Aug. 1, 1939. J. BORIO 2,167,742

TABLE UTILITY ARRANGEMENT

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FIG. 1

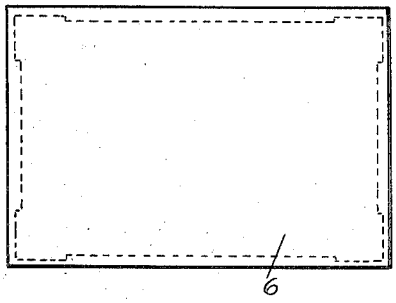


FIG. 2

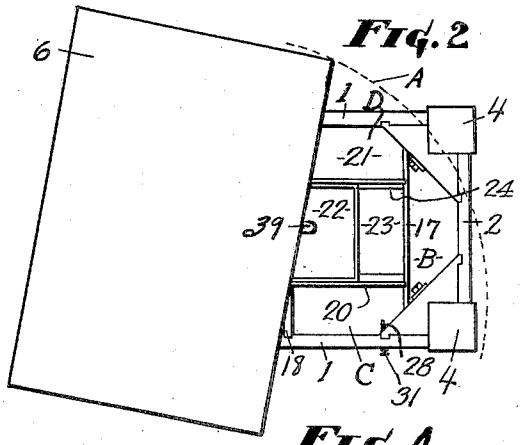


FIG. 3

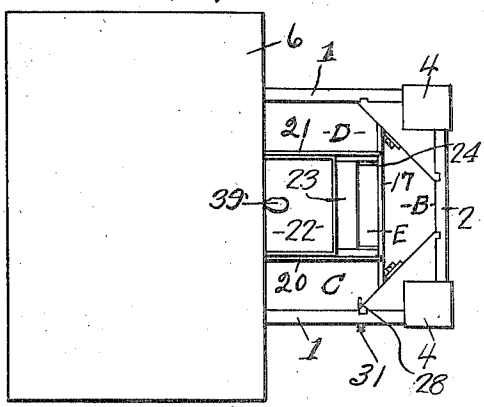


FIG. 4

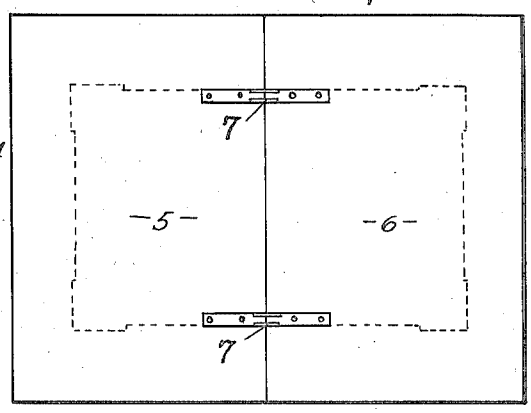


FIG. 5

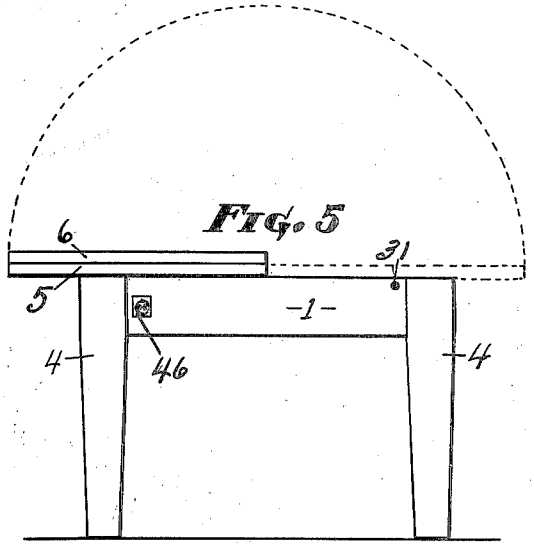
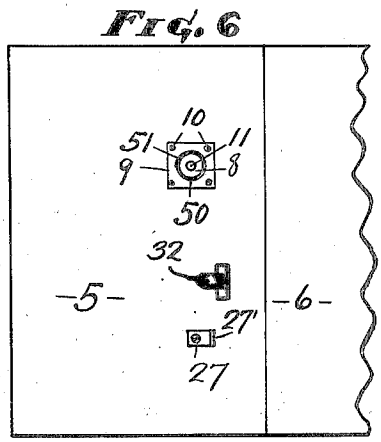


FIG. 6



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TABLE UTILITY ARRANGEMENT

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FIG. 7

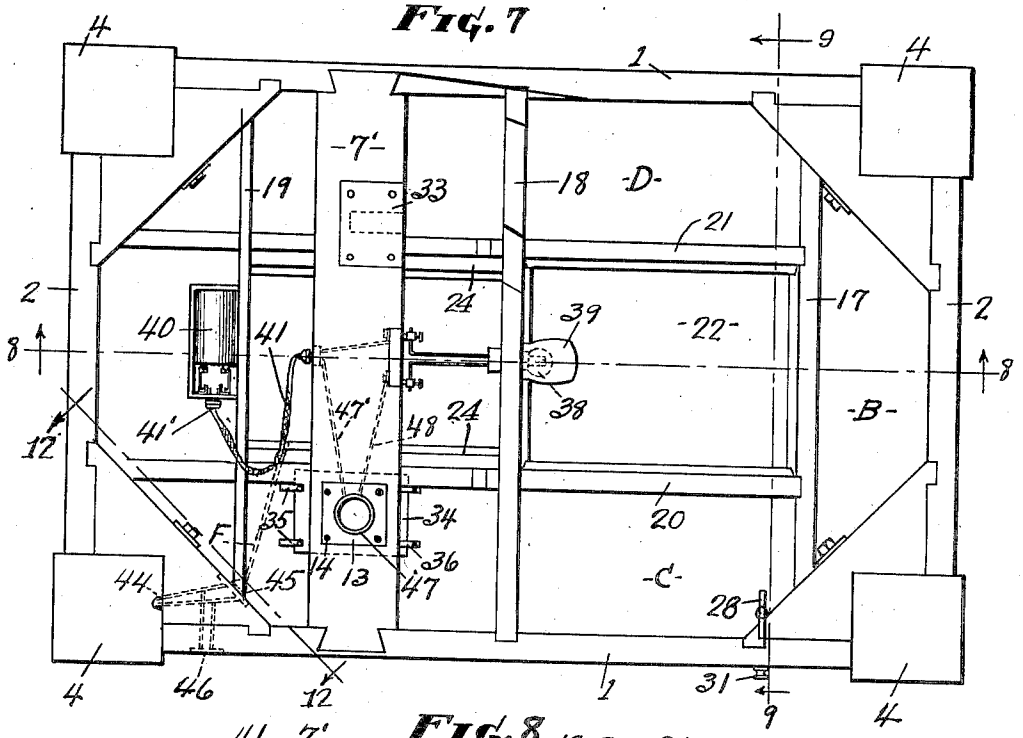


FIG. 8

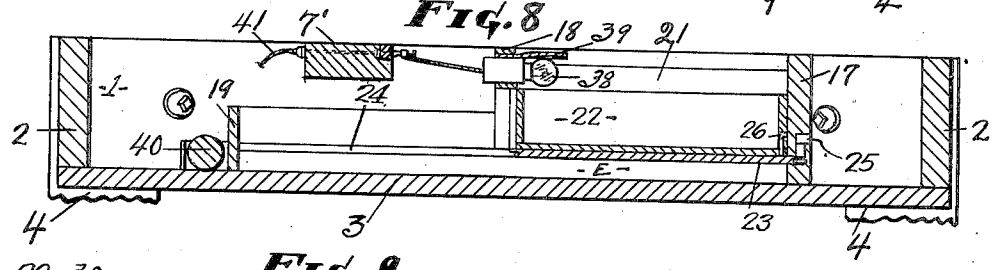


FIG. 9

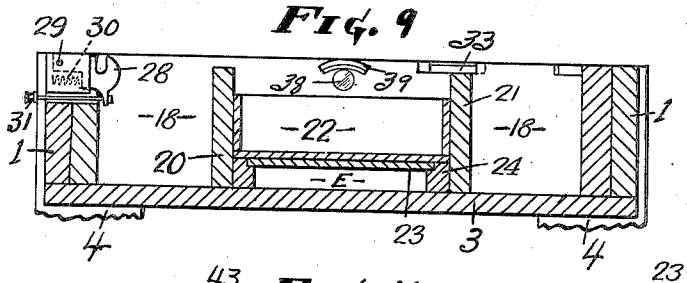


FIG. 11

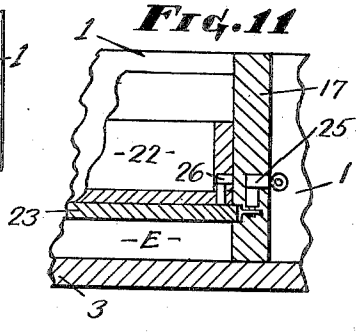
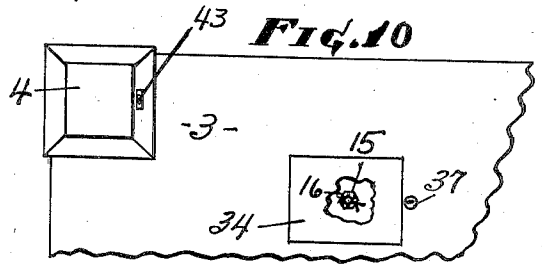


FIG. 10



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TABLE UTILITY ARRANGEMENT

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FIG. 12

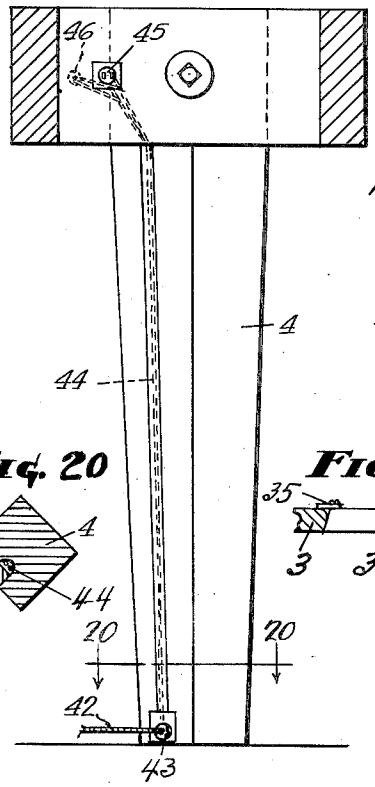


FIG. 13

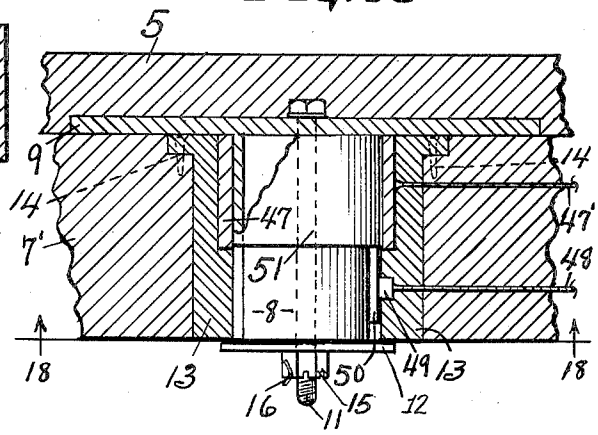


FIG. 20

FIG. 21

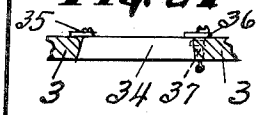


FIG. 14

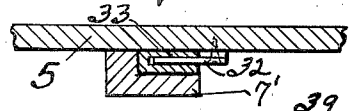


FIG. 15

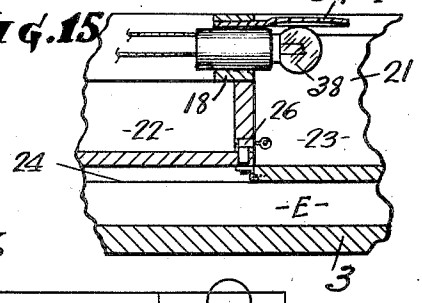


FIG. 16

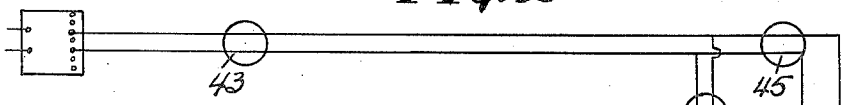


FIG. 18

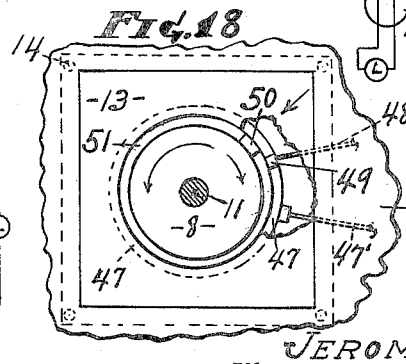


FIG. 19

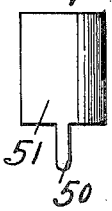
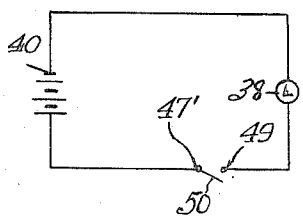


FIG. 17



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UNITED STATES PATENT OFFICE

2,167,742

TABLE UTILITY ARRANGEMENT

Jerome Borio, Sawyerville, Ill.

Application February 4, 1938, Serial No. 188,673

5 Claims. (Cl. 312—164)

My invention relates to improvements in table utility arrangements.

The object of my invention is to provide a table having sides and end rails to form a frame and legs to support the same, the frame having a bottom secured to its lower extremity, said top and bottom to conceal a drawer concentrically positioned in the frame and a compartment beneath the drawer and of greater length, the said top pivotally connected to the frame and adapted to turn on its pivot point as means for admitting access into the frame and to said drawer and compartment.

A further object of my invention is to equip the table with an electric wiring system in such a way as to permit plug connection for an electric current and having positioned in the wiring system a lamp to illuminate the concealed drawer and compartment, the lamp automatically energized, illuminating the drawer and compartment through the medium of a switch operated by a turn of the top to make and break the current.

A still further object of my invention is to subdivide the area within the frame external of the said compartments as storage for linen or other common table ware.

A still further object of my invention is to provide a lock for the drawer and closing means for the compartment simultaneously and an individual lock for the compartment.

These and other objects will hereinafter be more fully explained, reference being had to the accompanying drawings forming a part of this specification, and in which like characters will apply to like parts in the different views.

Referring to the drawings.

Fig. 1 is a plan view of the table showing one position of the top when folded.

Fig. 2 is a plan view of the table showing a rocked position of the top and the drawer partly moved outward.

Fig. 3 is a plan view showing the top folded and transversely crossing one end portion of the table, showing one open position of the drawer and panel enclosure for the compartment.

Fig. 4 is a plan view of the table showing the top unfolded.

Fig. 5 is a side view of the table with top folded as shown in Fig. 3.

Fig. 6 is an inverted plan view of the top showing the position of the pivot, stop and anchor, one member of the top partially removed.

Fig. 7 is an enlarged plan view of the table frame, the top being removed for convenience of illustration.

Fig. 8 is a sectional view of the frame taken on line 8—8, in Fig. 7, looking in the direction of the arrows.

Fig. 9 is a sectional view taken on line 9—9 in Fig. 7, looking in the direction of the arrows.

Fig. 10 is an inverted fragmentary view of the table, showing the removable plate, a part of which is broken away to show the anchoring means for the pivot arrangement.

Fig. 11 is an enlarged sectional view showing the drawer open and panel enclosure of its respective compartment and locking means therefor.

Fig. 12 is a sectional view taken on line 12—12 in Fig. 7 looking in the direction of the arrows.

Fig. 13 is an enlarged sectional view of the structure associated with the pivot and switch.

Fig. 14 is an edge view of the top showing its anchor arrangement, the latter being in cross section.

Fig. 15 is a sectional view showing the electric lamp, drawer and panel, the two latter elements in their closed positions and showing the method of locking the same.

Fig. 16 is a wiring diagram as connected with a power line for current supply.

Fig. 17 is a wiring diagram showing the system connected with a battery for current supply.

Fig. 18 is an inverted view of the pivot and switch taken on line 18—18 in Fig. 13, looking in the direction of the arrows.

Fig. 19 is a reduced side view of the pivot current connecting sleeve looking in the direction of arrow in Fig. 18.

Fig. 20 is a cross section through the table leg taken on line 20—20 in Fig. 12.

Fig. 21 is an edge view of the removable plate as illustrated in Fig. 10.

This invention relates to a table, the component parts of which consist of a frame having sides 1—1 and ends 2—2, said frame having a bottom 3, and being carried by legs 4, there being one at each corner thereof. The top consists of two members 5 and 6, hingedly connected as at 7, so that member 6 will lap back on member 5, as shown in Figs. 1, 2, 3, and 5, while member 5 is pivotally connected to a bar 7', transversely crossing the frame, the ends of which connect to frame members 1—1 respectively, the pivot consisting of a cylindrical member 8, having a plate 9, secured to one end and to said top member 5 by screws 10, positioned in each corner of the plate, and the said pivot member is bored

axially to receive a bolt 11, positioned therein as securing means for the top to said cross bar, and adapted to turn therein, and to avoid outward movement therefrom, there is placed on the bolt a washer 12, the peripheral edge of which extends outward to engage on the end of an insulation member 15, that extends through said bar and secured therein by screws 14, the said washer being supported in position by a castellated nut 15, and the said nut being secured against rotation by cotter pin 16. The top, being so connected, is free to turn as indicated by dotted line A in Fig. 2, and the said top members when turned to position shown in Fig. 3, may be unfolded, increasing its surface area as shown in Fig. 4, at which time the said top member is concentrically carried upon the upper portion of said frame member, and likewise when the top is folded as shown in Fig. 1. The features of the top arrangement I do not claim broadly, but the turning movement thereof, and pivot arrangement involving a switch is means to make and break an electric current later described.

The space between the top members and bottom 3 of the frame is subdivided by members 17, 18, 19, 20, and 21, providing a plurality of receptacles B, C, and D, that are exposed when top member 6 is lapped back on member 5, the said receptacles adapted to receive table linen or the like, while the said members 20 and 21 have positioned therebetween a drawer 22, slidable therealong. The bottom of the drawer is spaced upward from the said frame bottom to provide a secret compartment as shown at E in Figs. 2, 8, 9, 11, and 15, said compartment having a panel 23 slidable thereover and being carried by guides 24 on each side thereof, the said panel adapted to slide from member 17 to member 19, and having a lock 25, to secure the same to snug engagement with its said end member 17, independent of the drawer, and the said drawer has a lock 26, the bar of which will engage the other end of said panel 23, by which arrangement the drawer may be unlocked independent of the panel and adapted to slide outward thereover, and when said drawer is locked to its closed position as above described, the said panel is likewise locked at both ends.

As a means to accurately position the said top members in proper registry on the frame, there is positioned on the under side of the top member 5 an anchor 27, having a leg 27', downwardly extending to engage with a hook 28 pivotally connected as at 29, and tensioned by a spring 30, the said hook having a pull member 31, as releasing means for the hook when said top is to be turned on its pivot and the said hook and stop is securing means for the top in its position shown in Fig. 1, and when said top is positioned as shown in Figs. 1 and 3, it is secured by a tongue element 32, that is likewise secured on the under side of top member 5, and adapted to engage in the slot of an element 33, as shown in Fig. 14, said slotted element being seated in and secured to bar 7', as shown in Fig. 7, by which means when the top members are positioned as shown in Fig. 4, the tongue element as engaged is an anchor and stop therefor to avoid tilting or further turning movement of the top.

The pivot arrangement around which the table top turns is secured against outward movement to avoid access to the drawer when said drawer is closed and locked; therefore, some method of installation and removal of the top is required, and to accomplish such, I have arranged a removable plate 34, positioned in the frame bottom, the center of which is axially aligned with the pivot structure as accessible means to the castellated nut and cotter pin associated therewith as locking means for the nut. The panel is preferably rectangular in form and has a pair of lip elements 35, secured thereto at one end and projecting outward therefrom to engage on the bottom adjacent its respective edge of the panel, the lips functioning as carrying means for their respective end portion of the panel, said portion being bevelled to avoid upward movement as shown in Fig. 21, while the other end is secured against upward movement by stops 36 overlapping their respective end of the panel and the said stops being secured to the upper or inner side of said bottom, and to secure the panel so positioned, I have arranged a lock 37, carried by the bottom in working relation to its adjacent end of said panel so that the bolt thereof will insert in a mortice arranged therefor in the end of the panel.

The said drawer and secret compartment being enclosed by table structure as above described requires an artificial lighting system to overcome darkness or subdued light condition, and to accomplish such, I have positioned an electric lamp 38, carried by cross member 18 is such a way that the light rays from the said lamp are directed downward, illuminating the front of the drawer and its contents when said drawer is unlocked and moved outward, also the contents of the secret compartment when its respective panel cover is unlocked and removed by sliding the same toward and under said drawer, the lamp light being means to inspect matters of value contained in the adjacent receptacles, and the said lamp has a reflector 39, positioned thereabove to restrict the light rays downward and practically within the said frame members, and the said lamp may be energized by a battery 40, through the medium of a cable 41, and switch later described, connecting the said battery and lamp; furthermore the said lamp may be energized from an electric power plant through the medium of the house wiring system, having an appropriate and available outlet for a plug secured on one end to a cable 42, the plug not shown, but similar to a plug 43, positioned to the table leg plug, last said plug connecting with a cable 44, upwardly extending through the leg entering the frame and connecting with a plug receptacle 45, and to which cable 41 may connect as shown by dotted lines F by its respective plug 41', by which means the battery is discarded. It will be understood that the lamp above referred to must conform to the current employed whether direct or alternating, the battery being direct and only employed in the absence of alternating current. As an available means to connect a light for the table or decorating arrangements, a percolator or other similar energized utensils, there is placed in the frame structure of the table a plug outlet 46, to receive the plug of a cord to which said elements above referred to will connect, and this connection is not controlled by the switch that is operated by turning movement of the table top.

The said switch consists of a sleeve 47, that is stationarily secured in an insulation member 13, rectangular in cross section, axially bored to receive said sleeve and being secured in the said cross bar 7' as heretofore described. The said sleeve 47 has a wire 47' connected thereto for one side of the circuit, the other side being through

a wire 48, last said wire having a brush member 49, carried by said insulation member and extending through the inside wall thereof and adapted to contact with a downwardly extending tongue 50, that is integrally joined to a sleeve 51, said sleeve simultaneously with the pivot element 8, on which the said sleeve 51 snugly engages. Being so arranged, the circut is closed when the top is turned to an angle as shown in Fig. 2, and when said top is positioned as shown in Fig. 3, the circut is broken, extinguishing the said lamp 38, and the circuit is likewise broken when the table top is turned as shown in Figs. 1 and 4. In other words, the tongue of the switch will break its connection as it leaves the brush at either side thereof, the reciprocating turn being indicated by the arrows in Fig. 18.

Such modification may be employed with respect to the exact position of the drawer, secret compartment, and closing means for the compartment and their position within the frame and position of the light for said drawer and secret compartment, and such other modification may be made, as lie within the scope of the appended claims.

Having fully described my invention what I claim as new and desire to secure by Letters Patent is:

1. In a table, a frame subdivided and having a bottom and top, the top pivotally secured and adapted to turn on the frame, and legs to carry the frame, a drawer slidably carried between two of the subdividing elements and being spaced upward from the bottom and occupying approximately one-half of the length defined by said elements, a panel to cover the other half and slidable in close proximity to the bottom of said drawer whereby a space is provided between the panel and bottom of the frame functioning as a secret compartment, means to lock said panel and drawer together, in a position in which the drawer is retracted and disposed beneath the top and the panel extends forwardly therefrom, the frame being wired for an electric current, said wiring system having a lamp connected therewith and being positioned at the junction of the drawer front and end of the panel adjacent thereto in said position, and a switch positioned at the pivot point of the top, one side of which is carried by the frame structure while the other side is secured to the pivot and rockable therewith to make and break the circuit as the top is turned.

2. In a table, a frame having a bottom and a pivotally mounted top seated on the frame opposite its bottom, and legs to carry the frame, a drawer and panel element positioned within the frame medially thereof, means to carry the said drawer and panel slidably thereon in spaced relation from the bottom, the drawer being carried above the panel to slide thereover, a member positioned on each side of the panel and drawer, said member extending from bottom to the top and being seated on the bottom between which said drawer will slidably engage, and a member to close each end of the space in which said drawer and panel slidably engage, the said last mentioned members functioning as stops for said drawer and panel element when moved from each other longitudinally to avoid separation of their inner ends from each other, the space within and beneath said elements respectively being illuminated by an electric lamp positioned medially of the space, the lamp having a shade restricting its light rays toward said elements, the frame having a wiring system positioned therein and connected with the lamp and electric power source, the top having one side of an electric switch carried thereby and rockable therewith, the other side being carried by a cross bar secured to the frame, said switch to make the circuit as the top is turned to near a right angle position with respect to the frame and to break the circuit by further turning movement to a right angle position, and also to break the circuit when rocked the other direction through an angle of ninety degrees closing the top of the frame.

3. In combination a table and a wiring system therefor, the table consisting of a frame having a bottom secured thereto, and a top medially divided and hinged together to close the upper extremity of the frame, and legs to carry the structure as a whole, a pivot member secured to the top and a contact for one side of an electric switch secured to and rockable with the pivot member, and a member for the other side of the switch stationarily carried by a member of the frame, whereby the switch members being so positioned will make and break the electric circuit as the top is turned, there being a lamp in the wiring system and a plug opening in the frame adjacent the top, and a plug opening positioned in one leg of the table, there being wires passing through the leg longitudinally thereof to connect the plug outlet with the wiring system of the frame, by which means the interior of the frame is illuminated by the lamp when the top is turned on its pivot point to near a right angle position with respect to the frame longitudinally, all substantially as shown.

4. In table equipments, a table comprising a frame having a bottom and legs to carry the frame, a rockably arranged top carried on the frame, a drawer within the frame and adjacent the underside of the top, and a panel spaced from the bottom and slidable under and from beneath the drawer, a lock to secure the adjacent ends of the panel and drawer from sliding movement when the drawer is in its retracted position and the panel is moved outward to the extremity of its length, a guiding element for each side edge of the panel and on which said panel will slidably engage, said elements being shouldered to space the panel downward from the upper extremity of the guiding elements, and a guiding element for each side of the drawer, said elements extending from the bottom to the underside of the top and between which the said guiding elements for the panel are positioned, and the drawer adapted to slide on the upper extremity of the panel guiding elements.

5. A table comprising a frame having a bottom and legs to carry the frame, a rockably arranged top carried on the frame, a pair of guiding elements spaced apart and extending from the bottom to the underside of the table top, a drawer and a panel to slidably engage between said guiding elements, means between said elements to space the panel from the bottom the panel being slidable on said means, and said means being positioned so that the drawer will slidably engage thereon but clearing the panel, the guiding elements and the said means being in length sufficient to permit a lapped engagement of the adjacent ends of the panel and drawer when they have been moved from each other longitudinally, a lock on the drawer end to engage its adjacent panel end as securing means for said panel and drawer as positioned with respect to each other.

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