

*B. W. Arnold,*

*School Desk.*

*No. 97,338.*

*Patented Nov. 30, 1869.*

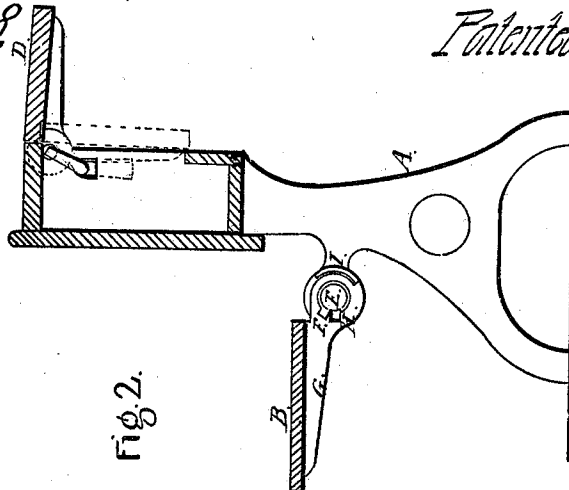


Fig. 2.

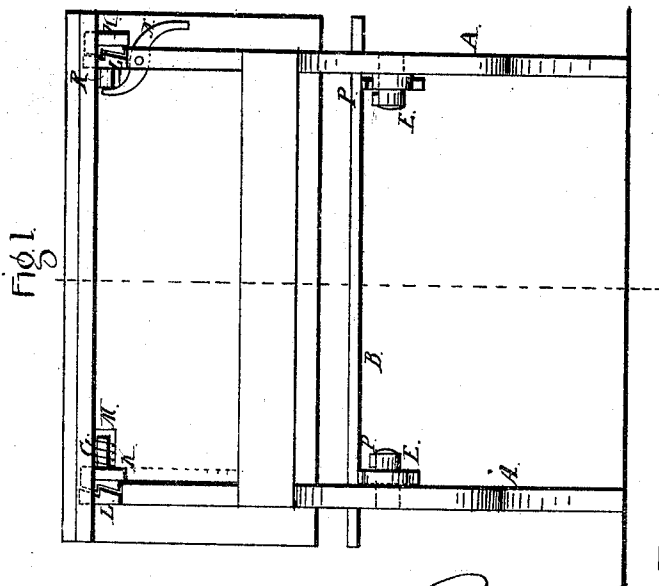


Fig. 1.

Witnesses:

*E. Wolff*

*Brooks*

Inventor:

*B. W. Arnold*  
PER *[Signature]*  
Attorney

# UNITED STATES PATENT OFFICE.

B. W. ARNOLD, OF DES MOINES, IOWA.

## IMPROVED SCHOOL-DESK AND SEAT.

Specification forming part of Letters Patent No. 97,338, dated November 30, 1869.

### *To all whom it may concern:*

Be it known that I, B. W. ARNOLD, of Des Moines, in the county of Polk and State of Iowa, have invented a new and Improved School-Desk and Seat; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in combined desks and seats for use in schools, such as have the desks arranged upon the backs of the frames for the seats, and are arranged for folding the seats up and desks down.

The invention consists in certain improvements in the hinge-joints for both the seat and the desk, as hereinafter described.

Figure 1 is an elevation of my improved desk and seat as seen looking from the side of the desk, and Fig. 2 is a transverse sectional elevation.

Similar letters of reference indicate corresponding parts.

A A are the end frames, which are commonly made of cast metal. B is the seat, and D the hinged part of the desk.

My improvement in the hinges for the seat consists in casting the pivot-pins E together with the end frames, and arranging projections F for holding the arms G, which are provided with notches H, opening into the eyes, which hook on the pins, to permit the arms to be engaged with the pins, by passing the said projections through the notches, when the pins enter the eyes of the arms, whereby, after the arms are secured to the seats, the end frames are bound together through the pins, arms, and seats, so as to be thoroughly braced against lateral strain on either one or on the seat. Moreover, the pins, thus joined to the end frames, constitute very strong and durable joints, which may be put together without any fitting, the whole being formed in casting the end frames and the seat-arms. Stops I are provided in the usual way, for holding the seat when let down to be occupied.

The improvements in the joints for the desk

consist in providing ears K on the arms with rose-clutch notches and corresponding clutch-disks, L, on the frames A, for holding the desk in the elevated position; also, in arranging the desk to slide laterally, to disengage or engage the clutches, and providing a spring, M, for holding them in engagement, and a lever, N, for throwing them out to let the desk fall. One of the pins, O, is attached to the frame A, and the ear of the disk-arm slides on it. The other pin, P, is connected to the ear of the disk-arm, and slides with it. The spring M is connected to the outer end of the pin O, and bears against the seat-arm, so as to hold them constantly in engagement with the frames. The lever N is pivoted in the end frame, and bears at its inner end against the pin R, connected to the desk, the other end projecting outside of the frame in a position where it may be readily taken in the hand for working it. When the desk D is raised up, the spring will force the clutches together, and for letting it down the lever is pressed against the pin P and the clutches forced out of connection.

To admit the lateral movement of the desk, the arms are placed on the same sides of the end frames.

The lever N may in some cases be dispensed with, and the movement against the spring may be effected by pressing on the part D.

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

1. A hinged seat, B, having recess H therein, in combination with a bracket having pivot-pin E, forming a part thereof, both being constructed and operating together as described.

2. The part D of the desk jointed to the end frames, so as to slide in the direction of the axis of the joints, arranged to clutch with the end frames, and provided with the spring M, and either with the lever N or not, substantially as specified.

B. W. ARNOLD.

Witnesses:

W. O. CURTISS,  
J. H. BROOKS.