Dec. 13, 1927. 1,652,774

C. C. FRASER ET AL

DESK

Filed March 16, 1923 3 Sheets-Sheet 1

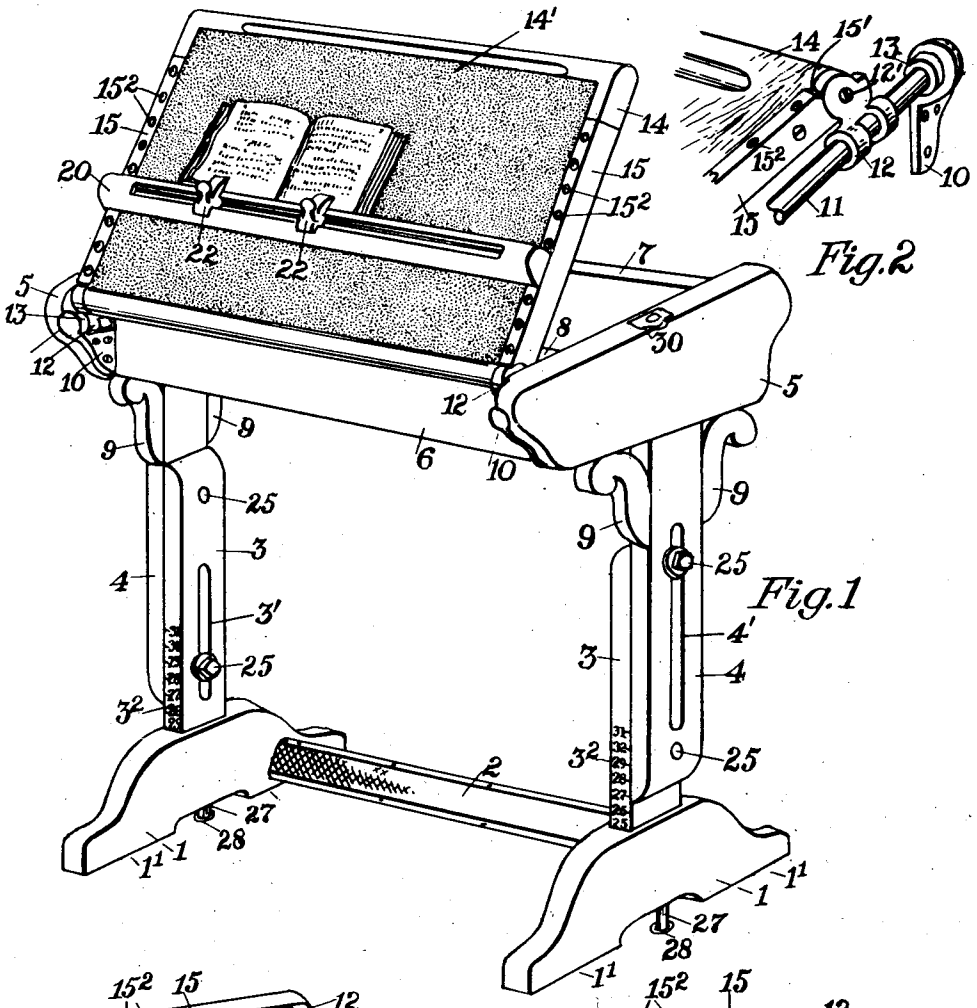


Fig.1

Fig.2

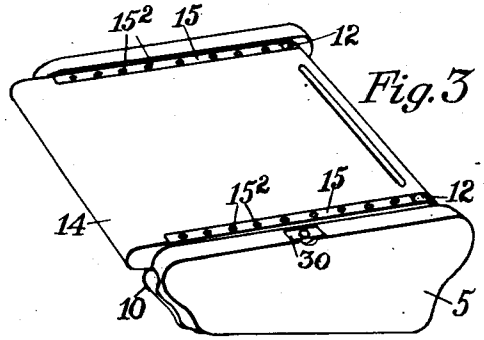


Fig.3

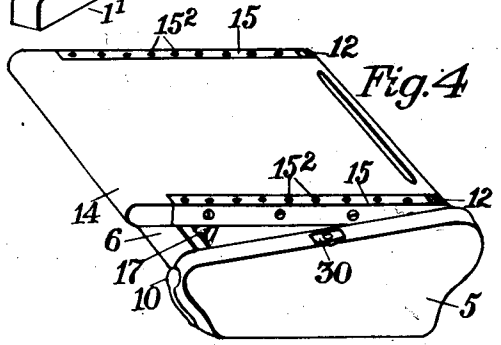


Fig.4

Witnesses:
F. A. Howe
Thos. C. Carpenter
Wm. A. Greeson

Inventors:
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DESK

Filed March 16, 1923 3 Sheets-Sheet 2

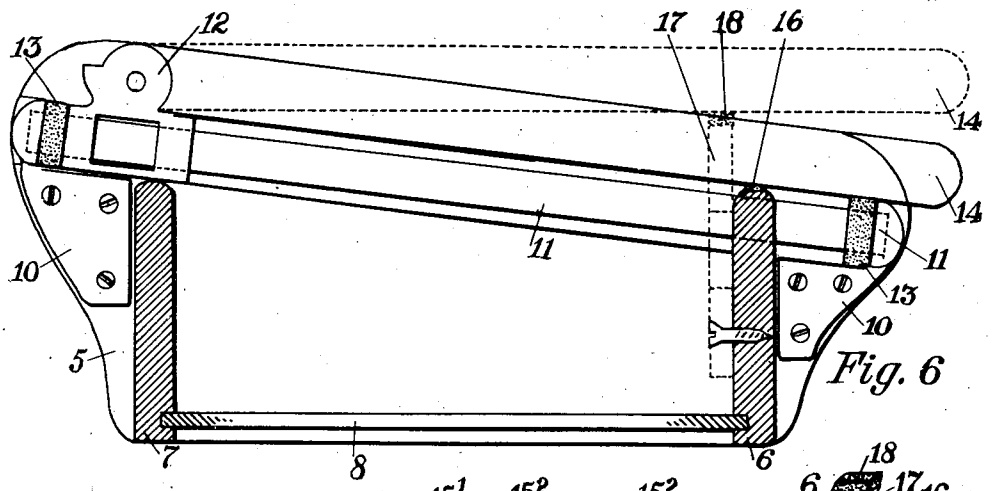


Fig. 6

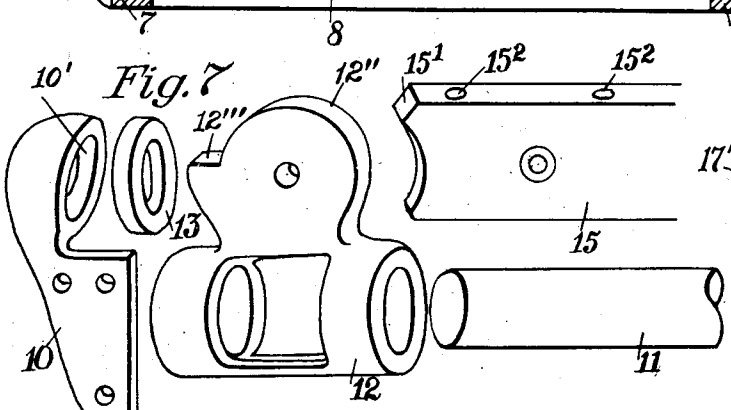


Fig. 7

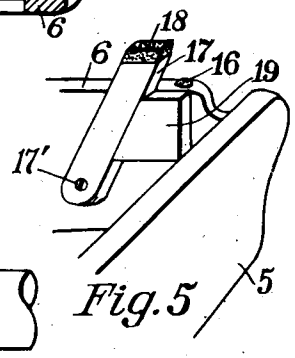


Fig. 5

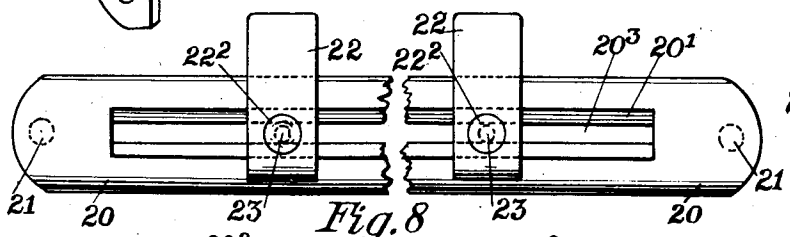


Fig. 8

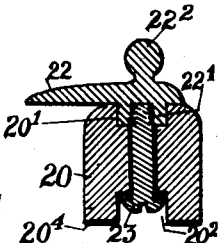


Fig. 10

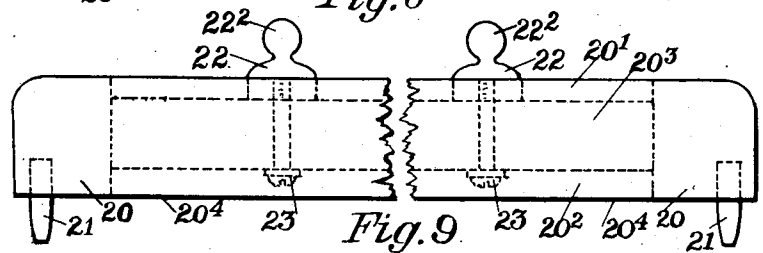


Fig. 9

Witnesses:
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William A. Fraser

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C. C. FRASER ET AL

DESK

Filed March 16, 1923 3 Sheets-Sheet 3

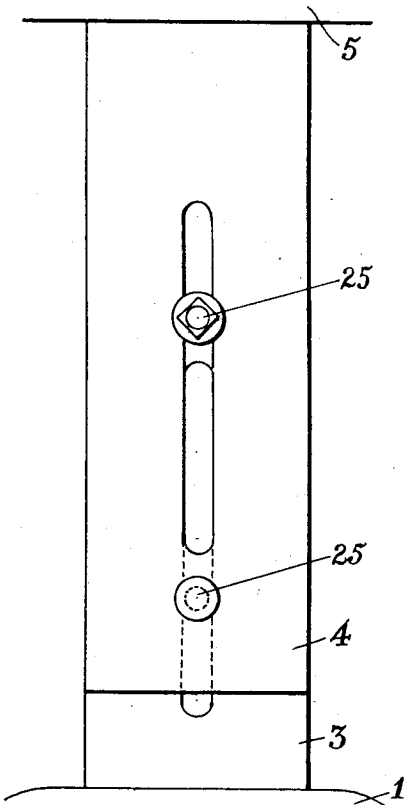


Fig. 11

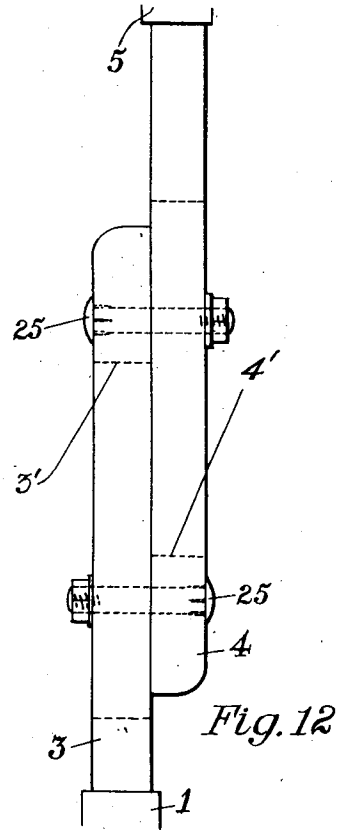


Fig. 12

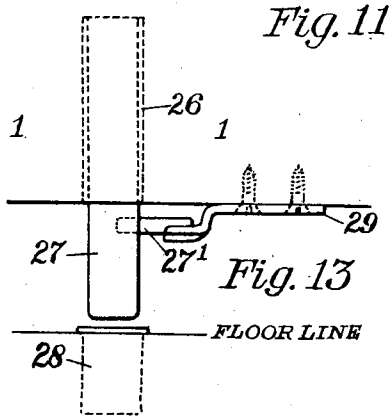


Fig. 13

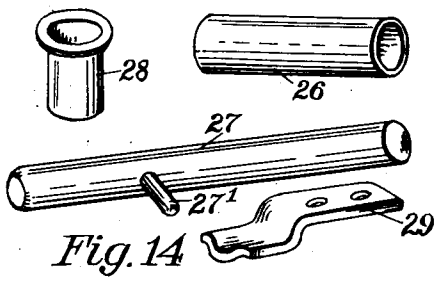


Fig. 14

Witnesses
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Patented Dec. 13, 1927. 1,652,774

UNITED STATES PATENT OFFICE.

CHELSEA C. FRASER AND JOSEPHINE A. GOSS, OF GRAND RAPIDS, MICHIGAN.

DESK.

Application filed March 16, 1923. Serial No. 625,652.

This invention relates to improvements in desks.

The main objects of our invention are:

First, to provide an improved desk in which the top may be adjusted to provide the maximum amount of working space at correct angles.

Second, to provide a desk which may be quickly adjusted to meet the requirements of the particular user.

Third, to provide a desk which, while unobstructed below the top providing freedom of movement of the legs, is provided with a foot rest positioned for the convenience of the user in various attitudes.

Fourth, to provide an improved desk which may be easily adjusted to different positions by children or other unskilled persons.

Fifth, to provide a desk which may be quickly fixed to the floor for the purpose of positioning it, and at the same time it may be readily released for clearing the floor, as occasion may require, without the aid of tools.

Objects pertaining to details and economies of construction and operation will definitely appear from the detailed description to follow.

We accomplish the objects of our invention by the devices and means described in the following specification. The invention is clearly defined and pointed out in the claims.

A structure which is a preferred embodiment of our invention is clearly illustrated in the accompanying drawing forming a part of this application, in which:

Fig. I is a perspective view of our improved desk with the top adjusted to a sixty degree angle presenting a blackboard surface, a book-rest or holder being in position thereon.

Fig. II is a fragmentary perspective view of the top supporting means.

Fig. III is a perspective view of the bed and top portion of the desk with the top adjusted to an angular position of approximately fifteen degrees.

Fig. IV is a perspective view of the parts shown in Fig. III with the top adjusted to a horizontal position.

Fig. V is a fragmentary perspective view of the bed or frame of the desk with one of the top supports in erected position.

Fig. VI is a side elevation of the bed and top with the bed partially in vertical section, the top being shown in one position by full lines and in another position by dotted lines.

Fig. VII is a perspective view of the top supporting members in disassembled relation.

Fig. VIII is a fragmentary plan view of the book or sheet holder.

Fig. IX is a fragmentary side elevation of the book or sheet holder.

Fig. X is a vertical section through the book-holder and one of its leaf engaging fingers.

Fig. XI is a side elevation of one of the adjustable standards or pedestals, the parts being shown in conventional form.

Fig. XII is a view looking from the left of Fig. XI.

Fig. XIII is a side elevation of the desk positioning parts in disengaged position, the coacting parts being conventionally indicated.

Fig. XIV is a perspective view of the desk positioning means removed from the desk pedestals and disassembled.

In the drawings similar numerals of reference indicate similar parts throughout all of the views.

Referring to the drawing, the desk frame proper comprises the bases 1 connected by the bar 2 which is positioned to constitute a foot rail. The standards or pedestals are mounted on the bases 1 and comprise the sections 3 secured to the bases and the sections 4 secured to the sections 3, the sections 3 being longitudinally slotted at 3′ to receive the bolts 25 carried by the sections 4, while the sections 4 are longitudinally slotted at 4′ to receive the bolts 25 carried by the sections 3. This provides a very effective means for securing these parts in adjusted position to regulate the height of the desk to meet the requirements of the particular child or person using the same.

To facilitate such adjustment a gauging indicia 3^2 is provided on the base sections 3. The bed comprises the end pieces 5 and

the front and rear horizontal pieces 6 and 7. These are rigidly secured together, the means securing the parts not being illustrated as they form no part of this invention.

The end pieces 5 of the bed are secured to the pedestal sections 4, ornamental brackets 9 being provided to brace the parts as well as to provide ornamentation. The bed is provided with a bottom 8 thereby providing a storage receptacle or compartment for books, papers, pencils, et cetera.

The top 14 is adjustably supported so that it may be moved to and from the user or may be adjusted to a horizontal position, or to different angular positions. The top may also be reversed, it being preferably provided with a blackboard 14′ on one side, the other side being plain.

The supports for the top comprise the brackets 10 which are secured on the inner side of the end pieces 5 and are provided with sockets 10′ receiving the ends of the slide rods 11. The top 14 is secured to the slides 12 which are slidably mounted on the rods 11 by means of the pivots 12′. This permits the top being adjusted forward and backward on the rods or swung thereon to different positions as indicated in the drawings.

At the ends of the top are bars 15 which constitute reinforcing members, the bars being curved at their ends adjacent the slides 12 to conform to the curved surfaces 12″ thereof and are provided with shoulders 15′ adapted to rest on the shoulders 12‴ of the slides when the top is swung over to the position shown in Fig. I, thereby supporting the top in this position without the necessity of other supporting means. This supports the top with its blackboard face 14′ at an angle of approximately sixty degrees, which is deemed by experts to be the proper angle for reading and various kinds of school work.

When it is desired to reverse the top, all that it is necessary to do is to swing the upper edge forward and slide the lower edge backward on the slide rods. The upper edge of the front bed piece 6 is positioned so that when the top is raised thereon as shown by full lines in Fig. VI it is inclined at an angle of approximately fifteen degrees, in which position it may be moved forwardly toward the user as desired.

We also provide means for supporting the top in a horizontal position as shown by dotted lines in Fig. VI, the supports 17 being pivoted at 17′ so as to be swung against the supporting blocks 19, and the supports 17 are equipped with buffers 18 while the bed pieces 6 are provided with buffers 16, thereby minimizing the noise. The support 17 when resting on the block 19 is inclined so that there is no tendency for it to collapse.

The rods 11 are provided with annular buffers 13 at the ends thereof so that the noise of the sliding adjustment of the top is minimized.

With this arrangement of parts the desk is easily and readily adjusted to the desired position to meet the particular needs of the user, either in the matter of comfort or the kind of work.

To further facilitate the use of the desk, we provide a book rest comprising a bar 20 having pins 21 engageable in a series of holes 15^2 in the bars 15 so that the bar 20 may be adjusted to hold a book, as is indicated in Fig. I, in any desired position. The leaf-holding fingers 22 are adjustable upon the bar, the same being provided with screws 23 engaging the longitudinal shouldered groove 20′ of the book bar, being adjustably retained by the screws 23 engaging the parts 22^1 sliding on the shoulders of the slot, see Figs. VIII, IX and X. The fingers are provided with knobs 22^2 to facilitate adjustment.

The book-holder bars are provided with rubber facings 20^4 on their lower sides so that they effectively serve to hold sheets or the like for writing or other purposes.

We preferably provide means for positioning the desks, that is, so that they cannot be freely moved about on the floor, this consisting of the locking bolts or pins 27 which engage sockets 26 set into the base members 1 and retained therein by the laterally projecting pins 27′ which may be engaged with or disengaged from the keepers 29 by rotative movement of the bolts 27. The floor sockets 28 are adapted to receive the bolts so that all that it is necessary to do to secure the desk against sliding movement on the floor is to position the bolts above the sockets and rotate the bolts to disengage the pins 27, allowing them to drop into the sockets. The sockets are flanged so that they may be readily removed for cleaning or the like. This suitably positions the desk for use but permits the floor being cleared for cleaning or other purposes.

The bases may be provided, if desired, with rubber tread portions 1′ which are quite effective in retaining them in position when the bolts 27 are omitted or not engaged. Another advantage of the anchoring bolts 27 is that they facilitate the adjustment of the desk relative to the light within a room, that is, after the desk top has been adjusted to meet the requirements of the particular user, one of the bolts may be retracted and the desk swung or pivoted about the other to the position most suitable for the lighting conditions.

Our improved desk is readily adapted or adjusted to meet the requirements of the particular user and may be readily manipulated by young or small children.

We have illustrated and described our improvements in an embodiment or adaptation

which we have found very practical. We have not attempted to illustrate or describe certain modifications or adaptations which we contemplate as we believe the disclosure made will enable those skilled in the art to which our invention relates to embody or adapt the same as may be desired.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:

1. In a desk, the combination with a top, a bed comprising end and side members, slide rods mounted on the inner sides of said end members, slides on said rod, said top being pivotally connected to said slides adjacent one edge thereof whereby the top may be reversed to present either side thereof, said top being adapted to collapse between said end members with its upper face when collapsed substantially flush with the upper edges of said end members and resting upon the upper edge of the front side member which is positioned so that the top is forwardly inclined when so supported, an adjustable support mounted on the inner side of the front side member to collapse on the inner side thereof and adapted when erected to support the top in a horizontal position, said top being slidably adjustable when resting on said bed side member or on said support, and coacting stop members on said top and slide members adapted to support said top in an inclined position.

2. In a desk, the combination with a top, a bed comprising end and side members, slide rods mounted on the inner sides of said end members, slides on said rod, said top being pivotally connected to said slides adjacent one edge thereof whereby the top may be reversed to present either side thereof, said top being adapted to collapse between said end members with its upper face when collapsed substantially flush with the upper edges of said end members and resting upon the upper edge of the front side member when so supported, and coacting stop members on said top and slide members to support said top in an inclined position.

3. In a desk, the combination with a bed, of a top, slide rods mounted on said bed, slide members on said rods, said top being pivotally connected at one edge to said slide members so that it is slidably and reversibly supported, said top and slide members being provided with coacting stop members positioned so that the top is supported in an inclined position presenting one side thereof when said top and slide stop members are in engagement, said top being adapted when in another position to rest on said bed whereby it is supported in an inclined position with its other side presented, and an adjustable support on said bed for supporting said top in a horizontal position.

4. In a desk, the combination with a bed, of a top, slide rods mounted on said bed, slide members on said rods, said top being pivotally connected at one edge to said slide members so that it is slidably and reversibly supported, said top and slide members being provided with coacting stop members positioned so that the top is supported in an inclined position presenting one side thereof when said stop members are in engagement, said top being adapted when in another position to rest on said bed whereby it is supported with its other side presented.

5. In a desk, the combination with a frame, of a top, top supporting slides mounted on said frame for sliding adjustment from front to rear thereof, said top being pivotally mounted on said slides so that it may be reversed to present either side thereof, means for supporting said top in a horizontal position or in a forwardly inclined position permitting its sliding adjustment while supported in either position, and means for supporting it in an angular position with its other side presented.

6. In a desk, the combination of a bed, a top, and means for slidably and reversibly supporting said top whereby it may be reversed to present either side thereof, there being means for supporting said top when adjusted to present either side at an angle and when adjusted to present one side to support it in a horizontal position, said top being slidably adjustable when supported in any of its angular or in its horizontal position.

7. In a desk, the combination of a frame provided with supporting pedestals, a top, means for slidably and pivotally supporting said top whereby its angular position may be varied and it may be reversed to present either side thereof and adjusted to and from the user, a book-holder mounted on one side of said top, and bolts mounted on said pedestals to be projected into engagement with floor sockets to anchor the desk or to be independently retracted whereby either bolt may be retracted and the desk may be swung about the other as a pivot facilitating the positioning of the desk relative to the light of a room.

8. In a desk, the combination of a frame provided with supporting pedestals, a top, means for slidably and pivotally supporting said top whereby its angular position may be varied and it may be adjusted to and from the user, and bolts mounted on said pedestals to be projected into engagement with floor sockets to anchor the desk or to be independently retracted whereby either bolt may be retracted and the desk may be swung about the other as a pivot facilitating the positioning of the desk relative to the light of a room.

9. In a desk, the combination of a frame, a top, means for slidably and pivotally sup-

porting said top whereby it may be reversed to present either side thereof comprising slideways disposed from front to rear of said frame, and top supporting slides coacting with said ways whereby the top is supported for adjustment from front to rear of the desk, said top being pivotally mounted on said slides whereby it may be reversed thereon, said slides being provided with means for supporting said top in an inclined position and permitting its sliding adjustment while supported in such position.

10. In a desk, the combination with a frame, of a top, top supporting slides mounted on said frame for sliding adjustment from front to rear thereof, said top being pivotally mounted on said slides so that it may be reversed to present either side thereof, means on said slides for supporting said top in any forwardly inclined position permitting its sliding adjustment while supported in such position, and means for supporting it in an angular position with its other side presented permitting its sliding adjustment in such angular position.

In witness whereof, we have hereunto set our hands.

CHELSEA C. FRASER.
JOSEPHINE A. GOSS.