

G. L. STEVENSON.
DROP HEAD CABINET.

APPLICATION FILED NOV. 15, 1909. RENEWED JUNE 15, 1911.

1,000,637.

Patented Aug. 15, 1911.

Fig. 1.

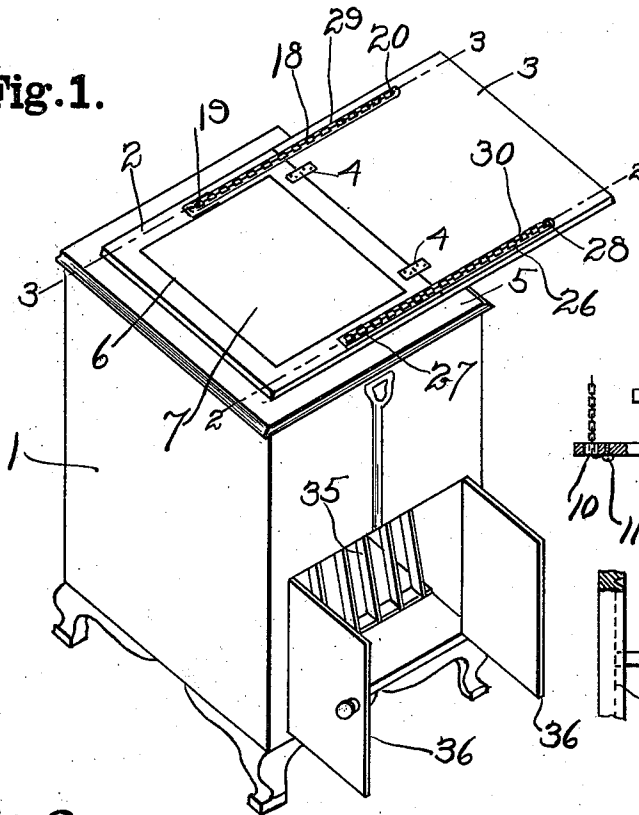


Fig. 5.

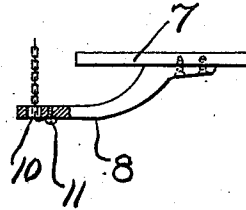


Fig. 6.

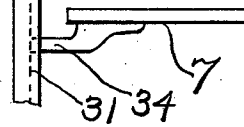


Fig. 2.

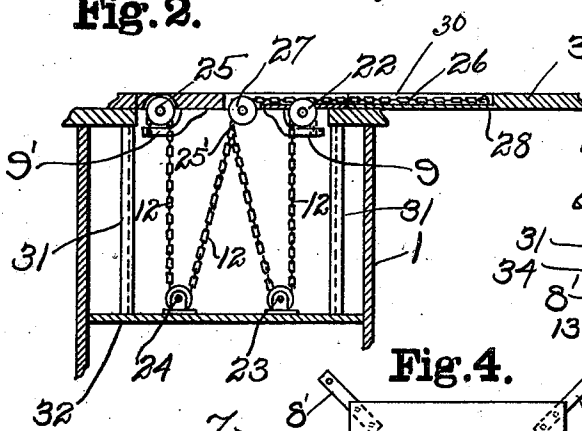


Fig. 3.

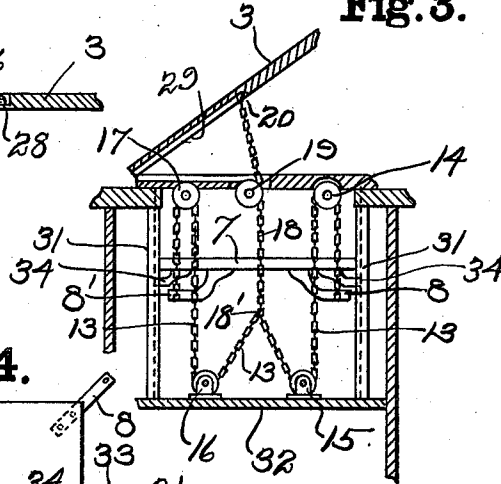
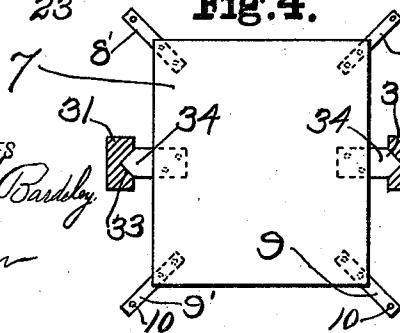


Fig. 4.



WITNESSES

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DROP-HEAD CABINET.

1,000,637.

Specification of Letters Patent. Patented Aug. 15, 1911.

Application filed November 15, 1909, Serial No. 528,049. Renewed June 15, 1911. Serial No. 633,352.

To all whom it may concern:

Be it known that I, GEORGE L. STEVENSON, a citizen of the United States, residing at Cranston, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Drop-Head Cabinets, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to drop head tables or cabinets in which a panel, head, or movable section is arranged to support a machine or other article, said section being adapted to drop or lower the supported machine bodily and vertically to its inoperative position within the cabinet below the general plane or top of the table and into a suitable inclosing receptacle, and to elevate the supported machine to its operative position above the plane of the table when it is desired to use the same.

The object of the present invention is to provide simple and effective means for readily raising and lowering this movable section and its supported member to and from its operative position and when lowered within the cabinet to close the aperture through which the drop head passes leaving the top of the cabinet plain for other uses.

30 By my improved construction the head or movable section is adapted to be dropped bodily in vertical guides, its action being similar to that of an elevator car, whereby the articles resting on the movable head will not require fastenings as their equilibrium is undisturbed.

With these and other objects in view, the invention consists of certain novel features of construction, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1— is a perspective view illustrating my improved cabinet with the movable section in its raised position and the operating leaf swung open or extended. Fig. 2— is a front elevation sectioned on line 2—2 of Fig. 1, through the hoisting mechanism, illustrating the movable section in its raised position. Fig. 3— is a rear view sectioned on line 3—3 of Fig. 1, through the hoisting mechanism, illustrating the movable section as dropped below the general plane of the table, with the extension leaf partly closed. Fig. 4— is a plan view of the drop head or

movable section showing the relative position of the vertical guides and the fingers from which the head is supported. Fig. 5— is a detail illustrating one of the head supporting fingers and the manner of attaching the operating chain thereto. Fig. 6— is a detail illustrating a portion of the drop head or movable section with the guide arm attached to its lower side and engaging the groove in the vertical guide bar.

Referring to the drawings, 1 designates the cabinet which may be constructed in any desired shape or form and for any desired purpose, the present design being more particularly adapted for the support and reception of a phonograph of a particular style of model.

The top portion 2 of the table or cabinet is provided with an outwardly swinging leaf or member 3 hinged at 4 and when in its outward or extended position it lies against and is supported on the ledge 5. This top portion is provided with an aperture 6, preferably rectangular, but which may be of any desired shape, into which is designed to fit a head or movable section 7. To the underside of this head and preferably extending outward from its corners are secured two pairs of fingers 8—8' and 9—9'. The outer end of each of these fingers is provided with a small hole 10 through which the end of its hoisting chain or cord may be passed and fastened on its under side by means of a screw 11, as illustrated in Fig. 5, or by any other desired or convenient fastening. I do not want to restrict myself to the fastening of these cords to the four corners of the movable section, as the same may be attached thereto at any desired number of points. In practice it is found desirable to suspend this drop head or movable section 3 from all four of its corners and at the same time to have but two cords, one on either side, leading out to connect to the operating leaf. To accomplish this in a simple and effective manner I have attached one end of a cord 13, see Fig. 3, to one of the fingers 8 and lead the same up over the pulley 14 down around pulleys 15 and 16, up over pulley 17 and down again to the finger 8' on the opposite corner. A single cord 18 is then attached to the bight 18' of this cord 13 between pulleys 15 and 16 and led up over pulley 19 to be attached at 20 to the hinged cover 3. The cord 12 on

the opposite side of the drop head is similarly arranged, see Fig. 2, one end of said cord is attached to the finger 9, and led up over pulley 22 down around pulleys 23 and 24, up over pulley 25 and then secured to the opposite finger 9'. A single cord 26 is then attached to the bight 25' of this cord between pulleys 23 and 24 and led up over pulley 27 to be attached at 28 to the hinged cover 3. Each of these cords 18 and 26 are adapted to lie in grooves 29 and 30, respectively, in the face of the table and also in the face of the operating leaf so as to lie flush with or beneath the surface thereof when the operating leaf is in its open position.

A pair of guide bars or ways 31 are arranged to extend from the table top down to an inclosing partition 32, said ways being provided with grooves at 33 for the reception of the tapering ends of the guide arms 34, said arms being secured in any suitable manner to the under side of the drop head. The space above the partition 32 forms a convenient inclosing receptacle into which the drop head with its supported machine may be lowered, and the space below this partition may be used for any desired or convenient purpose, but is shown as being provided with a plurality of bars 35 forming a rack for the reception of the record disks used in connection with the phonograph. Doors 36 are provided for closing this lower compartment.

In the operation of my improved device when it is desired to use this cabinet for the support or reception of a phonograph or other machine, it is only necessary to open the leaf 3 on its hinges, at once bringing to the surface of the table the drop head 7 on which the machine may be placed and retained in its operative position. When the machine is no longer required for immediate use it is only necessary to raise the free end of the leaf 3 and fold it over the top of the cabinet, whereby the drop head with its supported machine will at once descend bodily into the compartment below, the aperture left by the retreating head being covered by the leaf, leaving the face of the table plain and clear for other purposes. The machine thus disposed of is entirely inclosed, is out of the way and protected from dirt and dust. When it is again desired to operate the machine it is only necessary to raise the leaf, swing it outward on its hinges, thereby bringing the machine up level with the surface of the table and in its operative position.

By my improved method of operating the movable section vertically it is entirely unnecessary to fasten the machine upon said section as the face of the drop head is always level and the machine has no tendency to move from its position in which originally set.

It will now be understood that the portion 3 of the table top constitutes practically a lever as well as an extension of said top, and that the cords or chains 18 operatively connect said lever with portions of the other two chains at points between the two lower pulleys. In the claims hereto appended the word "cord" is employed for the sake of brevity, but it is to be understood that the term cord is employed in a broad sense to include flexible connections made of textile material or wire, or chains. When the parts are in position with the movable section 7 lowered completely, each of the two main cords runs first upwardly from the movable section, over an upper pulley, then under two lower pulleys, then over an upper pulley and down again to the vertical movable section. That is, the portions of the cords which extend under the lower pulleys are then straight or horizontal. The upper pulleys and the lower pulleys are mounted in fixed position. Since the cords which connect with the lever or table extension 3 connect with the other cords between the two lower pulleys, the first lifting movement of said lever to carry the parts to the positions shown in Fig. 3, provides for a very easy lift at the start so as to aid in overcoming inertia, the movement of the section 7 being then very slow compared with the first upward movement of the lever 3. As the connections straighten out from the position shown in Fig. 3 to the position shown in Fig. 2, the direct pull becomes more rapid, but the arc of movement given to the lever gradually retards the speed of lifting movement of the section 7. On the return movement, during the swinging of the lever 3 over from the position shown in Fig. 2 to the position shown in Fig. 3, and from the latter position until the lever 3 is closed, the beginning of the lowering movement will be slow and then gradually accelerated, while the ending of the lowering movement will be greatly retarded. Therefore there can be no such sudden starting or stopping movement of the section 7 in either direction as would tend to injure or in any way affect a delicate instrument supported on the section 7 and yet not rigidly connected therewith.

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

1. In a table, a vertically movable section, two pairs of upper pulleys, two pairs of lower pulleys, two cords connected to said movable section and each cord passing over two upper pulleys and two lower pulleys, a lever pivotally connected to a standard portion of the table, and flexible connections from said lever to the said cords at points between the two lower pulleys.

2. In a table, a vertically movable section, two pairs of upper pulleys, two pairs of lower

pulleys, two cords connected to said movable section and each cord passing over two upper pulleys and two lower pulleys, a lever pivotally connected to a standard portion of
5 the table and flexible connections from said lever to the said cords at points between the two lower pulleys, said lever being substantially the width of the table top and consti-

tuting an extension thereof when the vertically movable section is raised.

In testimony whereof I affix my signature
10 in presence of two witnesses.

GEORGE L. STEVENSON.

Witnesses:

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ARTHUR E. MUNRO.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
