L. O. JOHNSON.

TABLE DRAWER.

APPLICATION FILED JAN. 23, 1920.

1,345,194.

Patented June 29, 1920.

2 SHEETS—SHEET 1.

Fig. 1.

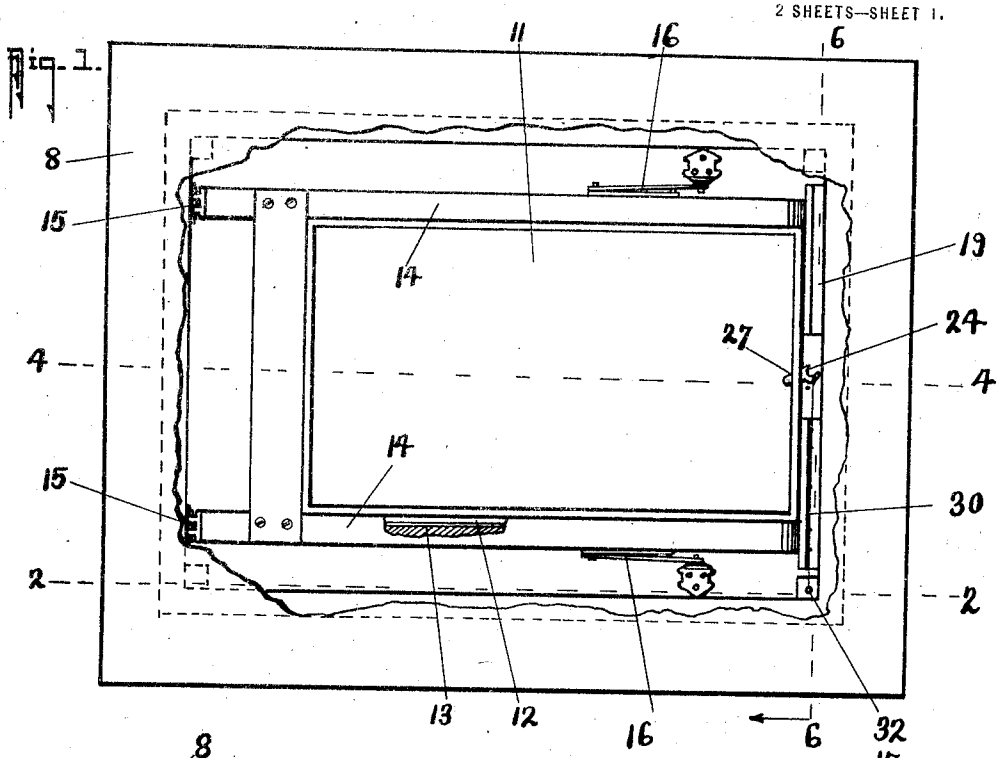


Fig. 2.

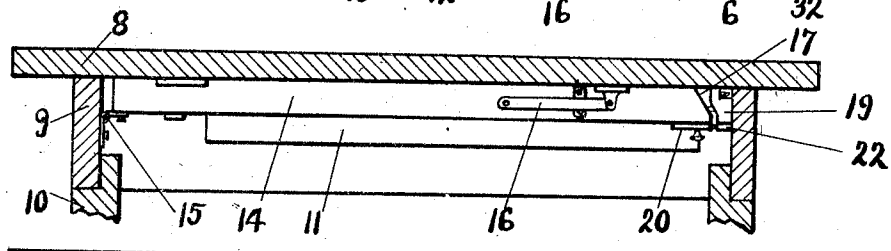
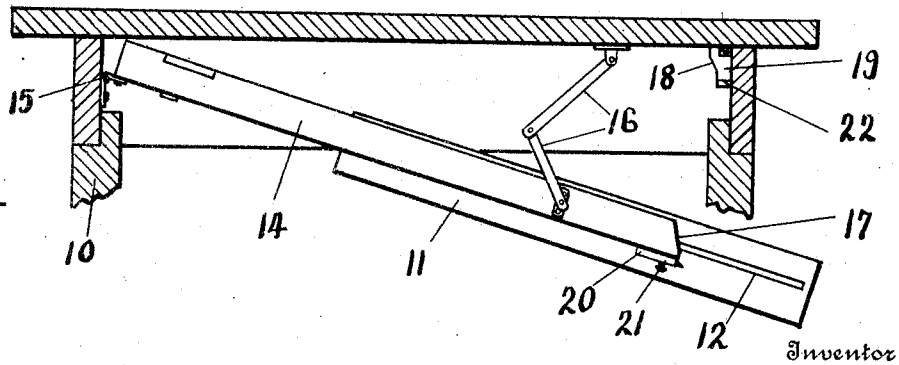


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

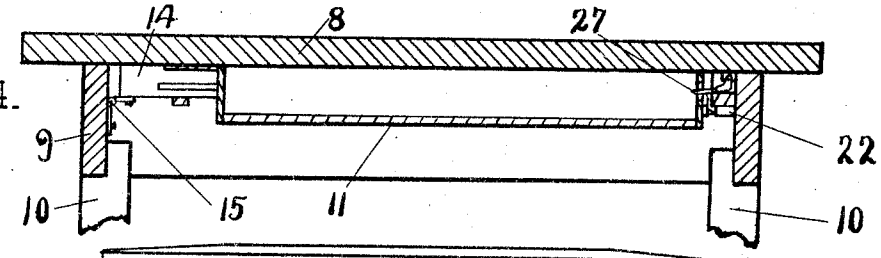


Fig. 5.

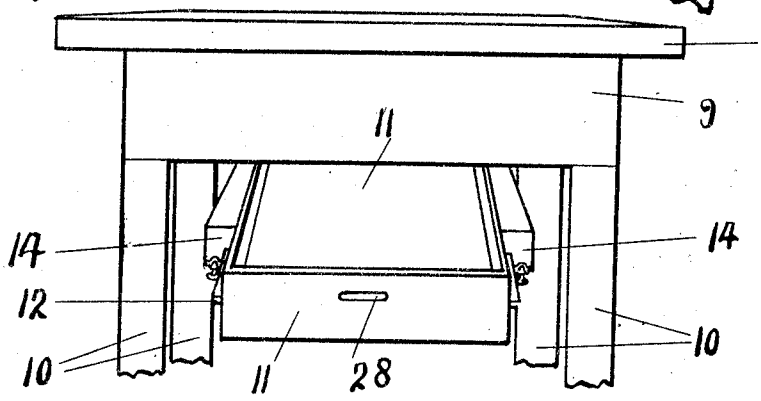


Fig. 6.

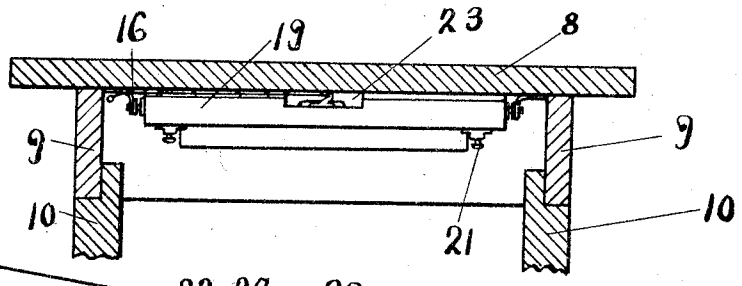
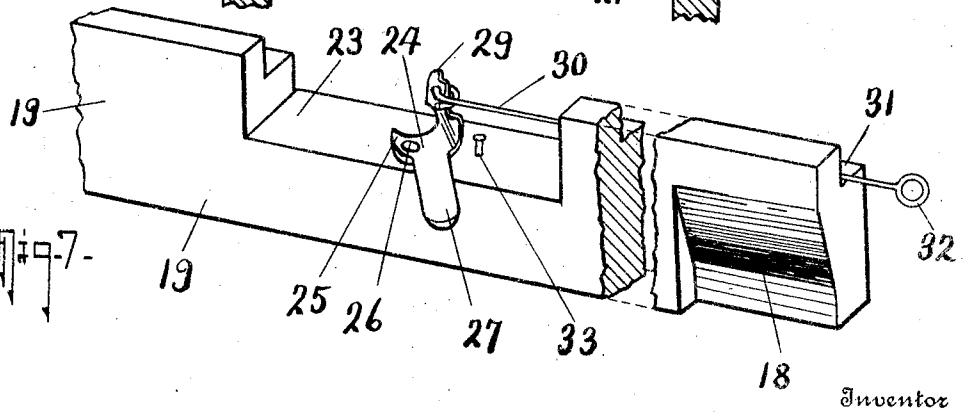


Fig. 7.



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TABLE-DRAWER.

1,345,194. Specification of Letters Patent. Patented June 29, 1920.

Application filed January 23, 1920. Serial No. 353,600.

To all whom it may concern:

Be it known that I, LEWIS O. JOHNSON, a citizen of the United States, residing at Ralston, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Table-Drawers, of which the following is a specification.

The present invention relates to improvements in table drawers and has for an object to provide an improved drawer so mounted in a table that it will be concealed from view, even upon close inspection of the table, thereby providing a comparatively secure hiding place for valuables.

Another object of the present invention is to provide an improved secret drawer within a table construction, which will involve no modification of the present standard construction of tables, but which may be mounted therein readily and at low cost, and be conveniently operated by the proprietor of the table.

The above, and various other objects and advantages of this invention will in part be described in, and in part be understood from, the following detailed description of the present preferred embodiment, the same being illustrated in the accompanying drawing, wherein:—

Figure 1 is a top plan view of a table with the top thereof broken away disclosing a drawer structure therein made according to the present invention.

Fig. 2 is a vertical sectional view taken on the line 2—2 of Fig. 1, with the table legs broken away.

Fig. 3 is a view similar to Fig. 2 with the drawer in the open, or partially open position.

Fig. 4 is a longitudinal central sectional view taken on the line 4—4 in Fig. 1.

Fig. 5 is a perspective view of the table, with the drawer in the open position.

Fig. 6 is a transverse sectional view taken on the line 6—6 in Fig. 1 and,

Fig. 7 is an enlarged fragmentary perspective view of a lock for holding the drawer closed.

Referring more particularly to the drawings, a conventional form of table is shown as having a top 8, the usual edge boards 9 and the supporting legs 10. These parts may be of any desired construction, it only being necessary that a suitable space be provided beneath the table top 8 and within the edge boards 9 for the reception, when in a closed position, of a disappearing table drawer constructed according to the present invention.

The disappearing or secret table drawer is indicated at 11, and is provided with a pair of longitudinally extending beads 12 projecting from opposite sides thereof and located preferably about midway of the height of the drawer. These beads 12 are adapted to slidingly fit within longitudinal grooves 13 made in a pair of guides or rails 14 that fit against opposite sides of the drawer 11 and form the means for supporting the same. The rails or guides 14 are preferably rectangular in cross-section as shown in Fig. 5, and are secured to one of the edge boards 9 as by the hinges 15, which permit the guides or rails 14 to be swung down to a lowered position shown in Fig. 3, when the drawer is to be opened. Toggle hinges 16 are secured between the underside of the table top 8 and the guides or rails 14 near their free ends for allowing of the swinging movement of these guides or rails and at the same time acting as braces for the guides or rails, and limiting the downward movement thereof; and also for supporting the guides or rails and the drawer 11 when in the lowermost position.

The free edges of the guides or rails 14 are beveled as indicated at 17 to coöperate with the correspondingly beveled faces 18 of a beam 19 carried within the table structure opposite the free edges of the guides or rails. Latches 20 are carried by the undersides of the guides or rails 14 at their free ends, and these latches are preferably of the reciprocating bolt variety, having knobs 21 projecting downwardly, by which the bolts may be conveniently projected and retracted. Catches 22 are carried by the underside of the beam 19 in alinement with the latches 20 when the rails or guides 14 are in an uppermost closed position, whereby the reciprocating bolts may be made to enter the catches 22 and sustain the rails and the drawer carried thereby in the raised concealed condition.

The beam 19, as more particularly illustrated in Fig. 7, is provided, approximately

centrally thereof with a recess 23, in which is placed a latch 24 formed with a laterally offset portion 25 receiving a vertical pivot 26 on which the latch is adapted to oscillate in a substantially horizontal plane. An elongated tongue 27 on the latch 24 is adapted to enter a notch or recess 28 made in the front wall of the drawer 11. A tail piece 29 on the latch 24 is provided with an eye in which the end of a wire rod 30 is engaged, said wire rod extending longitudinally of the beam 19 and operating in a cut away portion 31 thereof. An eye or other operating part 32 is provided on the outer end of the rod, by which the same may with facility be reciprocated to cause the tongue 27 of the latch 24 to move into and out of the notch or recess 28 in the drawer 11 and thus either lock the drawer in place or release the same so that it may be swung downwardly.

The latch 24 is preferably made from a single piece of material together with the offset portion 25 and the tail piece 29, which is also laterally offset from the main body of the latch and extends on the side and at a point opposite to the offset portion 25. A pin 33 placed at a proper point in the recess 23 provides an appropriate stop for engaging the tongue 27 when withdrawn from the notch or recess 28 in the drawer and is desirable for notifying the operator when the latch is in the retracted position, as may be sensed when the operator with his hand on the eye 32 moves the latch against the stop.

In operation, the drawer is normally in the closed position, for instance indicated in Fig. 2. When it is desired to gain access to the same by one familiar therewith, the wire rod 30 is preferably first shifted, by grasping the ring or operating piece 32, to cause the tongue 27 of the latch 24 to move out of engagement with the notch or recess 28 of the drawer 11. The reciprocating latch bolts 20 are thereupon retracted by grasping the knobs 21 thereof and thus freeing the bolts from the catches 22. The guides or rails 14, together with the drawer 11, will then swing down, by virtue of the weight of these parts, into the inclined position shown in Fig. 3, and the drawer 11 will assume a diagonal position that will cause it to automatically ride down on the rails or guides 14, whereby the drawer will be projected out beyond the adjacent edge board 9 and will be in a convenient open position for inserting or removing articles. The open position is shown more particularly in Fig. 5.

To close the drawer the same is pushed back on the rails or guides 14 and the rails together with the drawer are then lifted and the various latches reëngaged. When in the closed position the drawer and all of its parts are wholly concealed by the construction of the table so that no suggestion is conveyed to a casual observer, or even to a thief seeking valuable articles, that a drawer is concealed within the table.

I do not wish to be limited to any size, form or proportions and it will be obvious that various changes and modifications may be made in the structural details without departing from the spirit of the invention, provided such changes fall within the scope of the following claims.

What is claimed is:

1. In combination with a table including a table top, edge boards supporting the top, and legs secured to said edge boards, of a drawer, guides hinged to one of said edge boards and slidingly supporting said drawer, and means for holding the guides and drawer in raised position beneath the table top and concealed by said edge boards.

2. In combination with a table, of a pair of guide rails hinged at one end beneath the table top, a drawer slidably received between said guide rails, means for bracing said guide rails and limiting the downwardly swinging movement thereof, and means for holding said guide rails and drawer in the elevated position.

3. In combination with a table, a secret drawer, a pair of guide rails slidably receiving therebetween said drawer and hingedly mounted at one end to the table structure, latch means for holding said rails in the elevated position, and additional latch means for holding the drawer in the elevated position.

4. In combination with a table, a pair of rails hinged at one end beneath the table top, a drawer slidably received between said rails, a beam secured beneath the table top and arranged near the free ends of said rails when in the elevated position, and cooperating latch parts carried by said beam and the free ends of said guide rails.

5. In combination with a table, a pair of guide rails hinged at one end beneath said table, a drawer slidably received between said rails, said rails having beveled free edges, a beam beneath the table top having beveled faces coöperating with the free edges of said rails, coöperating latch parts on said beam and the free edges of said rails, and a latch member also carried by the beam for engaging with the drawer.

6. In combination with a table having a top, edge boards and supporting legs, of a disappearing or secret drawer comprising a pair of guide rails hinged at one end to one of the edge boards, a drawer member having lateral ribs slidably engaging said guide rails, toggle hinges for supporting the free ends of said rails, a beam supported near the free ends of the rails when in the raised position, said beam having a recess therein, a

latch in the recess having a laterally offset portion, a substantially vertical fulcrum pin passing through the offset portion of the latch, a tongue on the latch adapted to engage with said drawer, a tail piece laterally offset from the latch, an operating rod engaging with said tail piece, said beam having a cut away portion in which the rod may operate, and a stop engageable by the tongue of the latch.

In testimony whereof, I have affixed my signature in presence of two witnesses.

LEWIS O. JOHNSON.

Witnesses:

ARTHUR H. STURGES,

HIRAM A. STURGES.