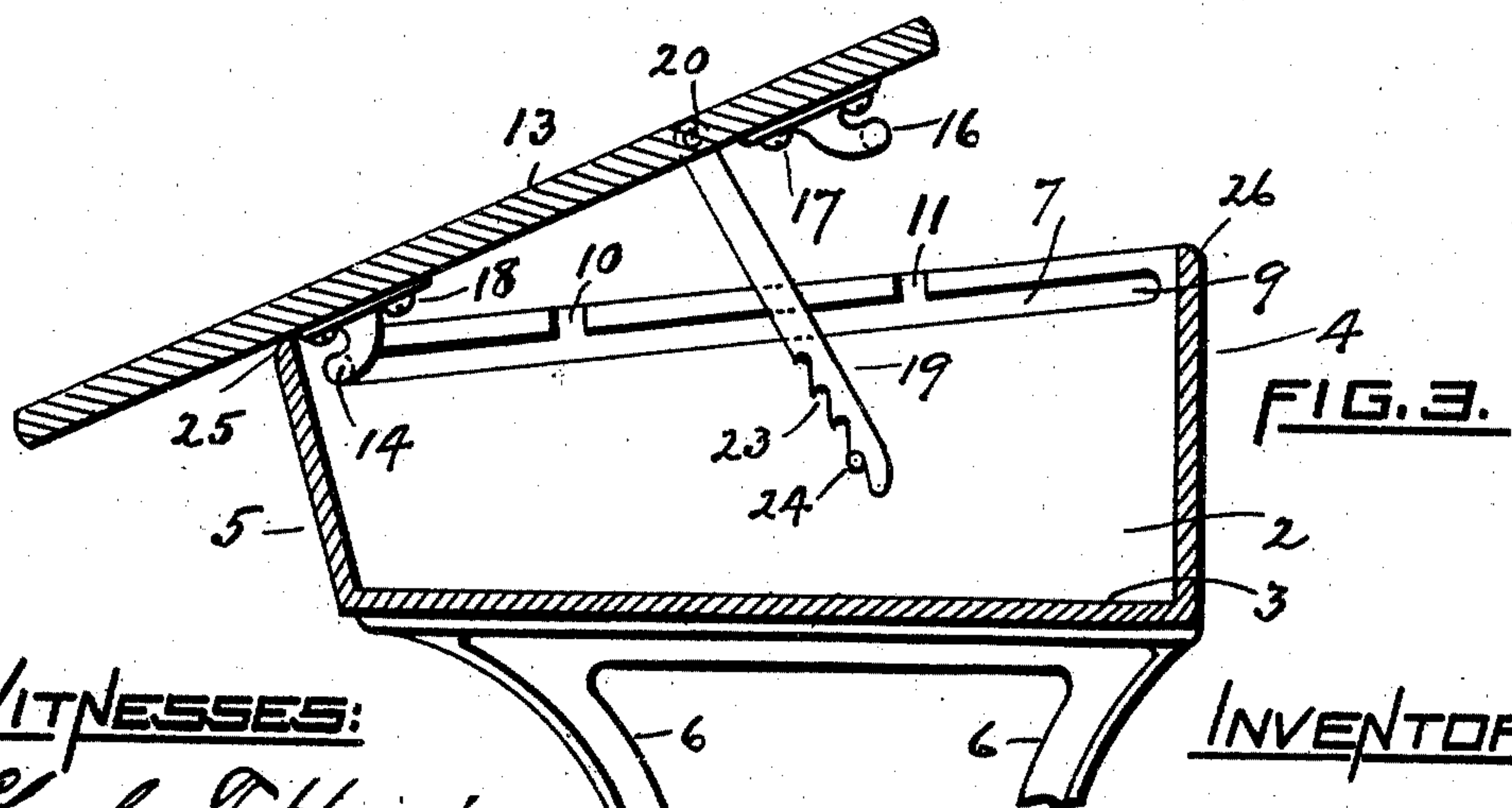
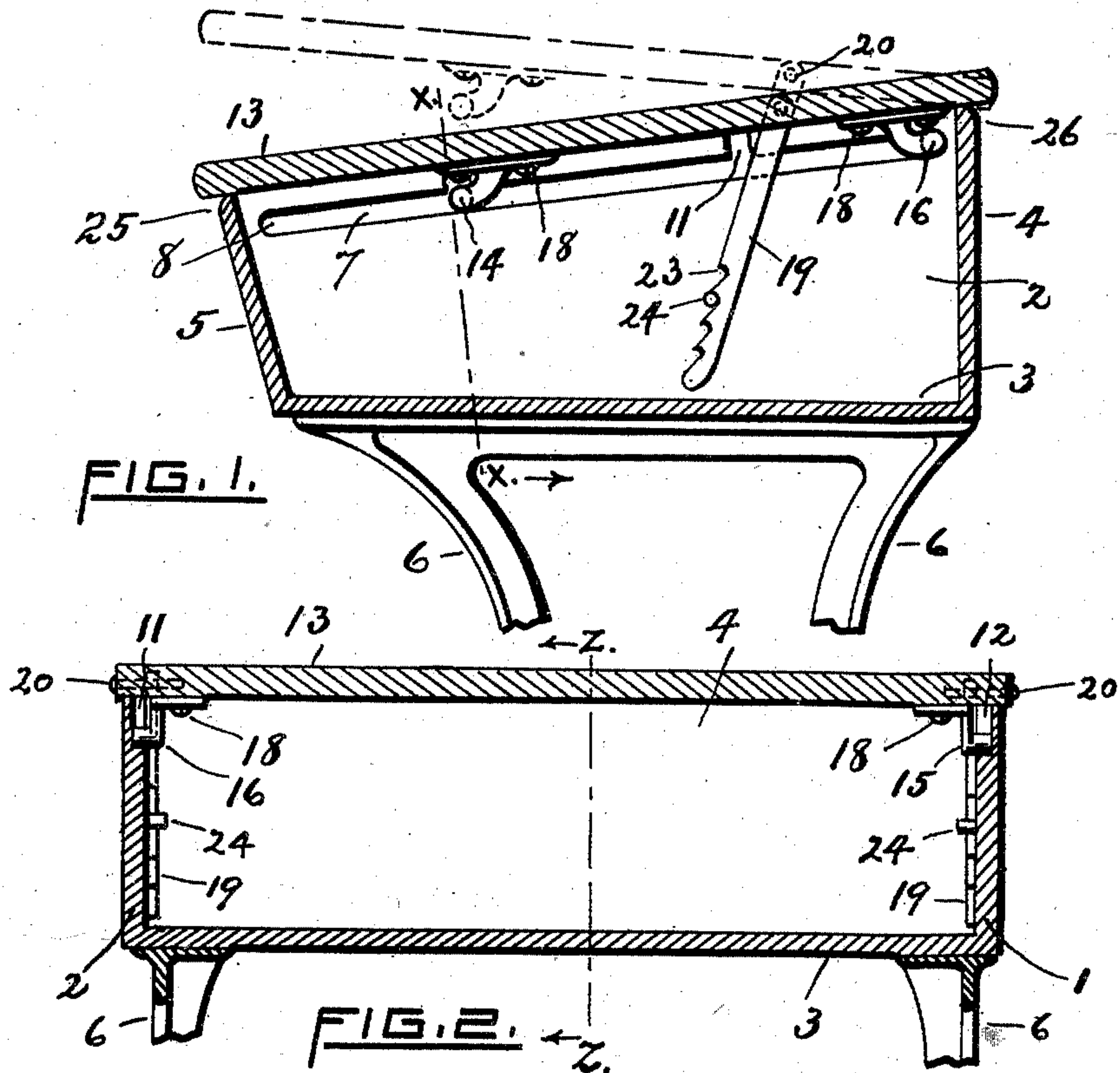


L. H. CAMPBELL.
SCHOOL DESK.

APPLICATION FILED JAN. 13, 1909.

967,609.

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LEONARD H. CAMPBELL, OF PROVIDENCE, RHODE ISLAND.

SCHOOL-DESK.

967,609.

Specification of Letters Patent. Patented Aug. 16, 1910.

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To all whom it may concern:

Be it known that I, LEONARD H. CAMPBELL, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in School-Desks, of which the following is a specification, reference being had therein to the accompanying drawings.

Like reference numerals indicate like parts.

Figure 1 is a view of my improved school desk, as seen partly in elevation and partly in section on line *z z* of Fig. 2. Fig. 2, is a view of the same as seen in cross section on line *x x* of Fig. 1. Fig. 3 is a view similar to Fig. 1, except that the desk cover is shown as tilted on its forward fulcrums.

My invention relates to school desks and more especially to a school desk having a slidable cover, which is also capable of hinging at will at either its forward or rear edge; and consists of the novel construction and combination of the several parts as hereinafter described and set forth in the claims.

The body of the desk consists of the two parallel sides 1 and 2, the bottom 3, the back 4 and the front 5, the latter being angularly inclined as shown in Figs. 1 and 3. The upper edge of each of the side pieces 1 and 2 has a sloping shape, as usual. The body of the desk is supported on standards 6, to which it is secured by screws or in any preferred manner.

Each of the side pieces 1 and 2 has on its inner surface a groove 7 with closed ends 8 and 9. Each groove 7 is parallel with the top sloping edge of the side piece. Two grooves 10 extend from the grooves 7 to the edge of the side pieces 1 and 2, near the front of the desk (that is, the part of the desk nearest to the pupil), preferably at right angles with said grooves, respectively, and two grooves 11 and 12 extend preferably at right angles from the grooves 7, 7, to the edge of said side pieces, near the rear of the desk.

The desk cover is designated as 13 and is rectangular and oblong in shape, so that it is capable of completely extending over the desk body and projecting slightly therefrom, and when in the position illustrated in Fig. 1, rests upon the upper edges of the back and front and upon the upper sloping edges of the side pieces 1 and 2.

Four fulcrum irons are used designated in the drawings as 14, 14, 15, 16, respectively, and these constitute the only means by which the cover 13 is secured to the body of the desk. Each fulcrum iron comprises a base plate, a curved arm and a fulcrum pin, all preferably integral and secured to the under surface of the cover 13 by screws 18, or otherwise. These fulcrum irons are placed beneath the cover 13 at some distance from the respective edges of the cover as illustrated in the several figures.

Two braces or rods 19, 19, are mounted pivotally at their upper ends upon pins 20, 20, which enter into the cover 13 as shown, or by other suitable means, and project downward diagonally within the desk body adjacent to the sides 1 and 2 thereof, respectively. On the forward edge of each brace rod is a plurality of sockets 23. On each side piece 1 or 2 there is an inwardly extending pin or stop 24 with which the brace rod is adapted to engage in either of its sockets 23.

The outer upper edges of the front piece 5 and the back piece 4 of the desk body are rounded, as shown at 25 and 26, respectively. This rounding 25 of the front piece 5 allows the tilting of the desk cover 13 thereon, as illustrated in Fig. 3, and the rounding 26 of the back piece 4 allows the tilting of the desk cover 13 thereon, as illustrated in Fig. 1. If said edges of the pieces 4 and 5 were not so rounded off, it would be impossible for the desk cover to tilt, as represented in said figures.

Having thus described the construction of my improved school desk, I will now explain the operation of its movable parts. When in its normal position, the desk is closed, as represented in Figs. 1 and 2. The fulcrum pins 15 and 16 are then at the rear closed ends 9, 9, and extend into the grooves 7, 7, of the side pieces 1 and 2. In this position, the cover 13 completely closes the desk and projects slightly on its four edges out beyond the body of the desk. The cover 13, however, is movable either to slide or to tilt. It can be drawn toward the pupil and yet maintain its said normal plane, to any desired extent within the distance from near the closed ends 9, 9, of the grooves 7, 7, to a point just to the rear of the vertical grooves 11, 12; and during such sliding movement of the cover 13, the fulcrum pins 14, 14, will move along the grooves 7, 7, to a

corresponding distance between a point near the vertical grooves 10, 10, and a point near the closed ends 8, 8, of the grooves 7, 7, of said side pieces. In any of these positions, the desk cover 13 cannot be tilted, because it is engaged by its four fulcrum pins all at the same time, and in the same plane, and these cannot rise out of said grooves 7, 7. But when the fulcrum pins 15, 16, are exactly seated in the closed ends 9, 9, of the grooves 7, 7, the fulcrum pins 14, 14, are then exactly in alinement with the grooves 10, 10. The cover 13 can then be raised by hand and its forward edge elevated, as illustrated in Fig. 1 by dotted lines, whereupon the rear edge of the cover 13 will pivot upon the fulcrum pins 15, and 16, and the fulcrum pins 14, 14, will rise and pass out of the vertical grooves 10, 10, to the position shown by the dotted lines in Fig. 1, to whatever degree may be desired, and then be held in such tilted elevated position by the engagement of the stop pins 24 in the selected sockets 23 of the brace rods 19, 19, appropriate for the purpose. This elevation of the cover 13 upon the fulcrum pins 15, 16, as hinges, gives to the pupil access to the interior of the desk to put away his books or papers therein or to remove them therefrom. By disengaging the brace rods 19, 19, from their said engagement with the pins 24, the desk cover 13 can be restored to its former position, illustrated in solid lines in Fig. 1.

For study and other purposes, it is often desirable and important that the desk cover 13 should have the peculiar tilting function illustrated in Fig. 3. Whenever the fulcrum pins 14, 14, are seated exactly in the closed ends 8, 8, of the grooves 7, 7, the fulcrum pins 15, 16 are then exactly in alinement with the vertical grooves 11, 12. The cover 13 can then be raised by hand and its rear edge elevated, as illustrated in Fig. 3, whereupon the forward portion of the cover 13 will pivot upon the fulcrum pins 14, 14, and the fulcrum pins 15, 16, will rise and pass out of the vertical grooves 11 and 12, to whatever extent may be desired, and then be held in such tilted elevated position by the engagement of the stop pins 24 in the selected sockets 23 of the brace rods 19, 19, appropriate for the purpose. This elevation of the cover 13 upon the fulcrum pins 14 is useful to bring the cover 13 and the books or papers which are thereon nearer to the pupil, thus preventing eye strain and allowing the pupil to sit erect in his chair before the desk.

I claim as a novel and useful invention and desire to secure by Letters Patent:—

1. The combination of a desk body having two parallel side pieces, each provided with a groove near and parallel with the upper edge thereof and also with a vertical groove in proximity with the forward end of the

side piece and extending from the first named groove to the upper edge of said side piece; a desk cover mounted on the upper edges of the desk body; and four L-shaped fulcrum pins located near the four corners of the desk cover, respectively, each of which fulcrum pins is secured at one end thereof to the under surface of the desk cover and is slidably mounted at its opposite end in that first named groove adjacent thereto, said parts being so assembled that when the two rear fulcrum pins are seated at the rear ends of the two first named grooves the two front fulcrum pins are in said two first named grooves in alinement with said two vertical grooves, respectively, and are capable of moving out through said two vertical grooves whenever the desk cover is tilted upon said two rear fulcrum pins as hinges.

2. The combination of a desk body having two parallel side pieces, each provided with a groove near and parallel with the upper edge thereof and also with a vertical groove in proximity with the rear end of said side piece and extending from the first named groove to the upper edge of said side piece; a desk cover mounted on the upper edges of the desk body; and four L-shaped fulcrum pins located near the four corners of the desk cover, respectively, each of which fulcrum pins is secured at one end thereof to the under surface of the desk cover and is slidably mounted at its opposite end in that first named groove adjacent thereto, said parts being so assembled that when the two forward fulcrum pins are seated at the forward ends of said two first named grooves the rear fulcrum pins are in said two first named grooves in alinement with said two vertical grooves, respectively, and are capable of moving out through said two vertical grooves whenever the desk cover is tilted upon said two forward fulcrum pins as a hinge.

3. In a desk, the combination of a desk body comprising the two parallel side pieces 1 and 2, each having the groove 7 therein from which groove two vertical grooves extend to the upper edge of the side piece; and the desk cover 13, having the four fulcrum pins 14, 14, 15, 16, each comprising in combination with the pin, an arm supporting the pin and a base plate by which it is mounted on the desk cover, all said fulcrum pins being mounted slidably in the grooves 7, 7, and so arranged that when the desk cover 13 pivots upon the fulcrum pins 14, 14, the fulcrum pins 15, 16, are movable out through the two rear vertical grooves, and when the desk cover 13 pivots on the fulcrum pins 15, 16, the fulcrum pins 14, 14, are movable out through the two forward vertical grooves.

4. In a desk, the combination of a desk

body having the two parallel side pieces 1 and 2, each provided with a groove 7, from which groove two vertical grooves extend to the upper edge of the side piece; the desk cover having the four fulcrum pins 14, 14, 15, 16, each comprising in combination the pin, an arm supporting the pin and a base plate by which it is secured to the desk cover, two brace rods pivotally mounted on the opposite sides of the desk cover, respectively, and each having a series of sockets in the edge thereof; and a stop pin in each side piece with which one of the brace rods is adapted to engage by

either of its sockets, said fulcrum pins being so located that when the desk cover pivots upon the fulcrum pins 14, 14, the fulcrum pins 15, 16, are movable out through the two rear vertical grooves, and when the desk cover pivots upon the fulcrum pins 15, 16, the fulcrum pins 14, 14, are movable out through the two forward vertical grooves.

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

LEONARD H. CAMPBELL.

Witnesses:

LUDGER A. BENOIT,
HOWARD A. LAMPREY.