E. A. MOSMAN.

DESK.

APPLICATION FILED MAR. 27, 1916.

1,239,937.

Patented Sept. 11, 1917.

3 SHEETS—SHEET 1.

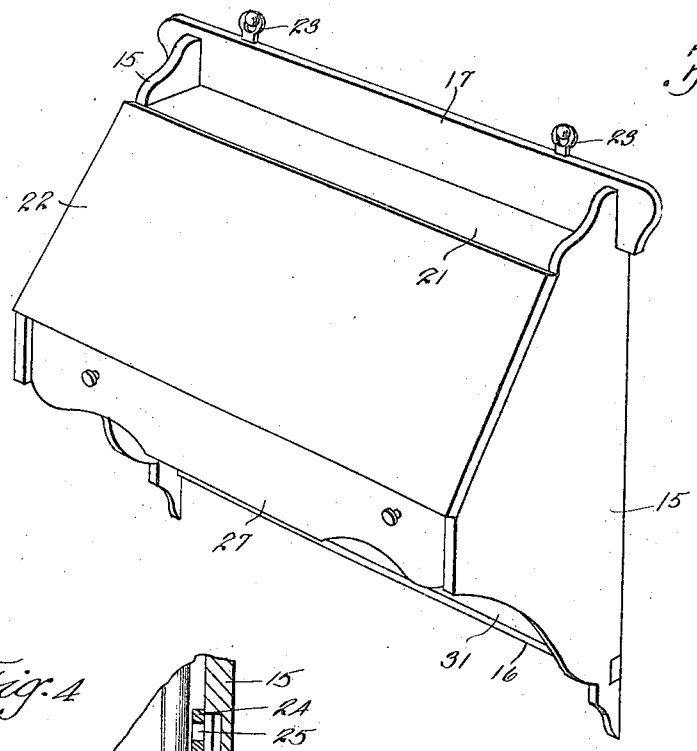


Fig. 1

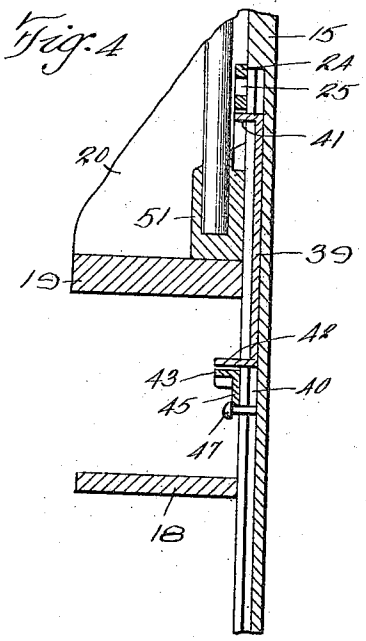


Fig. 4

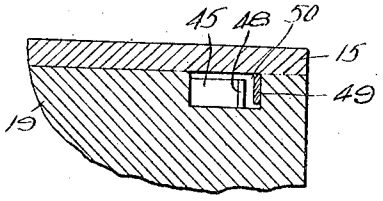


Fig. 5

Witnesses

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3 SHEETS—SHEET 2.

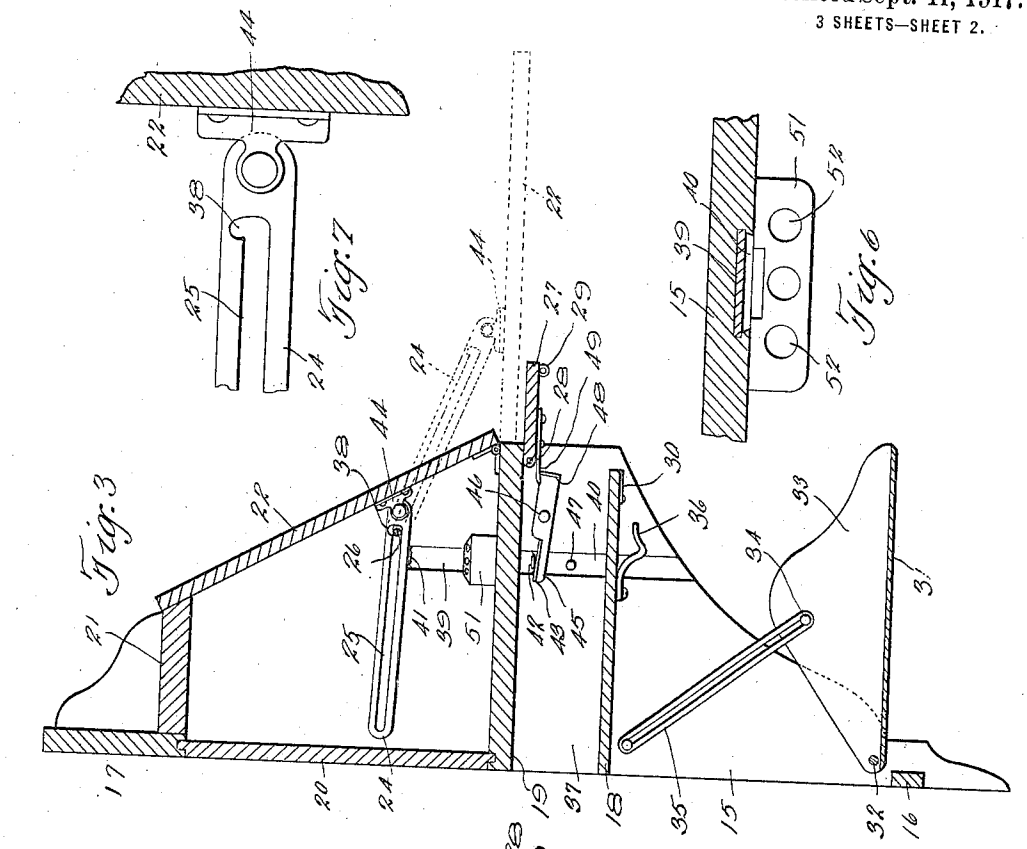


Fig. 7

Fig. 6

Fig. 3

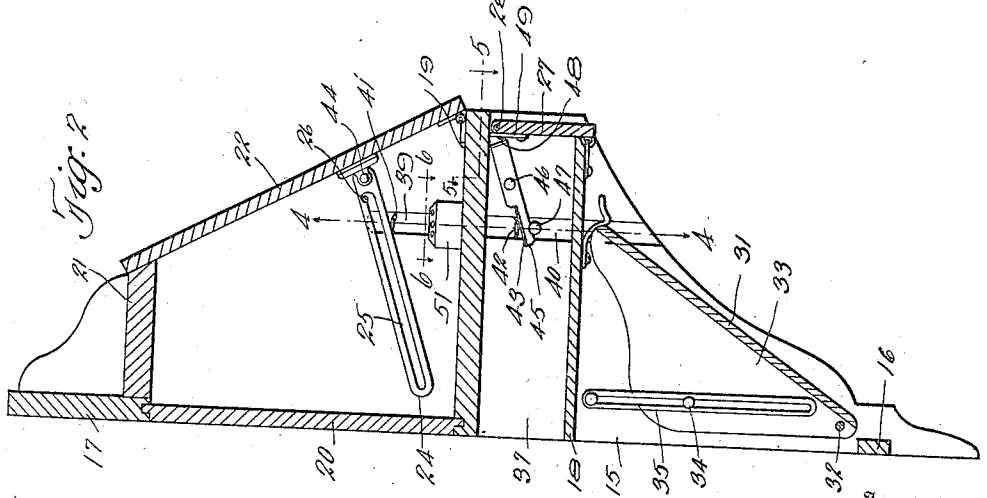


Fig. 2

Witnesses

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3 SHEETS—SHEET 3.

Fig. 9

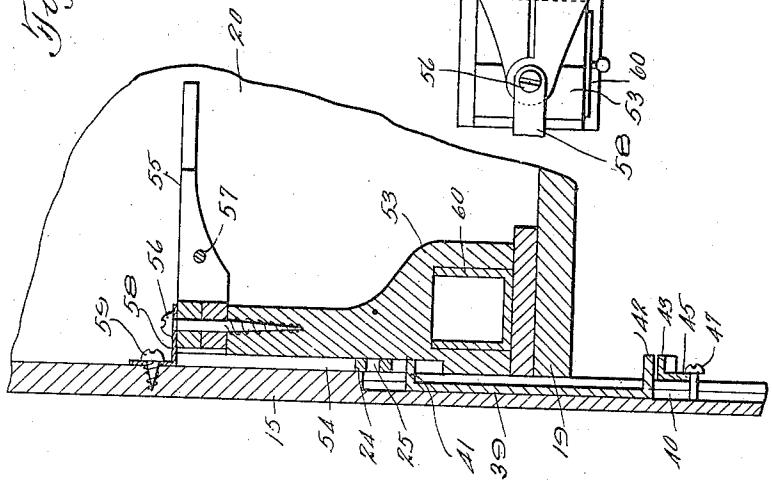
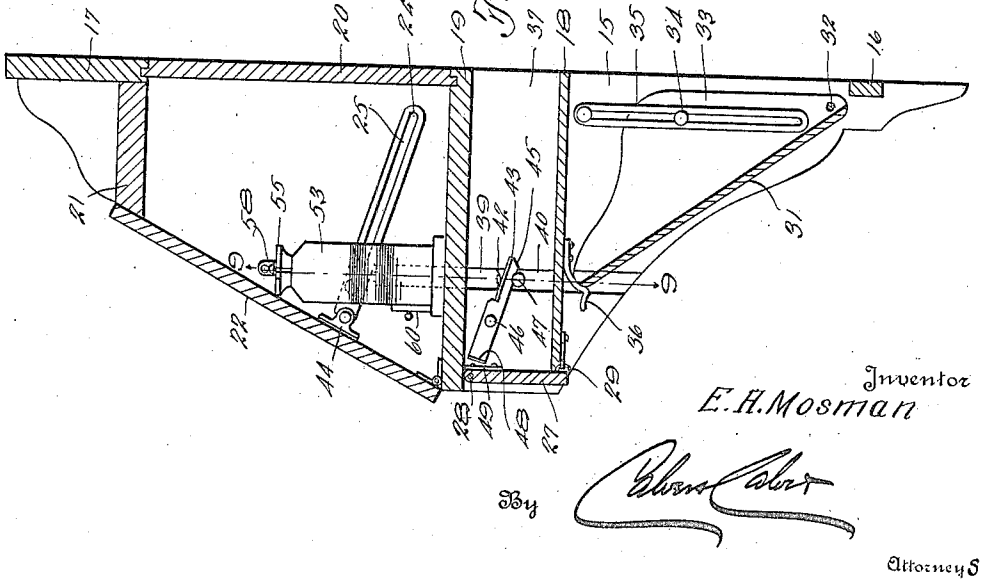


Fig. 10

Fig. 8



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UNITED STATES PATENT OFFICE.

EULA A. MOSMAN, OF ALLEGANY, NEW YORK.

DESK.

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To all whom it may concern:

Be it known that I, EULA A. MOSMAN, a citizen of the United States, residing at Allegany, in the county of Cattaraugus and State of New York, have invented or discovered certain new and useful Improvements in Desks, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates, primarily, to a wall desk of the drop lid type, that is to say, to a writing desk adapted to be hung or supported from and against a wall, as distinguished from those which are supported by legs from the floor, and provided with a hinged lid which, when raised, serves to close the writing compartment, and which, when lowered into horizontal position, constitutes a writing table. As will, however, be clear from the following description, certain features of the invention are not limited to use in connection with desks having both or either of these particular characteristics.

The invention has for its general object the provision of a desk of simple and inexpensive construction, and neat and attractive appearance, which, while occupying a minimum amount of space when not in use, is well qualified to fulfil all the requirements of such a device, and which includes in its construction many conveniences not present in similar articles as heretofore manufactured or designed.

A further and more particular object of the invention is to provide simple and efficient means for locking the lid in closed position, which means, while requiring no key, affords perfect security against all who are unfamiliar with its method of operation. In carrying out this feature of the invention, the links usually employed in drop lid desks to support the lid in horizontal position are utilized to lock the same closed, the unlocking being effected by opening another compartment in a predetermined manner.

The foregoing and other objects of the invention, together with means whereby the same may be carried into effect, will best be understood from the following description of one form or embodiment thereof illustrated in the accompanying drawings. It will be understood, however, that the particular construction described and shown has been chosen for illustrative purposes merely, and that the invention, as defined by the claims hereunto appended, may be otherwise embodied without departing from the spirit and scope thereof.

In said drawings:

Figure 1 is a perspective view of the desk closed.

Fig. 2 is a vertical section of the right hand end of the desk, showing the several parts closed and locked.

Fig. 3 is a view similar to Fig. 2 showing the desk unlocked and certain parts thereof open.

Figs. 4, 5, and 6 are detail sectional views on an enlarged scale, taken substantially on the lines 4—4, 5—5, and 6—6, respectively, Fig. 2.

Fig. 7 is an enlarged detail view of a portion of the combined supporting link and locking device.

Fig. 8 is a view similar to Fig. 2 of the left hand end of the desk.

Fig. 9 is a section, on an enlarged scale, taken substantially on the line 9—9, Fig. 8.

Fig. 10 is a plan view of the ink bottle support.

The desk body comprises end members 15 rigidly connected adjacent their lower ends by a transverse bar 16, at their upper ends by a top member 17, and at intermediate points by an intermediate shelf 18, desk top 19, back board 20, and top shelf 21, the last three members, in connection with the lid 22, inclosing the writing compartment. The top member 17 is provided with suitable eyes 23 or other means whereby the desk may be suspended from the wall. The lid 22 is hinged at its lower edge to the forward edge of the desk top 19 and, when opened, is supported in the substantially horizontal position shown in dotted lines in Fig. 3 by links 24 pivoted at their forward ends to brackets 44 secured to said lid, said links being provided with slots 25 which coöperate with fixed studs 26 projecting from the end members 15. As is usual in

desks of this character, the top shelf 21 is of less width than the desk top 19, and the forward edges of those portions of the end members 15 intermediate said shelf and top, and which constitute the side or end walls of the writing compartment, are correspondingly inclined. When the lid 22 is raised and closed, it engages the forward edges of said end members, as well as the forward edge of said shelf, and accordingly occupies the inclined position shown in Figs. 1, 2, 3, and 8.

The space between the desk top 19 and shelf 18, which constitutes a storage compartment 37, is closed at the front of the desk by a lid or cover 27 hinged at its upper edge to the end members 15 by means of pintles or trunnions 28. The lid 27 is preferably of a sufficient width to extend slightly below the shelf 18, where it is provided with an eye 29 adapted to receive a hook 30 pivoted to the under side of said shelf. The hinged cover 27, when closed, presents the appearance of a drawer, while the storage compartment above the shelf 18 also serves practically all the purposes of a drawer at considerably less expense and weight of material. Moreover, as the hook 30 is normally hidden by the lower edge of the lid or cover 27 the manner of opening what is apparently a drawer is by no means obvious to those unfamiliar with the construction.

31 denotes a shelf hinged at its lower or inner edge to the lower ends of the end members 15 by means of pintles or trunnions 32. Said shelf is preferably provided with upright end members or guards 33 from which project studs 34 coöperating with slotted links 35 pivoted at their upper ends to the end members 15, said links serving to support said shelf in a horizontal operative position when lowered into such position as shown in Fig. 3. 36 denotes a spring catch located on the under side of the shelf 30 and adapted to engage the upper or outer edge of the shelf 31 when the latter is raised and to support the same in an inclined position, as shown in Figs. 1, 2, and 8, to close the lower part of the desk. When so raised the shelf 31 is not only out of the way, leaving an unobstructed space beneath the desk (since the desk has no legs to obstruct such space), but also, by reason of its inclined position below the storage compartment 37, balances the inclined lid 22 above said compartment, thereby giving the desk, when closed, a symmetrical appearance. When, however, the desk is in use and the shelf 31 lowered, said shelf serves as a depository for books, papers, etc., thereby affording, in a wall desk, all the conveniences in this respect of a desk of ordinary construction.

The links 24 are provided adjacent their outer ends with notches 38 (see particularly Figs. 3 and 7) located at the upper sides of the slots 25 and communicating therewith. When the lid 22 is closed, the links 24, under the influence of gravity, swing downwardly on their pivots, causing the studs 26 to enter the notches 38, as shown in Fig. 2, thereby locking the lid in closed position. For the purpose of raising the links 24 a sufficient distance to free the studs 26 from the notches 38, as shown in Fig. 3, in order to unlock the lid 22, there are provided slides 39, guided for vertical movement in undercut grooves 40 in the end members 15, and provided at their upper ends with lugs or flanges 41 which engage the under sides of said links 24. The slides 39 extend downwardly below the desk top 19 (which forms the bottom of the writing compartment) and into the storage compartment 37, where they are provided with lugs or flanges 42 which are engaged by flanges 43 on the rear ends of levers 45 pivoted at 46 to the end members 15 within said storage compartment, the downward movement of said slides and levers being limited by stop pins 47 projecting from said end members. The levers 45 are formed at their forward ends with flanges 48 which are engaged by upwardly projecting fingers 49 on the lid 27 when the latter is opened. When the lid 27 is closed, the fingers 49 are received in suitably disposed recesses 50 (see Fig. 5) in the under side of the desk top 19.

To unlock the lid 22, the lid 27 is unlocked and swung upwardly into the position shown in Fig. 3, whereupon the fingers 49, by engagement with the flanges 48 on the levers 45, swing said levers in a clockwise direction (as viewed in Figs. 2 and 3) about their pivots 46, causing said levers, by engagement of the flanges 43 with the lugs 42, to raise the slides 39, and the latter, by engagement of the lugs 41 with the links 24, to raise said links a sufficient distance to free the notches 38 from the studs 26. Preferably the parts are so proportioned that, in order to unlock the desk the lid 27 must be swung upwardly to the limit of its movement, as shown in Fig. 3, the mere opening of said lid far enough to permit access to the storage compartment 37 being insufficient to raise the slides 39 the distance necessary to disengage the links 24 from the studs 26. Since, therefore, the locking mechanism is completely concealed when the desk is closed, and since, as above explained, the method of unlocking and opening even the compartment 37 is by no means obvious, it will be seen that the unlocking of the writing compartment will offer a very difficult problem to one unfamiliar with the principles of operation.

The open sides of the grooves 40 within the writing compartment are preferably partly covered by suitable devices constituting housings for the slides 39 within said compartments. Said devices may, if desired, comprise holders for writing implements and materials. As herein shown, there is provided at the right hand end of the desk a block 51, glued or otherwise secured to the desk top 19 and the adjacent end member 15, and provided with a number of sockets or openings 52 (see Fig. 6) to receive pencils, penholders, and the like (see Fig. 4). At the left hand end of the desk there is shown an ink bottle holder comprising a standard 53 (see Figs. 8 to 10), supported by the desk top 19 adjacent the end wall and cut away at its inner side to form a recess 54 (Fig. 9) to receive the corresponding link 24 and lug 41 on the corresponding slide 39. 55 denotes a pair of clamp arms pivoted to the top of the standard 53 by means of a screw 56 and adjustable, to embrace and hold the neck of an ink bottle, by means of a clamp screw 57. The standard 53 is secured at its top to the adjacent end member 15 by means of an L-shaped bracket 58 having an opening to receive the pivot screw 56 and a second opening to receive a screw 59 entering said end member. Said standard 53 may, if desired, be provided with a drawer 60 to receive postage stamps, pens, or other small articles.

Having thus described my invention I claim and desire to secure by Letters Patent:

1. A wall desk having a writing compartment provided with a lid, a shelf below said writing compartment, a hinged lid to close the space between said writing compartment and shelf and having a portion depending below said shelf, and a fastening device on the under side of said shelf and coöperating with the depending portion of said last-named lid.

2. In a desk having a writing compartment, in combination, a drop lid for closing said compartment, a link pivoted to said lid and provided with a slot and a notch at the upper side of said slot adjacent the outer end thereof, a fixed stud coöperating with said slot and adapted to enter said notch when said lid is closed to lock the same in closed position, and a slide guided in the wall of said compartment and extending to the exterior thereof, said slide being adapted to engage and raise said link to disengage said stud from said notch and thereby unlock said lid.

3. A desk having a writing compartment provided with a lid, means for locking said lid in closed position, a shelf below said writing compartment, a lid hinged at its upper edge and adapted to close the space between said writing compartment and shelf, said last-named lid having a portion depending below said shelf and being operatively connected with said locking means, and a fastening device on the underside of said shelf and coöperating with the depending portion of said last-named lid.

4. A desk having a writing compartment provided with a lid, means within said compartment for supporting said lid in open position and adapted to lock the same in closed position, and means for operating said locking means, said desk having a second compartment provided with a lid, and means carried by said last-named lid for engaging and operating said operating means.

5. In a desk having a writing compartment and a second compartment, in combination, a drop lid for closing said writing compartment, a link pivoted to said lid and provided with a slot and a notch at the upper side of said slot adjacent the outer end thereof, a fixed stud coöperating with said slot and adapted to enter said notch when said lid is closed and lock the same in closed position, a slide adapted to engage and raise said link to disengage said stud from said notch and thereby unlock said lid, said slide extending into said second compartment, and a lid for closing said second compartment and operatively connected with said slide.

6. A desk having a writing compartment provided with a lid, means within said compartment for supporting said lid in open position and for locking the same in closed position, and a slide guided in the wall of said compartment for operating said locking means, said desk having also a second compartment provided with a lid, a lever within said second compartment for operating said slide, and a finger carried by said last-named lid for engaging and operating said lever when said lid is opened.

7. In a desk having a writing compartment and a second compartment, in combination, a drop lid for closing said writing compartment, a link pivoted to said lid and provided with a slot and a notch at the upper side of said slot adjacent the outer end thereof, a fixed stud coöperating with said slot and adapted to enter said notch when said lid is closed to lock the same in closed position, a slide adapted to engage and raise said link to disengage said stud from said notch and thereby unlock said lid, said slide extending into said second compartment, a lever within said second compartment for engaging and operating said slide, and a lid for closing said second compartment and provided with a finger for engaging and operating said lever when said lid is opened.

8. A desk having a writing compartment

provided with a lid, means within said compartment for supporting said lid in open position and adapted to lock the same in closed position, a slide extending to the exterior of said compartment for operating said locking means, the wall of said compartment having a groove in which said slide is guided, and a holder for writing implements and the like closing the open side of said groove and constituting a housing for said slide.

In testimony whereof I affix my signature.

MRS. EULA A. MOSMAN.

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