

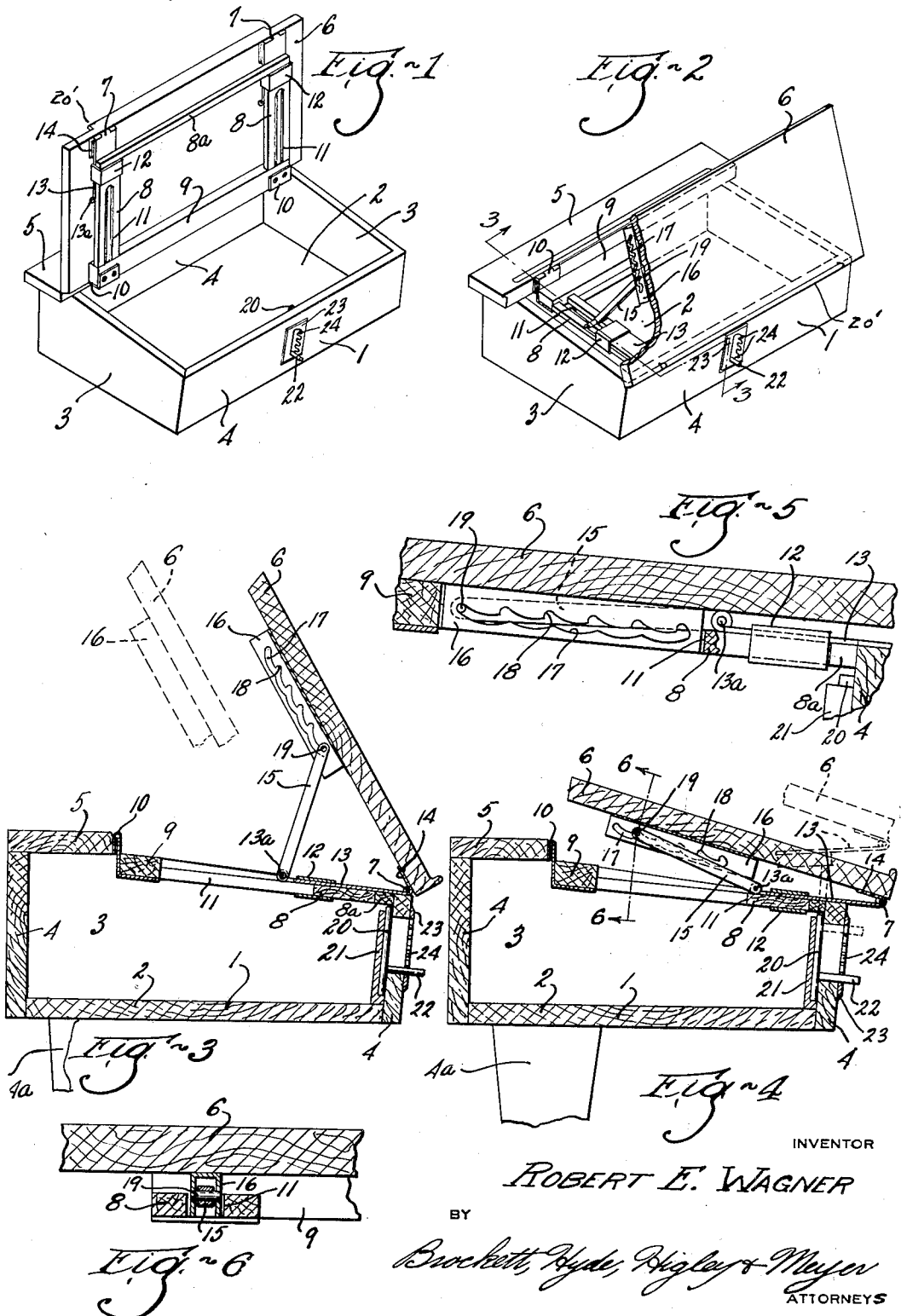
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DESK

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DESK

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7 Claims. (Cl. 45—91)

This invention relates to desks, its object being to provide an improved desk having a lid or work supporting member which can be tilted to various positions and also moved fore and aft so as to adjust a book or other article supported thereon to the most convenient position for the user's eyes.

One object of the invention is to provide an arrangement of this kind in which the desk lid, together with all necessary parts for providing adjustment thereof as described may be made as a single self-contained unit adapting it for attachment to desks now in use as a substitute for the present plain lids.

A further object is to provide an arrangement of this kind in which the several adjustments of the desk top are provided by very simple means capable of convenient adjustment and of manufacture and sale at low cost and not likely to get out of order in use.

Further objects of the invention are in part obvious and in part will appear more in detail hereinafter.

In the drawing, which represents one suitable embodiment of the invention, Fig. 1 is a perspective view showing the desk lid open; Fig. 2 is a similar view showing the desk lid tilted for use as a work support; Figs. 3 and 4 are sectional elevations showing different positions of the desk lid; Fig. 5 is a detail elevation on a larger scale of part of the hinge; and Fig. 6 is a detail cross section on line 6—6, Fig. 4, showing the desk lid closed.

The invention may be applied for use on any kind of a desk, but is particularly adapted for school desks or the like. For convenience and in no sense of limitation it is so illustrated, the desk comprising a body portion 1 of open box or tray form having a bottom 2, end walls 3 and side walls 4. This body may be supported in any suitable manner such as by a standard or legs 4a. The top opening in the body is partly closed along its outer edge by the usual pencil strip 5, and the top edges of the end walls 3 may be truly horizontal, or, as shown, slightly inclined so that the lid applied thereto will have a slight slope downward toward the user. The arrangement so far described is of common construction providing a partly open desk body adapted to contain books, papers or the like, with the upper opening therein adapted to be closed by a suitable lid or top. This lid or top in usual constructions is a simple sheet or plate-like member hinged to the edge of the pencil strip, as will be readily understood.

In the present construction the body opening is closed by a lid unit adapted to be used in the same manner as the ordinary desk lid but also providing other adjustments and uses. It comprises a lid member 6, which, if the desk is made of wood, is a wooden member of common construction. Said member is hinged at 7 to the arms 8 of a suitable support, said arms being cross braced by a member 8a and being also connected to a body portion 9 hinged at 10 to the edge of the pencil strip. The body portion 9 and arms 8 of the support may be made of wooden parts suitably secured to each other. The body portion 9 is a plain wooden bar extending parallel with and along the edge of the pencil strip, while the arms 8 are slotted, as at 11, and have sleeved thereto a yoke or loop 12, made of sheet metal, as shown, and attached to or forming part of the strap member 13 of a hinge, the other member 14 of which is attached to the under surface of the desk lid, as shown, providing the hinge connection 7 between the desk lid and the supporting arms 8 at that edge of the desk opening nearest to the user. Straps 13 and the yokes 12 connected thereto telescope and slide along the supporting arms 8, and those ends of the straps 13 remote from the desk user are provided with eyes to receive a pin 13a passing through the ends of links 15, which serve as props or supports for the desk lid when moved to a tilted position. The upper ends of said links 15 enter and travel in the groove of a channel member 16 having its side walls provided with slots 17 provided at intervals with recesses 18 in which move the oppositely projecting ends of a pin 19 fast with the link.

With this arrangement the lid, the supporting members 8, 9, 8a, and the hinge members 10 may be constructed and assembled as a unit adapted for attachment to desks already in use by simple removal of the ordinary lid and substitution of my improved desk lid unit. With the new unit attached the lid can be closed down upon the desk body in the usual manner and the outward appearance is exactly the same as that of the ordinary desk. All of the mechanism and adjusting parts are contained within the body cavity. This lid unit may be raised and lowered to open and close the desk in the usual manner, as shown in Fig. 1, the lid parts turning about the hinges 10.

When it is desired to use the lid as an inclined work support it is tilted to the position shown in Fig. 2, the lid member dragging with it the links 15 so that the latter assume an inclined or braced

ing position, and when the lid has been turned to the proper inclination it is dropped back and the pins 19 enter the nearest recesses 18 and form a positive lock rigidly supporting the desk lid may be moved fore and aft or in other words away from or toward the user to various positions, as shown in Figs. 3 and 4, so that the tilting lid may be adjusted to the proper position with respect to the focus of the eyes of the user.

By slightly raising the lid, when inclined, and grasping the links 15 and tilting the same away from the user, said links may be released from the notches 18 and the lid may be restored to its normal desk-closed position.

When the lid is fully closed down upon the body, the links 15 and channel members 16 nest within the slots 11 of arms 3, said slots being just a little longer than the links and channel members so as to nicely receive them, in addition to which the arrangement enables the ends of the slots to form abutments for the ends of the links and channel members to more or less restrain or prevent fore and aft sliding movement of the desk lid when in the closed position referred to.

As is usual in devices of this kind the near edge of the desk lid may be provided with a projection or shoulder 20' to prevent a book or other article from sliding off from the lid when it is inclined.

The desk may also be provided with means whereby that edge of the lid which is nearest to the user of the desk may be adjusted to various levels so that the work on the lid, whatever be its inclination, is adjusted to the proper level opposite to or in any other relation to the user. Such means, for example, may be an adjustable prop or support carried by the desk body and movable to various positions to extend it more or less above the edge of the wall 4 so as to serve as an adjustable support. The drawing shows for the purpose a bar 20 mounted to slide vertically within a casing 21 mounted on the inside of the wall 4, the bar 20 having an arm or handle 22 extending out through a slot in said wall and having its free end portion accessible for manual operation. On the front wall is a slotted plate 23 having notches 24 at various levels in the ends of its slot. The upper end of the bar 20 lies beneath the cross brace or bar 8a of the supporting frame. Consequently, regardless of the inclined position to which the lid is tilted, as in Figs. 3 and 4, if the near edge of the lid unit as a whole is elevated with the hand and the bar 20 is moved up so that it extends above the wall 4, the operating member 22 may be turned into one of the recesses 24 so as to retain the bar in its adjusted position, in which it will support the lid unit at the proper elevation.

What I claim is:

1. A desk of the character described, comprising a body provided with a top opening and a lid unit therefor, said lid unit comprising a frame pivoted to the body along one edge of said opening and provided with arms, supporting members slidable along said arms, and a lid hinged thereto.

2. A desk of the character described, comprising a body provided with a top opening and a lid unit therefor, said lid unit comprising a frame pivoted to the body along one edge of said opening and provided with arms, supporting members slidable along said arms, a lid hinged thereto, and braces between said lid and arms.

3. A desk of the character described, comprising a body provided with a top opening and a lid unit therefor, said lid unit comprising a frame pivoted to the body along one edge of said opening and provided with arms, supporting members slidable along said arms, a lid hinged thereto, and braces between said lid and supporting members.

4. A desk of the character described, comprising a body provided with a top opening and a lid unit therefor, said lid unit comprising a support pivoted to said body along one edge of the top opening and provided with outwardly extending slotted arms, supporting members sliding on said arms, a lid hinged thereto, and braces for said lid adapted to nest in the slots of said arms when the lid is closed.

5. A desk of the character described, comprising a body provided with a top opening and a lid unit therefor, said lid unit comprising a support pivoted to said body along one edge of the top opening and provided with outwardly extending slotted arms, supporting members sliding on said arms, a lid hinged thereto, brace members pivoted to said supporting members, and notched members cooperating therewith and secured to the desk lid, said brace members and notched members being adapted to nest in the slots of said arms when the lid is closed.

6. A lid unit for desks or the like, comprising a frame including a body portion and arms connected thereto, supporting members slidable upon said arms, hinges connected to said body portion, and a desk lid pivoted at one edge to said supporting members.

7. A lid unit for desks or the like, comprising a frame including a body portion and arms connected thereto, supporting members slidable upon said arms, hinges connected to said body portion, a desk lid pivoted at one edge to said supporting members, and braces extending between the desk lid and supporting members.

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