to swivel about a third axis extending substantially perpendicular to the first section (31) and offset from the centre thereof such that when the two sections of the top (31, 32) are opened out into substantially coplanar positions (Fig.s 6 and 9) the top can be pivoted about the third axis to be supported in its approximate centre by the base structure (1).

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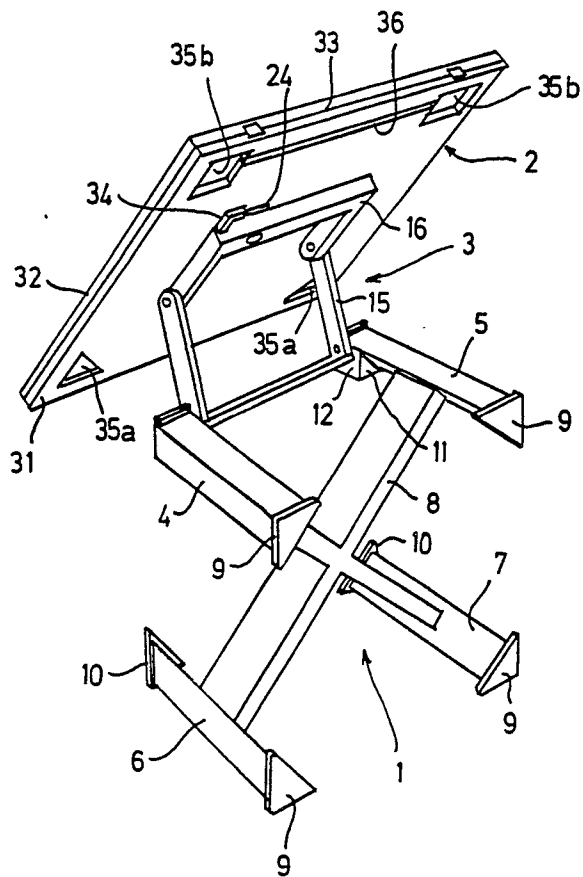


FIG. 1

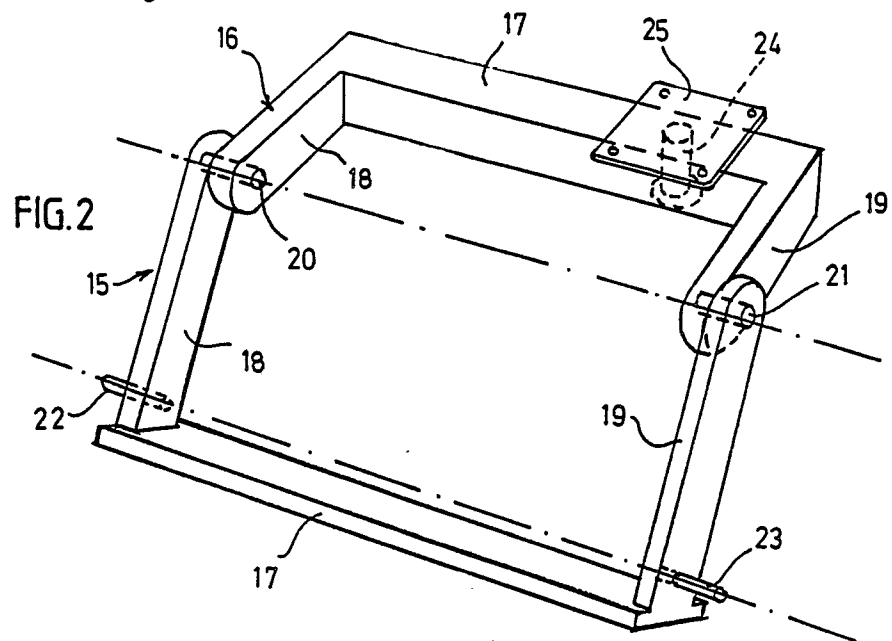
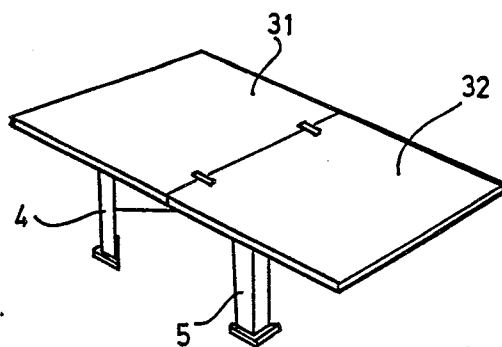
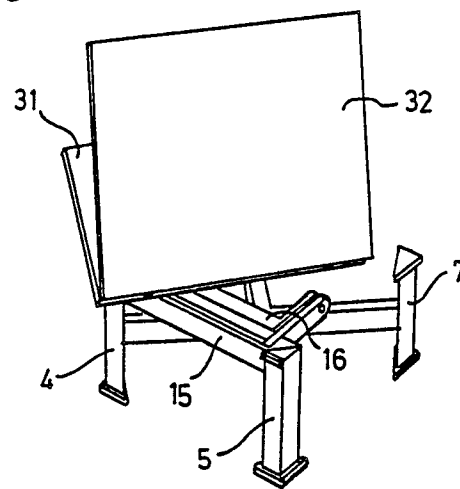
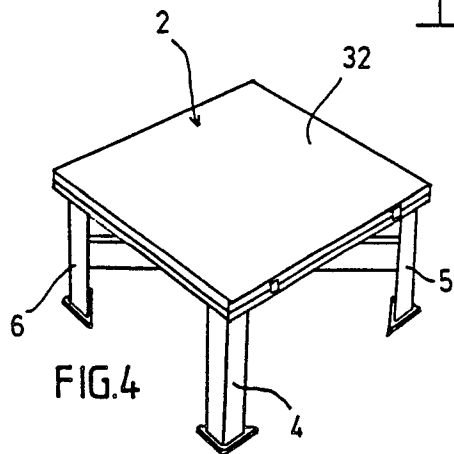
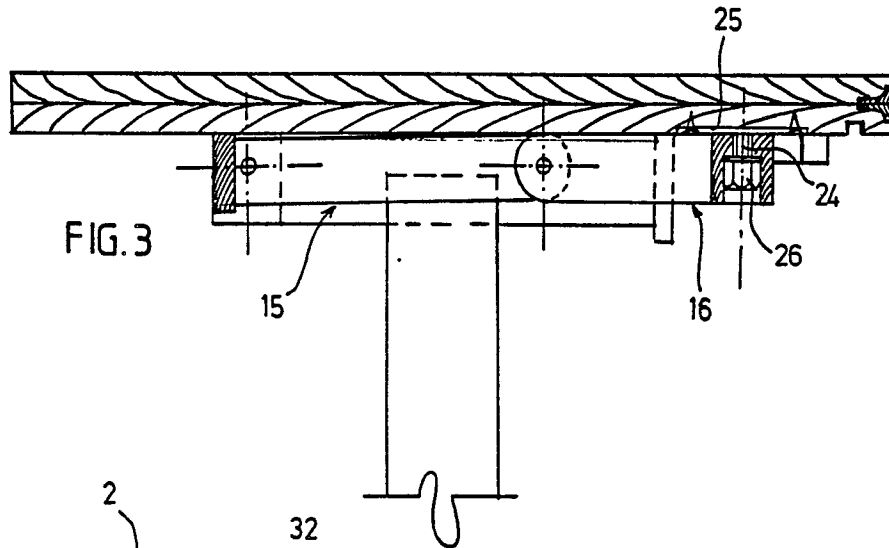
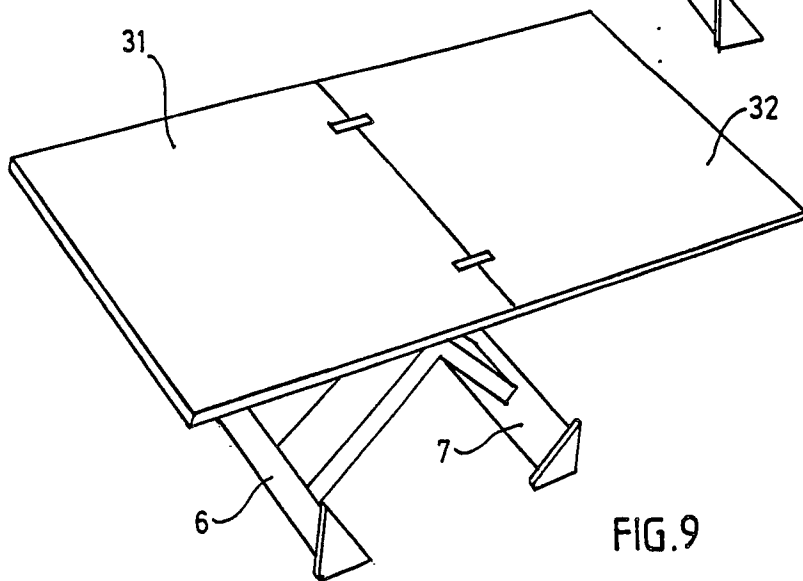
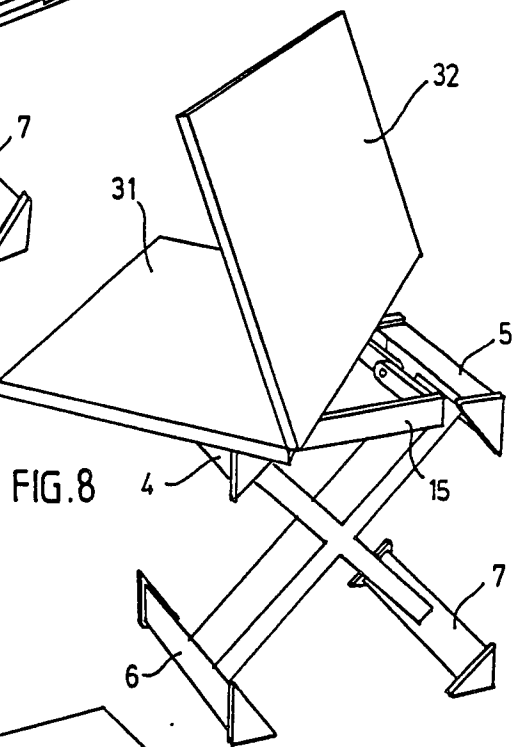
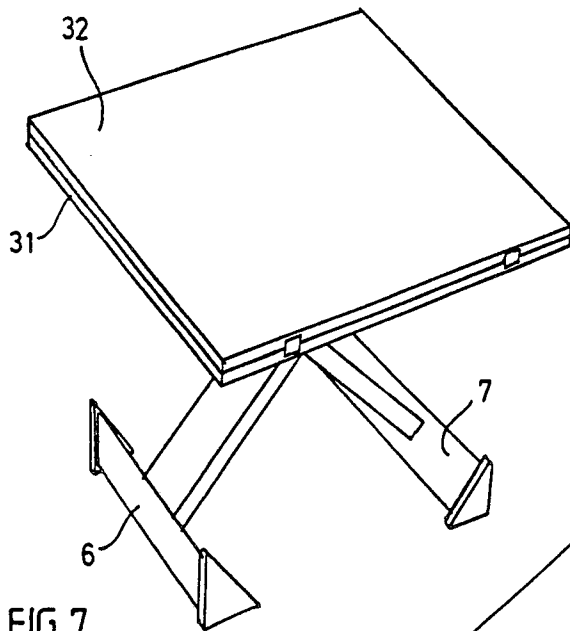


FIG. 2





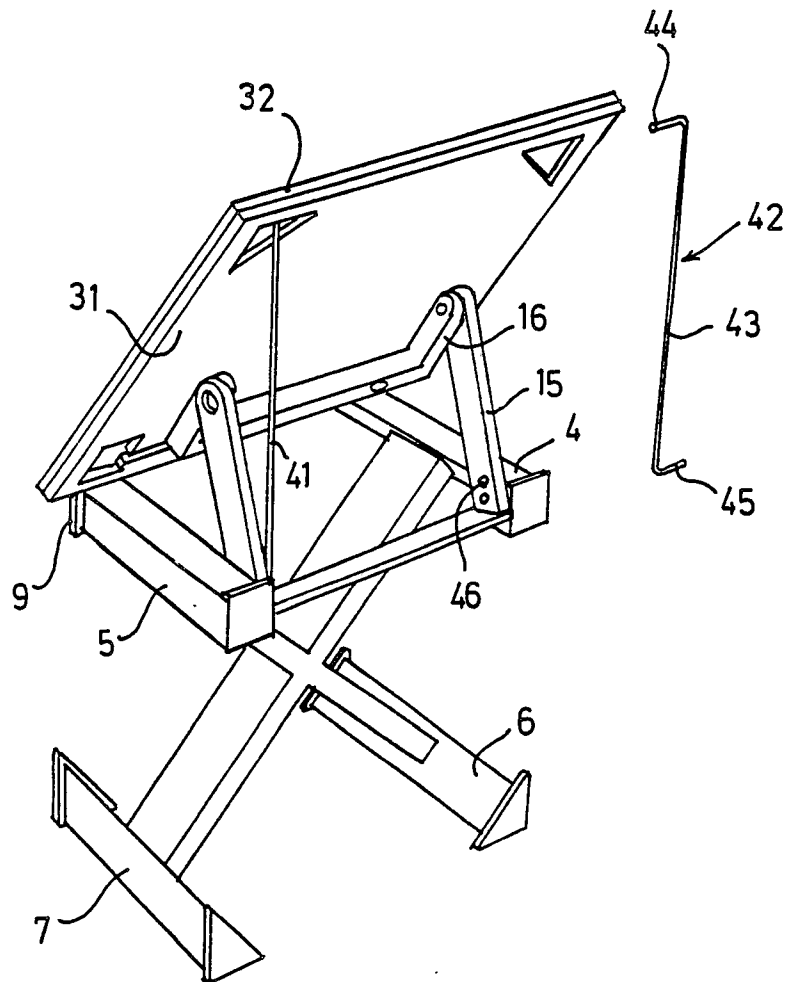


FIG.10