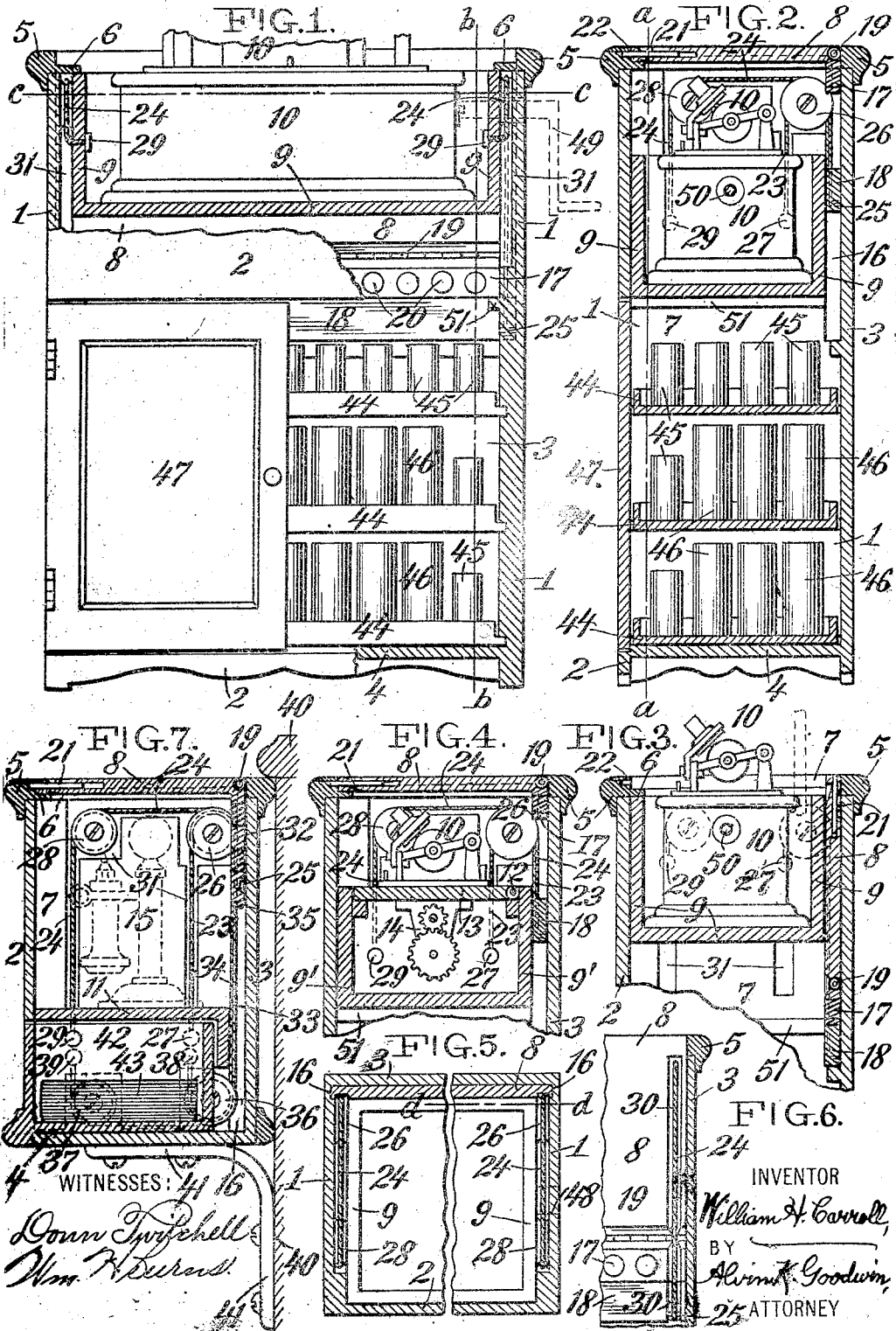


W. H. CARROLL.
DISAPPEARING TABLE CABINET.
APPLICATION FILED DEC. 5, 1906.



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DISAPPEARING-TABLE CABINET.

No. 871,084.

Specification of Letters Patent.

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Continuation of application Serial No. 302,722, filed February 24, 1906. This application filed December 5, 1906. Serial No. 346,465.

To all whom it may concern:

Be it known that I, WILLIAM HENRY CARROLL, a citizen of the United States of America, residing at Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in a Disappearing-Table Cabinet, of which the following is a specification.

This application is in part a continuation of my former application Serial Number 302,722. Filed Feb. 24th. 10 1906.

This invention has for its object to provide an inexpensive cabinet comprising an open-topped box containing a table which, with the machine or appliance it supports, is adapted for lowering or disappearance within the cabinet which has a cover concealing the lowered table and the machine or appliance thereon and protecting them from injury and from dust and dirt when out of use, while allowing quick raising of the table to bring the machine or appliance into convenient and most effective and attractive operative position. The cabinet also provides room for storing within it detachable or interchangeable parts of the contained machine or appliance, or reference data for use therewith, whereby said parts or data may always be conveniently at hand when required and also will be protected from injury and from dust and dirt when not in use.

It now is proposed to utilize the invention more especially for holding a phonograph or graphophone with its records or disks, or a music box and its interchangeable cylinders, or for holding a telephone and its directory, or for holding a glass or silver service which it may be desirable to ordinarily conceal; but the invention is not restricted to such uses.

The invention consists in certain novel features of construction and combinations of parts of the cabinet whereby when its vertically movable table is raised the cabinet cover will wholly or mainly disappear below the top of the cabinet box or body to give unobstructed range in all directions of the tone emitting trumpet of a phonograph or graphophone, or of the tones from a music box mechanism, resting on the raised table while giving full view of the instrument from all sides of the cabinet; or to afford the freest possible access at or from all sides to a telephone which may be supported on the raised table.

The invention further includes a special construction of the cabinet with a two-part slide or counterweight having one part coupled to the cabinet cover and the other part connected to the table in manner permitting automatic raising of the table as the slide and hinged cover are lowered, and so as to permit full lowering and raising of a wide cabinet cover while the table rises and falls a distance less than the range of vertical movement of the cover to accommodate within the cabinet a ma-

chine or appliance or device having a height less than the width of the cover, or of the cover and slide.

The invention will first be described and then will be particularly defined in claims hereinafter set forth.

Reference is made to the accompanying drawings 60 forming part of this specification, and in which

Figure 1 is a front partly broken vertical sectional elevation of one preferred style of the improved cabinet with one door removed and its table raised and sustaining an ordinary partly shown phonograph, the section 65 being taken on the line *a-a* in Fig. 2. Fig. 2 is a transverse vertical section of the cabinet, taken on the line *b-b* in Fig. 1, but showing the table and phonograph lowered within the closed cabinet. Fig. 3 is a partial transverse sectional view showing the table raised and sustaining the phonograph in operative position. Fig. 4 is a partial vertical transverse section showing a modification in which a phonograph is specially fitted to a hinged top on the cabinet table. Fig. 5 is a broken plan view of opposite end portions of the open cabinet, 75 in horizontal section on the line *c-c* in Fig. 1. Fig. 6 is a detail vertical sectional view taken on the line *d-d* in Fig. 5; and Fig. 7 is a vertical transverse sectional view of a modified cabinet specially adapted to sustain a telephone and its directory from a desk or other support. 80

The illustrated cabinet has a generally square or rectangular form, but it may be otherwise shaped as the particular conditions of its use may suggest or require.

In the drawings the numerals 1, 1, indicate two opposite end walls, and 2, 3, respectively indicate front and rear walls, all forming with the bottom 4, the body portion of the cabinet which is a box-like structure open at the top. It is preferred to exteriorly ornament said body by a surrounding top molding 5, which is preferably rabbeted to overlie the top of the box walls and is specially formed so as to have next the end walls 1, 1 and the front wall 2, a flange or tongue 6. This flange 6, however it may be formed, projects into the interior cabinet chamber 7 and constitutes a special double stop 95 which by its lower face limits the rising movement of a table vertically movable within said chamber 7, and by its upper face forms a jamb and rest for the closed cabinet cover 8.

In Figs. 1, 2 and 3 of the drawings, the cabinet table 100 9 is shown as an open-topped box adapted to receive a phonograph 10, or other appliance, in the usual form in which it is sold commercially, while in Fig. 4 of the drawings, the table 9' is substantially like the one 9, but has hinged to it at 12 a suitable plate 13 to which 105 a phonograph 10, or a graphophone or other mechanically driven appliance is specially fitted with the machine proper 10 above the plate and its driving mechanism 14 below the plate. In Fig. 7 of the drawings the table 11 is inverted or has a plane closed top and pendent 110

walls forming guides during its vertical movements, and is more especially adapted to sustain a telephone 15, or a glass or silver service, or any art or other objects of value it may be desirable to temporarily expose and use and later conceal and protect within the closed cabinet.

Referring now more especially to Figs. 1, 2, 3, 4, and 6 of the drawings, the numerals 16, 16, indicate vertical grooves or slideways preferably made in the opposite end walls 1, 1, and quite close to the rear wall 3 of the cabinet. In these grooves are adapted to move the cabinet cover 8, and a slide preferably formed in two parts 17, 18, the part 17 being preferably made of wood to promote convenient coupling or hinging of it at 19 to the cover 8, and the part 18 being preferably made of metal to serve as a counterweight to the loaded table 9, for which purpose also the wood part 17 may be plugged with metal as at 20. Thus coupling the cover 8 at 19 to the slide portion 17 permits the cover 20 when raised clear of the grooves 16, to fold down flat upon the flange stop 6, and allows a latch bolt 21 in the cover to engage beneath a catch plate 22 on the front molding 5, to hold the cover closed. Any suitable latch or lock may be used to secure the closed cover.

The preferred flexible cord or wire connections which cause the counterweight to raise the table are arranged as follows. It is preferred to provide two lifting cords or wires at each end of the table or to have four cord connections for assuring steady and level 30 movements of the table in the cabinet. When the two-part slide and counterweight is used the two cords 23, 24, at the same end of the cabinet body or box are both connected at 25 to one end of the lower slide portion 18, whence they pass together over the same deeply grooved pulley guide 26 journaled to the cabinet wall. One cord 23 passes directly downward from said pulley 26 and is connected at 27 to the end of the table 9 near its rear edge or part, while the other cord 24, after passing over the pulley 26, runs forward and 40 passes over a front pulley guide 28 and passes thence downward to connect at 29 with the end of the table near its front edge or part. Grooves 30 are or may be provided along the inner faces of the cover and the two-part slide to receive the table-sustaining cords 23, 24, and the cord pulleys 26, 28, and all forward portions of the cords and their pulley guides are accommodated within recesses 31 formed in the cabinet end wall.

Referring now to the telephone cabinet shown in Fig. 7 of the drawings, it will appear that when the counterweight for the table is made in one part or metal-plugged piece 32 hinged or coupled at 19 to the cabinet cover 8, the upper cords 23, 24 at the same end of the table are connected at 25 to one end of this slide or counterweight. This view also shows that two other lower cords 33, 34, may in like manner be connected at 35 to the slide 32 and thence run downward and around respective pulleys 36, 37 to connect at 38, 39 with the pendent end wall of the cabinet table 11. The office of these lower cords 33, 34, should they be used, is to cause positive lowering of the table as the cabinet cover and slide are lifted in the wall grooves 16, preparatory to finally closing and latching the cover. This modified cabinet which is specially adapted to hold a telephone 15, indicated by dotted 65 lines, may be held to the side wall of a desk 40, or other

support, by an inexpensive and readily attachable bracket 41.

A drawer 42 is provided below the lowered telephone table in which to hold the telephone directory 43, or other adjunct of the instrument, or the drawer may be removed and the directory then be placed in the drawer space of the cabinet. In the larger cabinet shown in Figs. 1 and 2 of the drawings, a series of drawers or trays 44 are provided below the vertically movable phonograph table 9, and these trays have the usual pegs 45 on which the records 46 are placed, whereby all the records are protected from injury and from dust and dirt within the closed cabinet and are easily accessible by opening its front door or doors 47. The upper part of one end wall of the cabinet has a hole 48 through which the axial head of a crank 49 will be passed for entering it into the end opening 50 of the case inclosing the driving mechanism of the phonograph for winding its actuating spring.

The operation of the table in the cabinet having the two-part slide or counterweight 17, 18, is as follows:— Suppose the table 9 to be fully lowered and the cover 8 to be latched shut to protect a phonograph 10 or other machine or appliance on the table within the closed cabinet, as shown in Fig. 2 of the drawings, it only is necessary to release the latch 21, and the slide 17, 18 will fall in the grooves 16 of the walls 1, 1, as the cover, after being opened into line with the slide, is lowered with it into these grooves. Toward the latter part of this lowering movement the cords or wires 23, 24 coupled to the descending slide portion 18, and to the table 9, will automatically lift the table and the phonograph 10 or other appliance upon it until the table strikes the upper stop flange 6 to which it will be snugly held level by the slide or counterweight. It will be noticed that both above parts 17, 8, will at first be lowered some distance in the slots 16 without raising the table 9, and while the grooves 30 in said parts 17, 8, slip along the cord connections 23, 24, and the table therefore will not be lifted from its normal lowered position until after the main slide portion 17 strikes the lower slide portion 18. When this occurs the cords 23, 24, will be drawn upon as both slide parts 17, 18 descend together with the cover 8 in the slots 16, and whereby the table 9 will be raised to the flange stop 6, as above described. The cover 8 then is quite fully down in the grooves 16, as shown in Fig. 3 of the drawings, and the phonograph is in full view from all sides of the cabinet to satisfy the eyes of all assembled persons, while the wide range of horizontal adjustment of a trumpet permissible on the phonograph mouth-piece, or the elevation clear above the cabinet body walls of a music box on the table, assures unobstructed tone emissions in any and every direction to fully satisfy the hearing of all the company. It is not possible thus to satisfy the sight and hearing of an assemblage when an opened phonograph or music box cabinet cover stands wholly or considerably above the support on which the instrument rests while in use, and especially when the instrument is sustained below the top of the main body portion of the cabinet. In closing this improved cabinet the cover 8, and slide parts 17, 18, are raised in the slots 16 as the table 9 falls and until the table again rests normally upon stops 51 fixed to end walls of the cabinet, and the slide part 18

then also rests while the slide part 17 is drawn upward by the cover 8, as the grooves 30 in the parts 8, 17, slip along the cords 23, 24, and until the cover 8 can be folded down flat upon its hinge 19 to the box flange 6 to close the cabinet and fully protect the phonograph or other appliance therein, as shown in Fig. 2 of the drawings.

The above described cabinet having the two-part slide or counterweight 17, 18, is more especially desirable for inclosing long and low appliances or machines, such as a phonograph or graphophone or a music box mechanism, which does not require a considerable rising movement of the table 9 to bring the sound giving or controlling mechanism or devices into advantageous operative position clear above the top of the main body portion of the cabinet, or which requires a range of vertical movement of the table less than the width of the cabinet cover.

When the slide or counterweight is made in one piece 32, the two cords or wires 23, 24, are connected to it and to the table with interposed rear and front guides or pulleys 26, 28, as shown in the telephone cabinet in Fig. 7 of the drawings. In this modified cabinet the table 11 will begin to rise immediately the open cover 8 commences its descent in the grooves 16 with the slide 32 acting as a counterweight. The telephone 15 supported on the table thus will be raised until the table strikes the stop 6, and the telephone now is easily accessible from any or all sides of the cabinet because the cover 8 now is nearly all down in the grooves 16. The shallow portion of the cabinet chamber 7 above the fully raised table 11, forms a recess which facilitates quick and correct replacement of the telephone upon the table prior to again closing the cabinet. Said closing is effected by lifting the cover 8, and slide 32, together in the grooves 16, until the cover rises clear of said grooves, and the cover then is folded down upon its hinge 19, so as to close against the stop 6, and will be locked by the latch device 21. This telephone cabinet gives complete protection to the unused instrument against injury and muddling and dust and dirt. Whether the instrument is in use or not, the top of the desk 40 to which the cabinet may be held is never obstructed by the telephone, and the whole of said desk top therefore is always available for all legitimate uses of a desk.

Whether the slide or counterweight be made in two independently movable parts 17, 18, or in one part 32, it gives opportunity for a substantial and nicely finished hinge connection of it at 19 with the cabinet cover 8, and the slide also promotes smoothness and steadiness of operation and durability of parts as the cabinet is opened and closed.

It will be understood that the coupling of the cabinet cover and slide may be effected otherwise than by the preferred hinge 19, or in any manner permitting operation of the slide relatively to the cover and table substantially as hereinbefore set forth.

I claim as my invention:—

1. A disappearing-table cabinet, comprising an open-topped box, a table movable within the box, a cover adapted to close the box, a slide hinged to the cover and adapted

to move with the open cover along a vertical wall of the box, and connections between the table and slide adapted to raise the table as the slide and open cover are lowered in the box, substantially as described. 65

2. A disappearing-table cabinet, comprising an open-topped box, a table movable within the box, a cover adapted to close the box, a slide hinged to the cover and adapted to move with the open cover along a vertical wall of the box, and flexible connections between the table and slide adapted to raise the table as the slide and cover are lowered in the box, substantially as described. 70

3. A disappearing-table cabinet, comprising an open-topped box, a substantially level table movable up and down within the box, a cover adapted to close the box, a slide hinged to the cover and adapted to move with the open cover along a vertical wall of the box, and connections between the table and slide adapted to raise the table as the slide and open cover are lowered in the box, substantially as described. 75

4. A disappearing-table cabinet, comprising an open-topped box, a substantially level table movable up and down within the box, a cover adapted to close the box, a slide hinged to the cover and adapted to move with the open cover along a vertical wall of the box, and flexible connections between the table and slide adapted to raise the table as the slide and open cover are lowered in the box, substantially as described. 85

5. A disappearing-table cabinet comprising a box, a table movable within the box, a cover adapted to close the box, said box having a slide made in two parts adapted for independent and simultaneous movements, and connections between the table and one part of the slide and between the cover and the other part of the slide, whereby a range of movement of the box cover greater than the movement of the table is assured while opening and closing the box, substantially as described. 90

6. A disappearing-table cabinet, comprising an open-topped box, a table movable within the box, a cover adapted to close the box, a slide made in two parts including one part hinged to the cover and a subjacent part, said two-part slide being adapted to move with the open cover along a vertical wall of the box, and connections between the table and the subjacent part of the slide for raising the table as the two-part slide and open cover are lowered in the box; said two-part slide permitting a range of vertical movement of the open cover greater than the vertical movement of the table, substantially as described. 95

7. A disappearing-table cabinet, comprising an open-topped box having at its upper part a stop projecting within its chamber, a table movable within the box below said stop, a cover adapted to close the box, a slide coupled to the cover and adapted to move with the open cover along a vertical wall of the box, and connections between the table and slide adapted to raise the table to the upper box stop as the slide and open cover are lowered in the box, substantially as described. 100

8. In a disappearing-table cabinet, the combination with an open-topped box having grooves at its opposite end walls, of a table movable within the box, a slide movable in the grooves, a cover coupled to the slide and adapted to close the box and movable with the slide in said grooves, and cords or wires connected to the table and slide and adapted to raise the table as the slide and cover are lowered in the box, substantially as described. 105

9. In a disappearing-table cabinet, the combination with an open-topped box having an upper stop and provided with grooves at opposite end walls, of a substantially level table movable in the box below the stop, a slide movable in the grooves, a cover coupled to the slide and adapted to close the box and movable with the slide in said grooves, and cords or wires connected to the table and slide and adapted to raise the table to the stop as the slide and cover are lowered in the box, substantially as described. 110

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