

(No Model.)

2 Sheets—Sheet 1.

J. F. FIELD.
SCHOOL DESK.

No. 582,465.

Patented May 11, 1897.

Fig. 1.

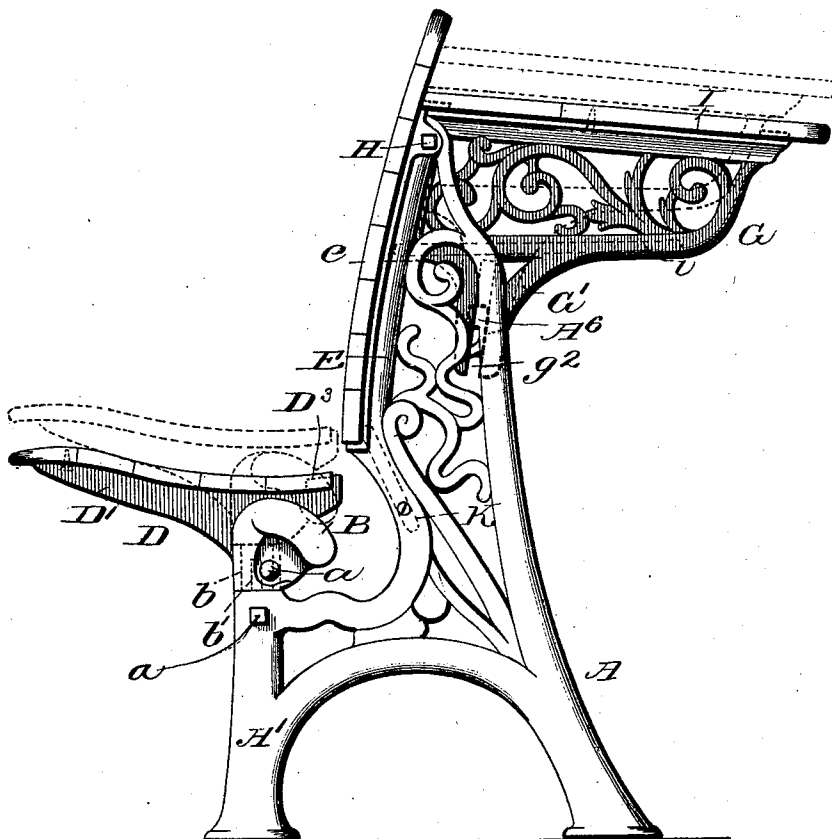
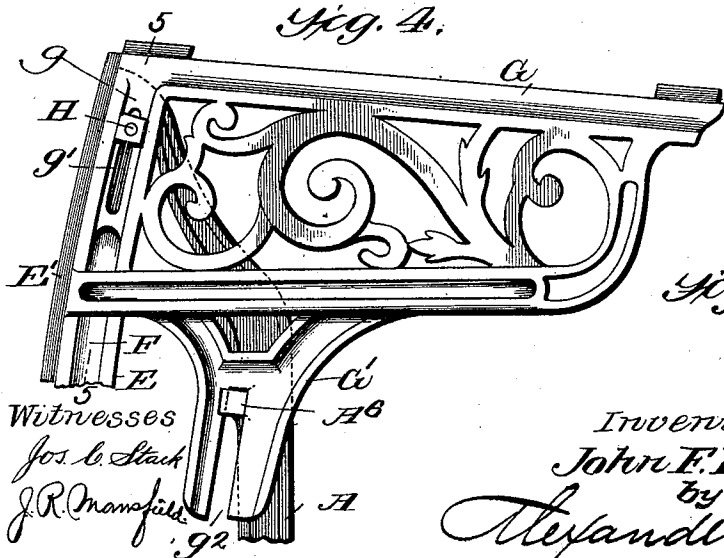
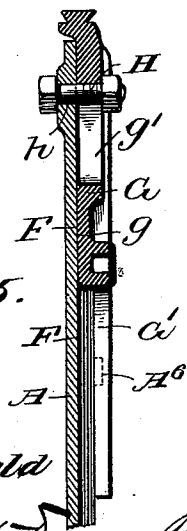


Fig. 4.



Witnesses
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Fig. 5.

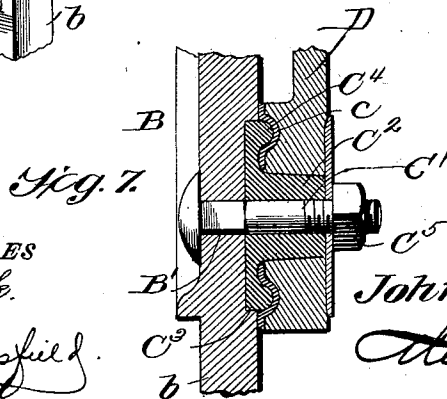
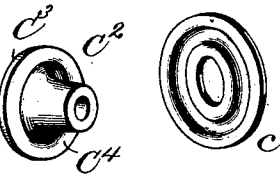
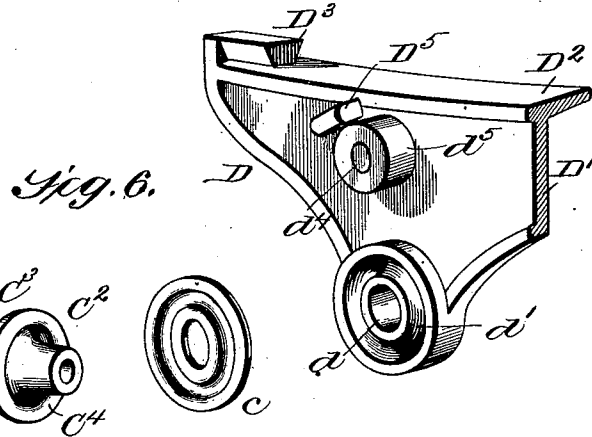
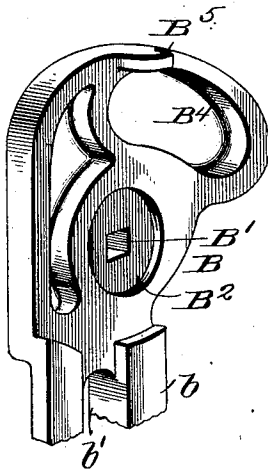
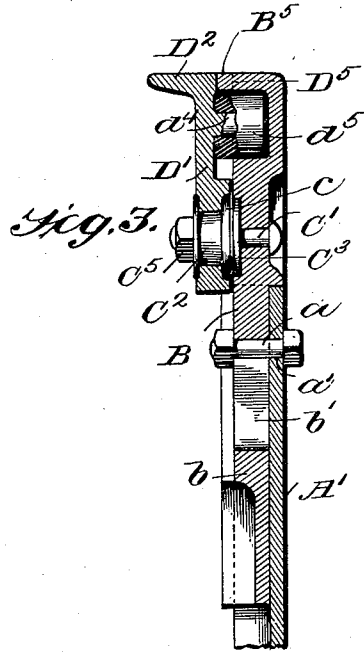
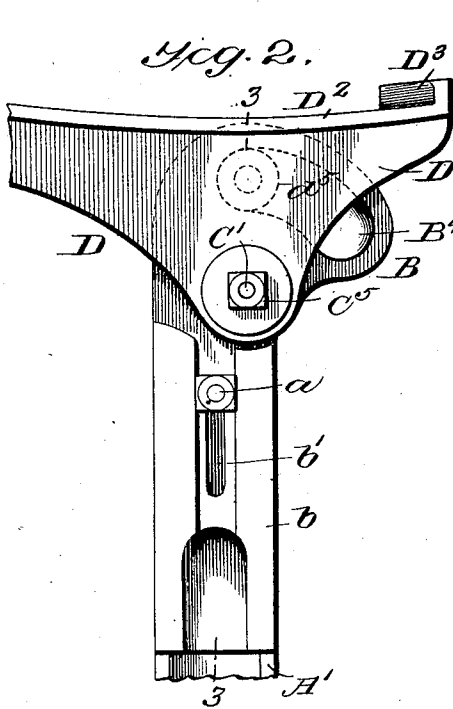


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SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 582,465, dated May 11, 1897.

Application filed June 8, 1896. Serial No. 594,717. (No model.)

To all whom it may concern:

Be it known that I, JOHN FRANKLIN FIELD, of Muskegon, in the county of Muskegon and State of Michigan, have invented certain new and useful Improvements in School-Desks; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

This invention is an improvement in school desks and seats; and its principal objects are, first, to make the seat vertically adjustable, so that it can be arranged to suit the occupants, and, second, to make the box or desk top vertically adjustable, so that it can be arranged to suit the users.

Other objects are to improve the seat-hinge and other minor details of the desk.

The invention consists in the novel construction and combinations of the parts of the desk hereinafter summarized in the claims, and the accompanying drawings illustrate a desk embodying my improvements.

Figure 1 is a side view of the desk, showing the seat and top in lowest position in full lines and elevated in dotted lines. Fig. 2 is an enlarged inside view of the connection between the seat and standards. Fig. 3 is a transverse section on line 3 3, Fig. 2. Fig. 4 is an enlarged inside view of the connection between the desk-top and standard. Fig. 5 is a transverse section on line 5 5, Fig. 4. Fig. 6 is a view of the parts of the hinge-joint of the seat to the standard separated. Fig. 7 is a transverse section through the seat hinge-joint with parts assembled.

Referring to said drawings by letter, A A designate the main side frames or standards of the desk, which may be ornamented in any desired manner. These standards have short front legs A', to which the seat-hinges are attached, said legs being concaved or grooved on their inner sides to receive the shank b of hinge-castings B, which are formed to fit neatly in the legs A' and can be slid up and down therein and are fastened thereto by means of bolts a, which are passed through openings a' in legs A' and through vertically-elongated slots b' in shanks b, (see Figs. 2 and 3,) so that the hinge-castings can be adjusted vertically up or down several inches.

The head of the hinge-casting B has a square opening B' in it just above shank b for the passage of a bolt C', and on this bolt is slipped a short journal-sleeve C², which has a flange C³ on its end, fitting into an annular recess B² in casting B, said flange having an annular bead C⁴ on its inner face to engage the corresponding recess d' in the seat portion D of the hinge, around socket d therein, adapted to fit on the sleeve C² when the parts B D of the hinge are properly placed together.

The bolt C' is engaged by a nut C⁵, by which means the parts are securely held together. (See Fig. 7.)

A corrugated washer c, of thin metal, may be placed between bead C⁴ and recess d', as shown, to reduce wear thereon.

The seat portion D of the hinge has a web portion D', which underlies and supports the seat, said portion having a reinforcing rib or flange D² on its upper edge, at the rear end of which is a dovetailed lug D³, adapted to engage a corresponding recess in the rear board of the seat, and thus fasten the latter to the portion D, while the front board of the seat can be secured by screws, as indicated in the drawings. Part D also has a lateral outwardly-projecting stud d⁴ on its outer face, which works in an arc-shaped groove B⁴ in the inner face of casting B and limits the movement of the seat on part B. Stud d⁴ is surrounded by a cylinder d⁵ of rubber, which acts as a buffer and deadens the noise and shock of the impact of the stud against the ends of the groove.

As an additional precaution part D has a lug D⁵ on its outer face, adapted to engage a shoulder B⁵ on the inner face and upper edge of part B when the seat is lowered, thereby positively limiting the downward movement of the seat.

From the foregoing description and drawings it will be seen that the seat can be adjusted vertically on the frame by loosening bolts a, and then locked when adjusted by tightening said bolts, and that castings B form part of the standards for the seat and part of the hinge connection thereof to the main standards.

The standards A have the usual or other desired back-attaching construction on the

edge adjoining the seat, this edge E being preferably provided with a dovetailed rib E', fitted into dovetailed grooves in the back boards *e* of the desk. In the upper ends of 5 frames A, just in rear of the seat, are grooves F, into which fit corresponding ribs *g* on the edge of the top-supporting castings G, which are formed separate from the side frames.

Bolts H, passed through openings *h* in the 10 upper ends of frames A and through elongated slots *g'* in ribs *g*, secure the castings G to the side frames. The castings G also have depending portions G', which are slotted at *g''* to engage T-lugs A⁶ on the inner sides of 15 frames A, below and in rear of bolts H.

The top I and box-bottom *i* are attached to and between the castings G, as shown.

By loosening bolts H the top can be raised, having a vertical adjustment of several 20 inches, and when bolts H are fastened the top is securely held in position. The portions G' and lugs A⁶ prevent the castings G swinging on bolts H and render the structure solid and substantial.

25 The standards A may be rigidly secured together both by the back *e* and a cross-tie K, which is put in place first of all and facilitates the putting together of the desk.

The seat and desk portions are thus independently adjustable and can obviously be 30 adjusted to suit the occupants and users, and thus enable the children to be comfortably and properly accommodated.

Not only are the seat and top adjustable, 35 but they can be easily removed from the standards without taking the latter apart. In this manner room can be economized in storing and packing the desks for transportation.

Having thus described my invention, what 40 I therefore claim as new, and desire to secure by Letters Patent thereon, is—

1. The combination with the standards having their upper ends grooved substantially as described; with the top castings G having a 45 portion *g* adapted to fit the grooved portions of the standards, and slotted as at *g'*, and also having depending slotted portion G' engaging a lug A⁶ on the standards whereby rock-

ing of the top is prevented; with means for fastening part *g* to the standard, substantially 50 as and for the purpose described.

2. The combination of the casting B having opening B', recess B², and groove B⁴, and the piece D having socket *d*, recess *d'*, and stud *d''*; with the bolt C', and the journal- 55 sleeve C², having flange C³, and the washer *c*, all substantially as and for the purpose described.

3. The combination with the standards, the vertically-adjustable castings B attached 60 thereto, having opening B', recess B², groove B⁴ and shoulder B⁵; and the seat-hinge casting D, having socket *d*, recess *d'*, stud *d''*, and lug D³; with the bolt C' uniting parts B, D, the sleeve C² on said bolt having flange C³, and 65 the annular washer *c*, all substantially as and for the purpose specified.

4. The combination of the standards A, having vertical grooves F and lugs A⁶; with the castings G having slotted ribs *g* on them, fitting 70 grooves F and depending portions G' on their lower edges engaging lugs A⁶, and the bolts transfixing the slotted ribs and securing them to the standards; with the desk top or box secured to said castings G, for the purpose 75 and substantially as described.

5. In a desk the combination of the standards A, having short grooved legs A', and grooves F in their upper ends and lugs A⁶, the back *e* rigidly attached to said standards; the 80 castings G having ribs *g'* engaging grooves F and having slotted portions G' engaging the lugs A⁶, and the desk or box secured to castings G; with the castings B having slotted portions *b*, adjustably attached to the grooved 85 front legs A'; the seat-supporting castings D hinged to castings B, and the seat attached to castings D, all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as 90 my own I affix my signature in presence of two witnesses.

JOHN FRANKLIN FIELD.

Witnesses:

WILLIAM W. BARCUS,
H. A. STAFFORD.