March 29, 1932. H. N. BANKS 1,851,299

TILTING INLAY TABLE-TOP

Filed Oct. 9, 1929

FIG. 1.

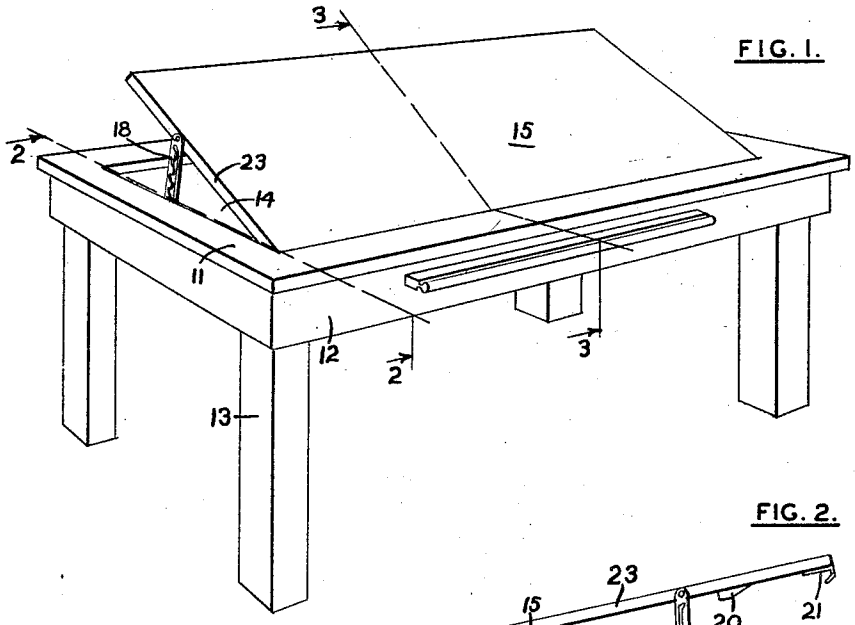

FIG. 2.

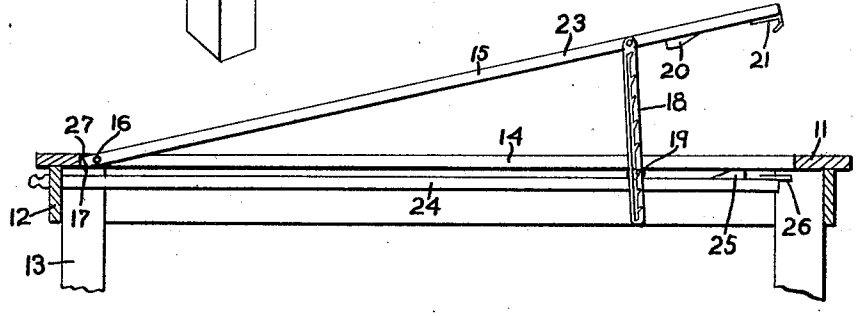

FIG. 3.

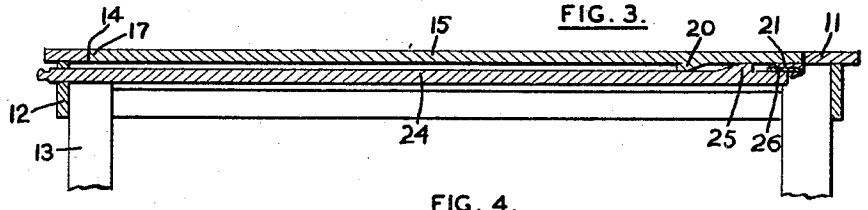

FIG. 4.

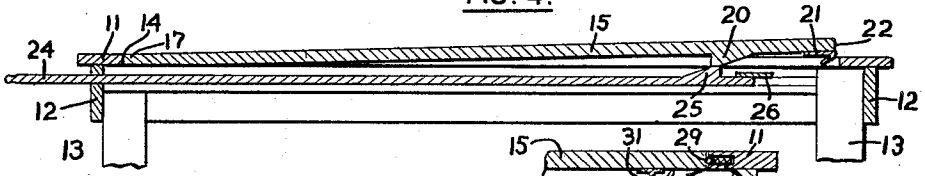

FIG. 6.

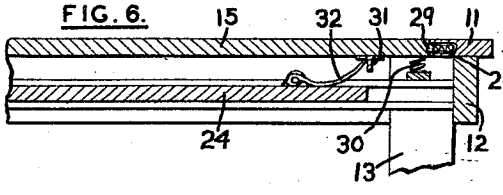

FIG. 5.

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TILTING INLAY TABLE TOP

Application filed October 9, 1929. Serial No. 398,426.

My invention pertains to a tilting inlay table top, that is an inlaid portion of a table top which may be tilted upwardly leaving the remainder of the table top intact.

An object of my invention is in conjunction with a table top, to have a portion thereof arranged to tilt upwardly so that the upwardly sloping part may be used as a support for books affording an inclined surface for making or inspecting drawings or many other purposes in which it is desired to have an inclined surface.

A further object of my invention is to have the portion of the table top which may be raised to form an incline, constructed as a part inlaid in the other portions of the table, so that when the inlay portion is in its lowermost position there is a flat horizontal surface without any projections and so arranged that the inlay portion may be pointed upwardly having a hinged or a pivoted connection preferably adjacent one edge of the inlay portion.

Another detailed object of my invention is in having the pivotal connection of the inlay set in slightly from the lower marginal edge so that when the inlay section is tilted and inclined, a small ledge is formed with the inlay and the marginal portion of the immovable table top and thus forms a support for books or the like at the lower portion of the sloping table top section.

A further detailed object of my invention is having the inclinable inlay section positively locked when in its lowermost position, thus absolutely maintaining the table top fixed when desired.

Another object of my invention is the combination of an inclinable table top with a sliding leaf, which leaf is adapted to be housed underneath the top in the table or to be withdrawn to support books or other articles. In this connection my invention includes the combination whereby the leaf in a movement communicated thereto, may be utilized to release the inclinable table top to allow shifting this to any inclined position and also the combination by which the sliding leaf, for instance when thrust fully inwardly, forms a locking device for holding the inclinable top in its horizontal and housed position. By this combination moving the leaf in one direction locks the inclinable top in its housed position and by another movement not only unlocks but slightly elevates the inclinable top so that it may be readily grasped by the fingers to elevate to the desired extent. The inclinable top is supported by any suitable adjustable device to hold it at any desired inclination.

My invention is illustrated in the accompanying drawings, in which,

Figure 1 is a perspective view of the table having my inlay top constructed in connection therewith;

Fig. 2 is a vertical section on the line 2—2 of Fig. 1 in the direction of the arrows, showing the marginal edge of the inclinable inlay in elevation;

Fig. 3 is a section on the line 3—3 of Fig. 1 in the direction of the arrows, showing the inclinable inlay top in its locked position by the leaf board;

Fig. 4 is a view similar to Fig. 3, showing the inclinable inlay top unlocked and slightly raised to allow grasping by the fingers;

Fig. 5 is a detail transverse section similar to Fig. 3, showing a modified form of lock and release for the table top;

Fig. 6 is a view similar to Fig. 5, showing the releasing device in another position.

In the drawings, the main table top is indicated by the numeral 11, this being indicated as having the usual apron 12 extending thereabouts, the table top being supported by legs 13. The main portion of the top has an opening 14 which is illustrated as being bounded by the inner edges of the main section of the fixed portion of the table top. The movable inlay 1 is designed to fit the opening and is indicated as pivoted by pivot pins 16 adjacent the front portion of the table. It will be noted that the pivot connection is slightly spaced from the front marginal edge 17 of the inlay.

The inlay is provided with an adjusting bracket 18 on each side pivotally connected thereto and this having notches which engage pins 19 secured to the fixed part of the table. In the construction of Figs. 1, 2 and 3, the

inlay section has a small cam surface 20 on the underside and preferably located in substantially the center. It is also provided with a hook latch or locking member 21, this being located underneath the movable inlay and adjacent the rear edge thereof; this rear edge being indicated by the numeral 22; the side marginal edges being indicated by the numeral 23.

A slidable leaf 24 may be of the usual character, sliding through an opening in the apron and suitable guides on the table being located immediately underneath the inlay top. This leaf may be utilized to support books, instruments or the like when pulled outwardly. The leaf has an upwardly sloping cam surface 25 which cooperates with the cam surface 20 in the manner hereinunder detailed and also has a locking plate or bolt 26 secured at its inner edge which engages with the latching or locking hook 21.

When the inlay table top is lowered and the leaf 24 thrust inwardly, it will be seen that the table has a flat top with the non-movable part 11 and the movable part 15 being in the same horizontal plane and without any upward projections at the meeting marginal lines. The lock bolt or plate 26 fits in the hook-shaped lock 21 and thus holds the table top in its housed or closed position. When it is desired to raise the inlay section of the top, the leaf 24 may be pulled outwardly as illustrated in Fig. 4, which causes the interengagement of the cam surfaces 20 and 25. This action unlocks the inlay part of the top and slightly raises this. Therefore a person opening the table may grasp the rear edge 22 with the fingers or the projecting part of the marginal edges 23 and thereby raise the inlay portion of the top to the desired elevation or inclination; this being adjustable as above mentioned by the bracket and pin 18 and 19.

In this action the front marginal edge of the inlay moves down slightly, thereby leaving a slight ledge 27 along the front of the table at the lower edge of the inlay top and the front marginal portion of the fixed table top. This ledge may be utilized to support books or other articles by their lower edge and such articles on sloping of the table top may be readily inspected, due to the inclination of the top.

In connection with Figs. 5 and 6, I show a ball and spring type of latch 28 in which the ball fits in a slight depression 29 in the marginal edge 22 of the top. A small compression spring 30 engages the undersurface of the inclinable top, tending to urge this upwardly, but the spring acting on the ball is sufficient to retain the top locked. A small projecting pin or section of an angle 31 depends from the underside of the movable inlay and this is adapted to be engaged by a flat spring 32 which is attached to the movable leaf. When the leaf is thrust inwardly the spring 32 and pin 31 occupy the position of Fig. 5.

When it is desired to lock the table top and slightly raise it, the leaf is pulled outwardly in which case the spring 32 becomes deflected downwardly by the pin or stud 31 and this without lifting the table top. Then the leaf may be thrust inwardly so that the end of the spring engages the pin or stud 31 in the position shown in Fig. 6 and in such inward movement of the leaf this obtains a thrusting or levering action which forces the table inlay top slightly upwardly causing the spring latch to release. Then the inlay top may be raised to the desired inclination.

Various changes may be made in the principles of my invention without departing from the spirit thereof as set forth in the description, drawings and claims.

I claim:

1. In a table having a table top with an opening, the combination of a tiltable top section pivotally mounted adjacent one side of the opening and having an adjustable supporting means to support said section at various angles of inclination, a slidable locking and unlocking device having a hook and bolt engagement with the tiltable section and interengaging cams to slightly raise said section on reverse movements of said locking and unlocking means.

2. In a table having a table top with an opening therein, a movable top section pivotally mounted adjacent one side, means to support said section when tilted, a slidable leaf underneath the said section extending outwardly through one side of the table and having a locking device interconnecting with the said section to lock said section housed with its top flush with the table top, and interengaging cams to slightly raise the tiltable section to allow grasping at one edge by the fingers.

3. In a table having a table top with an opening therein, a tiltable section pivotally mounted adjacent one side of the opening, adjustable supporting means to support said section at various degrees of inclination, a slidable leaf under the section extending outwardly through one side of the table, a locking plate on the leaf engaging a hook on the section to lock said section in its housed position flush with the table top, a depending sloping cam on the section, an upwardly extending sloping cam on the leaf to interengage and slightly raise the section to allow grasping by the fingers.

4. In a table as claimed in claim 3, the said section being pivoted at opposite side edges, the pivot being spaced from the lower edge when inclined, whereby a ledge is formed by one of the side margins of the opening, to support books or the like on the inclined top.

5. In a table having a table top with an

opening, a pivotally mounted tilting section pivoted to one side of the opening, a slidable opening device having a leaf spring secured thereto, a pin on the underside of the leaf, the spring being adapted to engage the pin in one direction of movement depressing the spring and in the other direction of movement engaging the pin and slightly lifting one side of the said section to allow grasping by the fingers.

6. In a table having a table top with an opening and an inlay section in the opening, said inlay when in its housed position forming with the table top a plane surface, means to hinge the said inlay in the opening, a slidable leaf below the said inlay and adapted to slide inwardly and outwardly in the table, means interconnecting with the said leaf and the inlay to lock the inlay closed when the said leaf is in one position.

7. In a table as claimed in claim 6, means interconnecting the leaf and the inlay to slightly raise the inlay by moving the leaf to another position and thereby facilitate raising of said leaf, and means to support said leaf in a raised position.

8. In a table having a table top with an opening, a tilting inlay section fitting in the opening and having a hinged connection spaced from one edge of the inlay and one edge of the opening, a slidable leaf fitting under the inlay, means interconnecting the leaf and the inlay to slightly raised said inlay on the movement of the leaf and facilitate raising of said inlay, and means to support said inlay in a raised position, said inlay and table top with the inlay closed having a surface all in one plane and when the inlay is raised the edge of the opening adjacent the hinge forming a ledge to engage books or the like resting on the inlay, means interconnecting the inlay and the leaf to lock the inlay in its housed position when the leaf is thrust completely inward.

In testimony whereof I have signed my name to this specification.

HARRY N. BANKS.