T. REDMAYNE.

SCHOOL-DESK.

No. 169,478. Patented Nov. 2, 1875.

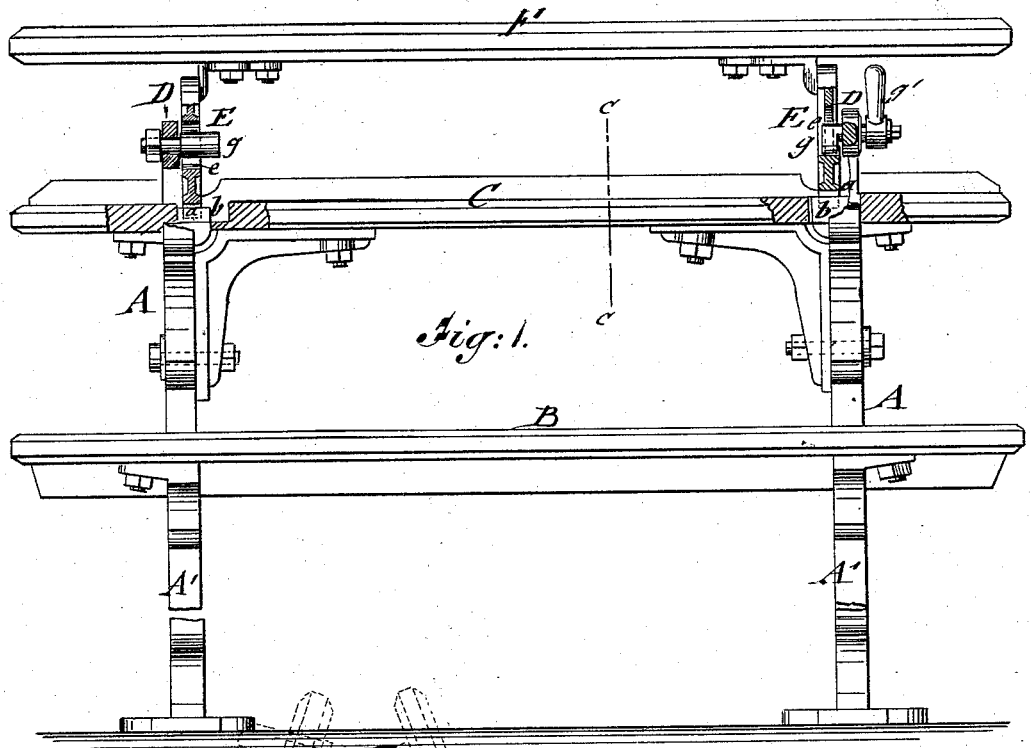

Fig: 1.

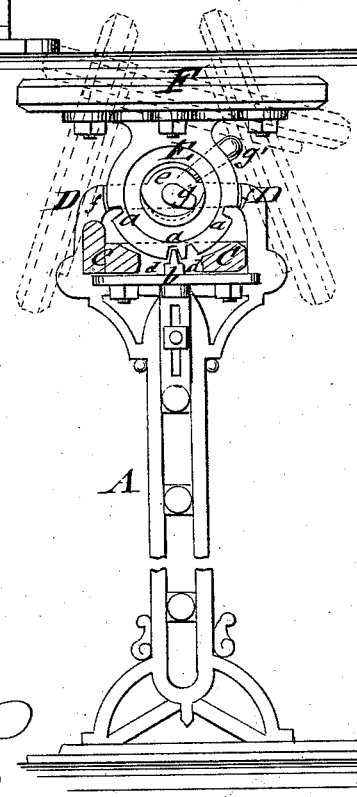

Fig: 2.

WITNESSES:

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THOMAS REDMAYNE, OF SHEFFIELD, ENGLAND, ASSIGNOR TO WILLIAM REDMAYNE.

IMPROVEMENT IN SCHOOL-DESKS.

Specification forming part of Letters Patent No. **169,478**, dated November 2, 1875; application filed July 17, 1875.

To all whom it may concern:

Be it known that I, THOMAS REDMAYNE, of Sheffield, in the county of York, England, have invented a new and useful Improvement in School-Desks, of which the following is a specification:

The invention relates to improvements in school-desks, by which the board or plane surface which forms the desk is capable of being adjusted and fixed either in a horizontal position, to serve as a table, in a slightly-inclined position, to serve as a desk, or in a nearly vertical position, to serve as a back to the seat, which is ordinarily arranged in connection with such desks.

It is also applicable to music-stands and other similar articles, in which the angle of a board or plane surface is required to be altered.

The invention consists in mechanism for adjusting and altering the angle of the desk, and also of mechanism for locking or fixing the board or desk when it has been adjusted in the required position, so that it cannot be altered, except by releasing the locking mechanism.

In the accompanying drawing, Figure 1 represents a front elevation partly in vertical transverse section, and Fig. 2 an end elevation, partly in section on line *c c*, Fig. 1, of my improved school-desk.

Similar letters of reference indicate corresponding parts.

A in the drawing represents a frame or standard for carrying the desk, which, if a seat is used in conjunction therewith, is connected by the broader base-plate with another standard, A′, of lesser height, and of such shape that the lower one serves to support the seat. The standards and connecting base-plate may be made of any suitable material, such as metal or wood, but I prefer to make them of cast-iron. Where the desk and seat are of moderate length standards are arranged at or near both ends of the same; but where they are of greater length additional standards are placed at one or more points between the end standards.

When the invention is applied to a music-stand, reading-desk, or similar article of short length, the central single standard only is necessary.

The seat B is attached to a T-piece, bracket, or arm at the top of the lower of the two standards, which is constructed of such height that it suits the children or other persons that are to use the desk. At suitable distance below the top of the desk-standards A is arranged a bracket-frame, to which a book-shelf, C, is applied by fastening-screws or otherwise. Above the book-shelf is arranged, as part of the standard A, a frame-work or support, D, that secures in a recess at the inner side the wheel E, which is provided with notches *a* at its circumference. Below the wheel, and at a central point of standard, A, on the bracket-piece carrying the book-shelf, is arranged a tooth, stud, or catch, *b*, that projects through a slot, *d*, of the book-shelf. The tooth *b* fits into the notches *a* of the wheel when the same is turned to drop thereon. The wheel E is made of any convenient diameter, not greater than the width of the top of the standard, and does not turn upon any pin or center, but has a large circular central aperture, *e*. At opposite points of the wheel are formed, by the recess of support D, lugs *f*, that are at a level slightly below that of the center of the wheel, and in such a position that, when the wheel is forced down with one of its notches on the tooth, the lugs bind at opposite points on the wheel, and retain the same perfectly firm and free from shaking. By raising the wheel vertically sufficiently to disengage the tooth from the notch it can be turned round until either of the notches is above the tooth, and when again forced down it is held as firmly in its new position as before. The desk-board F is bolted or fixed to a top bracket of the wheel E, and its position altered with the turning of the wheel, so that it can be set either into a horizontal position, to serve as a table, or in inclined position, to serve as a desk, or in nearly vertical position, to serve as a back to the seat, or in any other desired position, a suitable notch being made upon the circumference of the wheel to correspond with such position. No central pin or bearing at all is used for the wheel, as the desk can be

readily lifted and be turned with great ease, and without friction into any position.

In order to prevent the wheel or wheels from being lifted completely out of the frame-work of the top of the standard, a pin or stud may be fixed to the same in such a position as to be in the center of the wheel when the latter is pressed down in its position; but the pin or stud has to be made of such a diameter that the wheel can be raised until completely disengaged from the tooth before the circumference of the central aperture in the wheel touches the pin. The central pin may also be made with a cam, *g*, for forcing down the wheel on the locking-tooth by revolving the same by a fixed or detachable handle, *g'*, which, if turned, carries the cam down on the lower side of the central hole, and locks thereby the wheel into position on the tooth. When the handle and cam are turned back the wheel is released, and can be turned as required.

In place of this mechanism a pivot-pin with cam and handle may also be attached to the wheel, and turned against the central pin for locking the wheel. The desk-board is thus locked with great firmness in any one of its positions, and its angle altered easily by raising it vertically for adjustment. When fixed firmly in any position it cannot be altered without the possession of a proper handle or key for the purpose. The ink-vessels have to be so fixed into the desks and constructed that they cannot be detached from the same, and close hermetically, preventing the falling out of the vessel, and the spilling of the ink.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination of a desk-board, attached to an adjusting-wheel with central aperture and notches at the circumference, with a recessed support or frame-work of the desk-standard, and with a central tooth or stud of the same, so that the wheel is held firmly at any point of its circumference, and adjusted by being vertically raised from the tooth, substantially as and for the purpose shown and described.

2. The combination of the wheel of the desk-board, swinging in the support of the main standard, and fitting on the tooth or stud, with a locking-device for holding the notched wheel rigidly in contact with the detent or tooth, substantially as and for the purpose shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS REDMAYNE.

Witnesses:

EDWARD WATKINSON,

JOSEPH DAWSON.