(No Model.)

H. J. COLBURN.

SCHOOL DESK.

No. 277,545. Patented May 15, 1883.

Fig. 1.

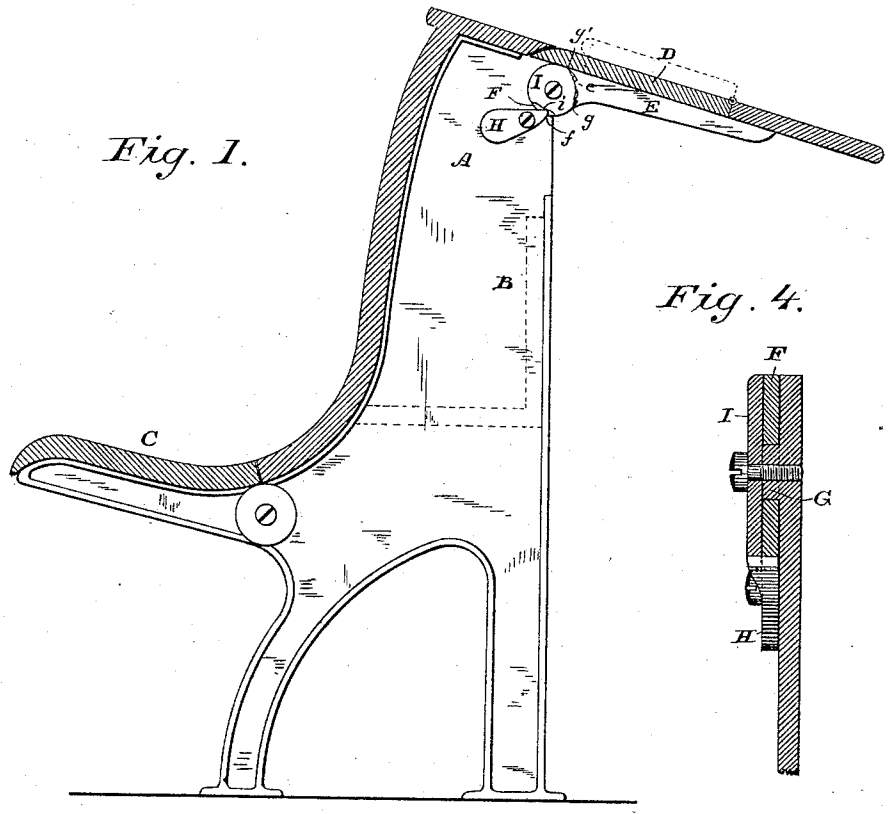


Fig. 4.

Fig. 2.

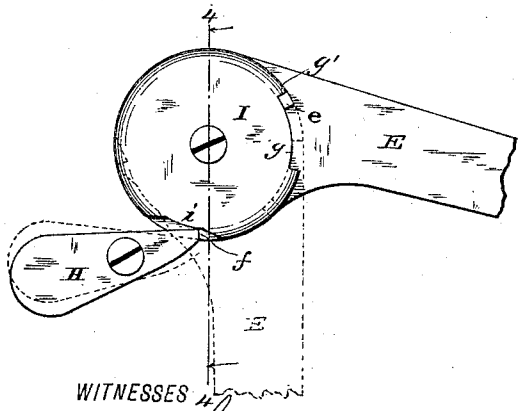
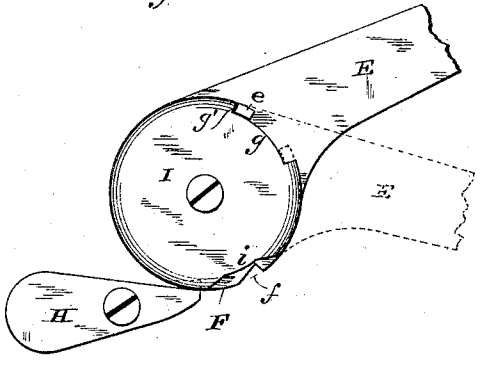


Fig. 3.



WITNESSES

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Wm J. Tanner

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N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

HENRY J. COLBURN, OF TOLEDO, OHIO, ASSIGNOR TO HIMSELF AND HERBERT BAKER, OF SAME PLACE.

SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 277,545, dated May 15, 1883.

Application filed April 8, 1882. (No model.)

To all whom it may concern:

Be it known that I, HENRY J. COLBURN, of Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in School-Desks, of which the following is a specification.

My invention relates to that class of desks known as "folding-leaf" desks, in which the leaf or table may at pleasure be either lowered from its normal inclined or horizontal working position, so as to hang vertically or be raised and locked in position merely by raising and lowering the leaf. Desks of this character are more especially designed for school use, as they afford more space for the students to enter and leave their seats, and give more room for the movement of the students when the desks are not in use. The leaf or table, when lowered, also serves as a cover to close the book-box, which is located beneath it.

The first part of my invention consists in a simple and reliable device for attaching the leaf to the desk-frame, so that it may be raised and lowered at pleasure, as above mentioned, merely by rocking or moving the leaf up and down. This part of my invention may be applied to various classes of desks, brackets, folding tables, and other articles where it is desirable to have a leaf or table which may be raised and lowered.

The second part of the invention consists in forming the leaf or table of a desk of the character shown in the drawings in two parts hinged together, so that the outer portion or section may be folded over onto the section that is hinged to the frame, when the leaf is raised and lowered, so that it will not interfere with the knees of the person at the desk. This part of my invention is designed for school-desks which are arranged side by side in close rows.

In the accompanying drawings, Figure 1 is a vertical section through a school-desk, showing my improvements applied thereto. Figs. 2 and 3 are detail views of the device which permits the raising and lowering of the leaf, and Fig. 4 is a section on the line 4 4 of Fig. 2.

The desk-frame A is provided with the usual book-box, B, and the folding seat C, for the occupant of the desk next in front. This seat may be hinged in the same manner that the leaf of the disk is, as will be hereinafter described, or in any other suitable manner.

The leaf D of the disk is secured to the brackets E, which are formed with circular enlargements F, having bearings on the hubs G on the frame. The enlargement F is provided with a notch, *f*, in which a catch, H, engages to lock the leaf in its working position, as will be described. This catch is shown as consisting of a gravity-pawl; but a spring-pawl, sliding bolt, or any other suitable device may be used.

A disk or plate, I, the edge of which coincides with that of the annular enlargement F of the bracket, turns on a bolt projecting centrally from the hub G, and is held against the end of the hub with sufficient friction to prevent its rotation, except when forced around by the pin *e* on the bracket, which works in a recess, *g*, in the periphery of the disk. The disk is cut away at *i*, so that when that portion of the disk coincides with the notch *f* in the annular enlargement of the bracket the catch H can drop into the notch and lock the leaf in its elevated position. The parts are so arranged that when the pin *e* is against the upper shoulder, *g'*, of the recess *g* in the disk the cut *i* will coincide with the notch *f* and permit the catch H to drop into the notch, and when the pin is against the opposite shoulder of the recess the full unbroken edge of the disk will be over the notch and prevent the catch from entering it. Now, in raising the leaf, the pin *e* will rest against the shoulder *g'* and force the disk to move with it, leaving the notch *f* exposed, so that when the leaf has reached the proper point the catch will fall into the notch, and thus lock the leaf in its elevated position. To lower the leaf it is first raised a short distance, the disk being carried around by the pin *e*, and the catch riding out of the notch *i*, then, as the leaf is lowered, the disk remains stationary until the pin strikes the lower shoulder of the recess; but by this time the notch *f* has passed under the unbroken edge of the disk and the catch is prevented from entering it, so that the leaf may be lowered to its vertical position.

The different positions of the parts in raising and lowering are shown in full and dotted lines in Figs. 2 and 3. If it is desired to hold the leaf in more than one elevated position, other notches *f* should be made in the bracket, and the recesses *i* and *g* correspondingly lengthened in order to give the requisite range of movement, as will be understood.

The details of the device above described may be varied in some respects without departing from my invention. For instance, the disk might be held by a friction-spring instead of by frictional contact with the hub; or a pivoted plate, not disk-shaped, may be employed. These, as well as other changes, will readily suggest themselves to skilled persons.

The second part of my invention is illustrated in Fig. 1, where it will be seen that the leaf D is made in two sections, and that the outer section, D′, is hinged at *d*, so that it may be folded up, as indicated in dotted lines, when the leaf is raised or lowered, in order that it will not interfere with the knees of the occupant of the desk. This is peculiarly useful in desks of the character shown—that is, where the front of the desk forms a seat for another desk. Such desks are used in schools, and are placed in rows close together; and it is important that the student should be able to lower the leaf of his desk without turning or moving in his seat.

I am aware that a folding jointed leaf is, broadly, old, and I do not therefore claim it, but limit myself to the particular organization shown.

What I claim as my invention is—

1. The combination, substantially as set forth, of a hinged leaf-supporting bracket, a bearing on which it turns, a catch which dogs or locks the bracket in an elevated position, a disk or plate placed over the notched enlargement of the leaf-supporting bracket, and means whereby the plate is intermittently moved by the raising and lowering of the bracket to alternately expose and cover the notch in the bracket, and alternately permit and prevent the engagement of the catch in the notch.

2. The combination, substantially as set forth, of the leaf-supporting bracket, its annular notched enlargement, the hub or bearing on which the bracket turns, the catch which locks the bracket, the recessed disk or plate which alternately exposes and covers the notch in the bracket, and the pin on the bracket which works in the recess in the plate.

3. The combination, substantially as set forth, of the leaf-supporting bracket, its notched annular enlargement, the catch which engages in the notch, the hub or bearing on which the bracket turns, the intermittently-movable disk or plate cut away at *i* and recessed at *g*, and the pin on the bracket which works in the recess in the disk.

In testimony whereof I have hereunto subscribed my name this 31st day of March, A. D. 1882.

HENRY J. COLBURN.

Witnesses:
RUFUS H. BAKER,
WM. BAKER.