(No Model.)

J. J. SCHMITT & M. W. DOUGHERTY.

WRITING DESK.

No. 319,133. Patented June 2, 1885.

Fig. 7.

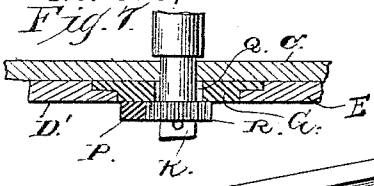


Fig. 1.

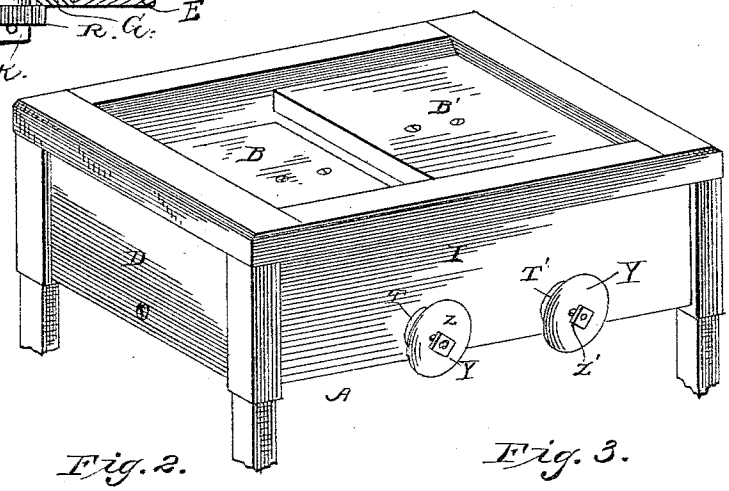
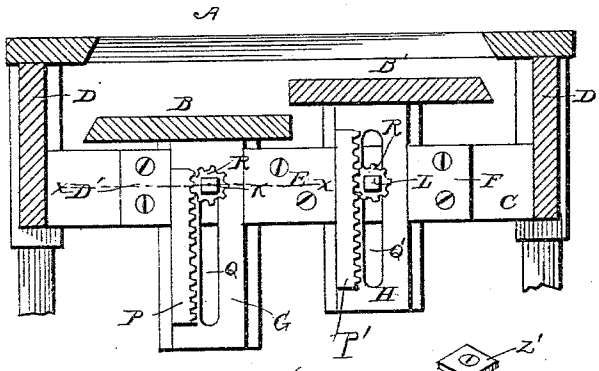


Fig. 2.

Fig. 3.



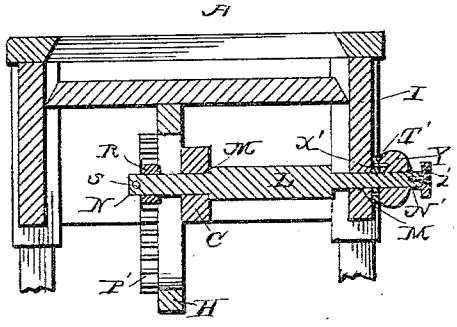


Fig. 4.

Fig. 5.

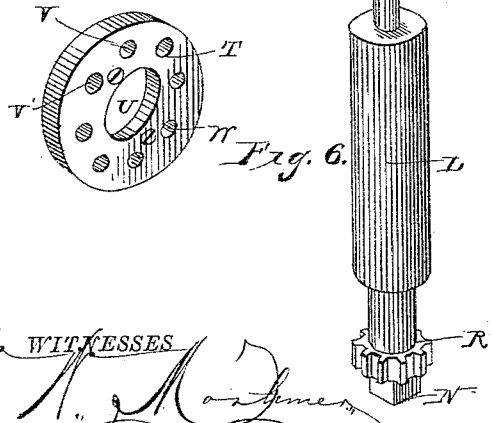
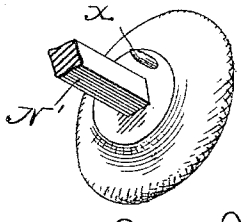


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN JOSEPH SCHMITT AND MICHAEL W. DOUGHERTY, OF WESTON, WEST VIRGINIA; SAID DOUGHERTY ASSIGNOR TO THOMAS MALASKEY, OF SAME PLACE.

WRITING-DESK.

SPECIFICATION forming part of Letters Patent No. 319,133, dated June 2, 1885.

Application filed August 4, 1884. (No model.)

To all whom it may concern:

Be it known that we, JOHN J. SCHMITT and MICHAEL W. DOUGHERTY, citizens of the United States, residing at Weston, in the county of Lewis and State of West Virginia, have invented new and useful Improvements in Writing-Desks, of which the following is a specification, reference being had to the accompanying drawings.

Our invention has relation to writing-desks designed to hold record and account books in convenient position for writing in them, and our object is to provide a simple and efficient desk for this purpose.

The invention consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of a desk embodying our improvements. Fig. 2 is a vertical longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail view of the keeper-plate. Fig. 5 is a detail perspective view of the knob by which the pinions are locked in the racks. Fig. 6 is a detail perspective view of one of the shafts. Fig. 7 is a horizontal section on the line *x x*, Fig. 2, showing more clearly the construction of the guide-blocks to form guideways for the standards.

Referring by letter to the accompanying drawings, A designates the frame of the writing-desk, which is provided with a divided top, the sections B B′ of which are independently movable, so that they may be adjusted vertically to cause them to occupy the same plane or different horizontal planes, as may be required.

C designates a longitudinal bearing-rail, which is secured in the end rails, D, of the frame of the desk, preferably at the middle portions thereof. To one face of this bearing-rail C are secured the flanged guide-blocks D′ E F, which form the ways in which the slotted standards G H work vertically when operated. The side rail, I, of the frame A is also a bearing-rail, and the two shafts K and L are supported in bearings M in said rails C and I. Those portions of the shafts K and L that rest in the bearings M are round, while their ends N N′, which project beyond said bearings, are rectangular in cross-section. The table-sections B B′ are secured to the upper ends of the slotted slides or standards G H, and these latter are provided with racks P P′ on their rear faces at one side only of their respective slots Q Q.

The rear ends, N, of the shafts K and L are provided each with a pinion, R, slipped on the rectangular portion of the shaft and held in place by a key, S. These pinions R R engage the racks P and P′, as shown.

The side rail, I, is provided with annular keeper-plates T T′, having central circular apertures, U U′, through which the front ends of the shafts K L project. These keeper-plates T T′ are secured to the outer face of the side rail, I, by screws, and are provided around their apertures U U′ with annular rows V V′ of perforations or seats W, for the reception of the locking-studs X X′ on the inner faces of the sliding knobs Y Y′, which are slipped upon the rectangular ends N′ of the shafts K L, and are prevented from being pulled off the shafts K L by collars Z Z′. By pulling upon the knobs they will be moved outward against the collars, and this movement will withdraw the locking-studs from their respective perforations, and the knobs may be turned to raise or lower the table-sections B and B′ in the desk-frame A as may be desired by turning the knobs to operate the pinions, which latter move the sections through the racks on the slotted standards. When at the proper elevations, the sections are locked in position by sliding the knobs back on the shafts and entering the locking-studs X X′ into the proper seats in the keeper-plates T T′.

The operation of the desk is very simple, and heavy books can be adjusted without much exertion. The book is placed on one section of the table and opened, when by lowering the section on which the thicker portion of the book rests the surface of the open book may be made level. Both sections are then lowered until the surface to be written on is level with the stationary portion of the top of the desk. By this construction the

surface of the book to be written on can always be kept level, no matter at what place the book is opened, and the writing can be performed without a book-rest, as the surface to be written on can always be brought to a level with the stationary portion of the desk-top by properly adjusting the sections B B'.

Prior to our invention it has been proposed to construct a writing-desk with adjustable table-sections which were provided with vertical racks engaged by pinions on the inner ends of horizontal shafts, the latter being turned by a handle or lever and having a spring-pawl for locking the same from further movement when the proper adjustment has been effected. We would therefore have it understood that we lay no claim to this construction. Our improvements are far superior in many respects to the crude and clumsy arrangement specified. We provide sliding knobs for turning the operating-shafts and holding the same from further movement when the proper adjustment of the table-sections has been effected, thereby dispensing with the use of a pawl and lever employed in the construction above mentioned, and providing a better substitute therefor. Other improvements are made, but this particular one seems to be the most important and serviceable for the end in view.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with the desk-frame having the bearing-rail provided with the flanged guide-blocks, of the slotted standards working vertically in the guideways provided in the guide-blocks, vertical racks provided on one of the faces of the standards, table-sections fitted to the upper ends of the standards, the shafts passing through the slot of the standards, and provided with a pinion engaging its rack, and knobs for operating the shafts and holding them in any position desired, as set forth.

2. The combination, with the desk-frame and the adjustable table-section moving in the same, of the standards to which the sections are fitted, the shafts operating the standards at one end and journaled in the desk-frame at the other end, keeper-plates attached to the desk-frame, and a knob sliding loosely on the extended ends of the shafts, and provided with locking means to engage the keeper-plates, arranged and operating as and for the purpose set forth.

3. The combination, with the desk-frame, the adjustable table-sections, and the standards to which they are fitted, of the shafts for operating the standards, knobs sliding over the ends of the shafts and capable of rotating the same, keeper-plates fitted to the desk-frame, and pins or studs provided on the sliding knobs to engage the said plates when said knobs are pushed inward, as set forth.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

JOHN JOSEPH SCHMITT.
MICHAEL W. DOUGHERTY.

Witnesses:
H. H. SMITH,
THOMAS P. MARTIN.