

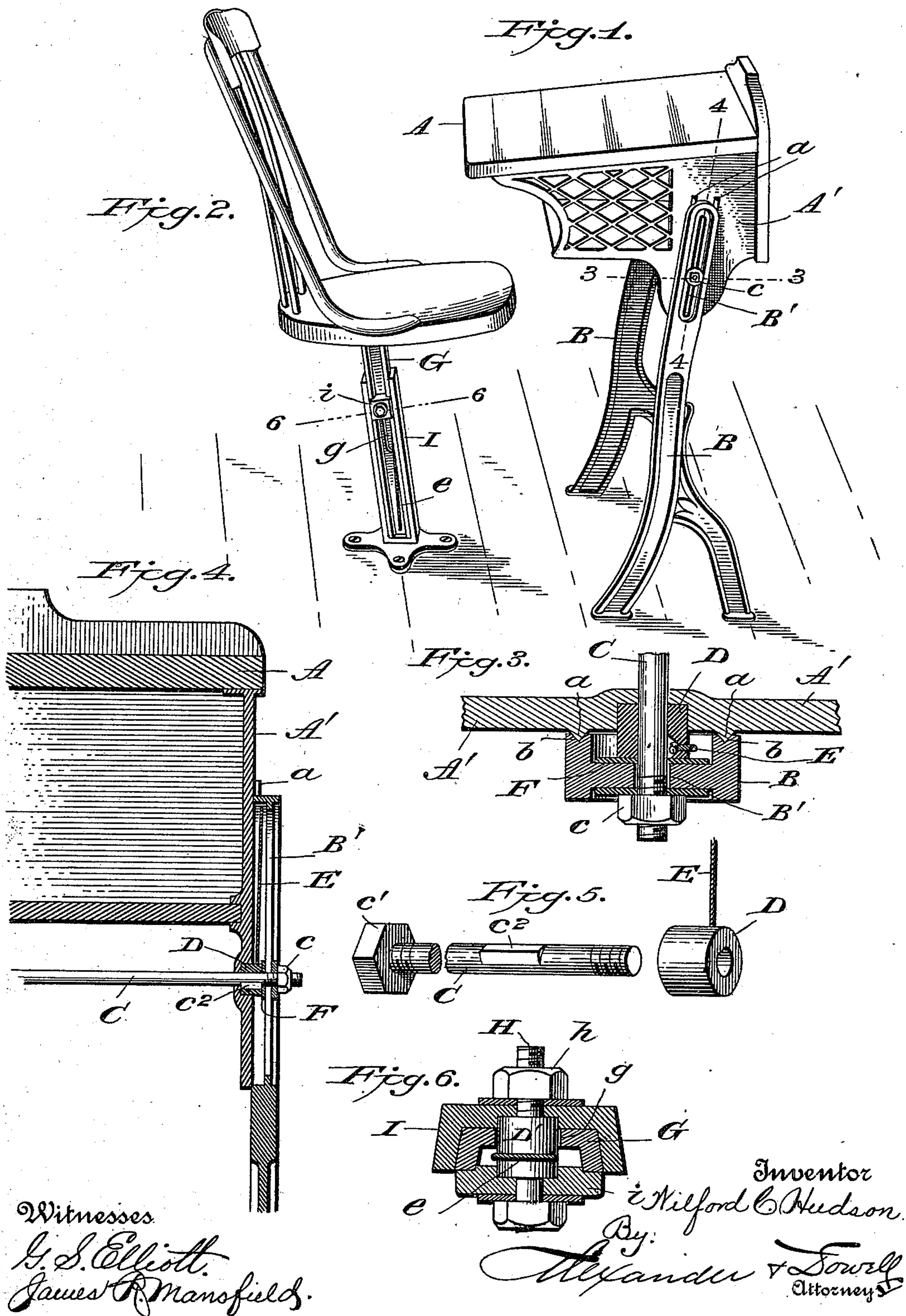
No. 669,482.

Patented Mar. 5, 1901.

W. C. HUDSON.
SCHOOL FURNITURE.

(Application filed July 11, 1900.)

(No Model.)



UNITED STATES PATENT OFFICE.

WILFORD CUSIC HUDSON, OF ATHENS, OHIO.

SCHOOL FURNITURE.

SPECIFICATION forming part of Letters Patent No. 669,482, dated March 5, 1901.

Application filed July 11, 1900. Serial No. 23,260. (No model.)

To all whom it may concern:

Be it known that I, WILFORD CUSIC HUDSON, of Athens, in the county of Athens and State of Ohio, have invented certain new and
5 useful Improvements in School Furniture; 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.

10 This invention is an improvement in adjustable school furniture—such as desks, chairs, &c.—and has particular reference to the adjusting devices whereby the desk or chair, or both, may be readily and quickly adjusted to
15 suit the height of the pupil, and the adjustment can be performed with great ease with the pupil in the seat.

The invention therefore consists in the novel details of construction and combinations of parts, which will be hereinafter summarized in the claims, and the accompanying drawings illustrate both a desk and seat or chair embodying the invention, the means for
20 adjusting the fixed and movable parts of the desk and of the chair being substantially alike; but in one case the cable take-up is journaled in the movable part and in the other case it is journaled in the stationary part, this being, however, a matter of choice
25 with the constructor.

I will now describe the invention in detail, referring to said drawings, in which—

Figure 1 is a perspective view of a desk, and Fig. 2 a similar view of a seat, embodying my invention. Fig. 3 is an enlarged section on line 3 3, Fig. 1. Fig. 4 is a vertical
35 section on line 4 4, Fig. 1. Fig. 5 is a detail perspective of the pulley and a portion of the rod detached. Fig. 6 is a transverse section
40 on line 6 6, Fig. 2.

The desk is constructed with a movable top portion A, supported on fixed standards B B, which parts, as shown, are preferably of the usual construction except that each top side
45 casting A' is provided with two substantially vertical parallel ribs or projections *a a*, which engage corresponding guideways *b b* in the inner sides of standards B B. These projections and ribs prevent the top A rocking on
50 the standards and prevent shearing off the fastening-bolts, thus increasing the durability of the structure and making it more rigid.

Each standard B is provided with an elongated slot B' near its upper end, through which passes the ends of a securing-rod C, 55 which is journaled in the sides A' of the top and extends through both standards and is provided with a nut *c* at one end and a head *c'* at the other. On the rod C, beside each slot B', is fixed a pulley or enlargement D, 60 which is concealed between the side flanges of the standards. For convenience in assembling the parts pulleys D may be made separate and slipped on the ends of rod C and kept from rotating thereon by engaging keys or
65 angular shoulders *c''* on the rod, as shown.

To each pulley D is fastened one end of a wire cable E, the other end of which is secured in an opening in the standard B near the upper end of the slot B' or is secured to 70 the standard in any other suitable manner. The pulleys being secured on the rod C and the latter being journaled in the sides of top A', the top can be readily adjusted by first loosening the nut *c*, thus relieving the pressure or friction on the sides of the standards, 75 and then turning the rod by a wrench or in other suitable manner revolving the pulleys D and winding up the cable, and thereby raising the top of the desk, the cables pulling 80 up the rod and top in which it is journaled. By reversing the movement of the rod the weight of the top carries it downward. When properly adjusted, the nut *c'* is again tightened, binding the parts securely in position. 85 Washers F are placed between the pulleys D and the standards to increase the frictional clamping-surface. It will be observed that the standards incline toward the front, so that when the desk-top is raised it also moves farther from the chair. The chair-seat is also 90 raised and lowered in the same manner as the desk, only in this instance the pulley is journaled in the fixed part or seat-standard and the slot is in the movable part or seat-shank. 95

The movable seat-casting G is provided with an elongated slot *g*, through which passes a bolt H, journaled in the standard I, said bolt transfixing a plate *i*, that embraces the outer upstanding flanges of the movable 100 seat-casting. The pulley D' is fixed to bolt H, between plate *i* and standard I, and works in slot *g*.

The stationary support I is provided with

side flanges between which the seat-casting G slides.

In the chair construction one end of cable E is fast to the pulley D', journaled in the fixed part, and the other end is fastened to the movable part G. By turning bolt H the cable is wound about the pulley and raises the seat-casting to the proper height. Then the bolt is tightened by means of the nut h, thereby clamping the castings firmly together.

Obviously, if desired, the seat may be raised by the same means as shown for adjusting the desk, or the desk might be raised by the same means as shown for adjusting the seat—that is, it is a matter of preference whether the cable take-up be journaled in the fixed or in the movable part.

Having thus described my invention, what I claim as new is—

1. In an adjustable support for school furniture, the combination of the stationary and movable members, a shaft or bolt connecting said members and journaled in one of them, and adapted to play in a slot in the other member, and a cable one end of which is secured to said shaft and the other end fastened to the other member, and means for clamping said members together, substantially as described.

2. In an adjustable support for furniture, the combination of the movable and stationary parts thereof, a revoluble shaft or bolt journaled in the movable part of said support, said stationary part being slotted for the purpose of permitting the shaft to play therein, a cable having one end attached to the stationary part of said support and its opposite end wound about said shaft or bolt and means for clamping said shaft or bolt.

3. In an adjustable support for school furniture, the combination of a stationary and a movable member, one member provided with a slot and the other member provided with bearings for a shaft, a shaft extending through both the stationary and movable members,

and a pulley fixed on said shaft; with a cable having one end attached to said pulley and the other end connected to one of said members whereby one of the parts may be adjusted, substantially as described.

4. In an adjustable support for school furniture, the combination of the opposite standards having slots substantially as described, the desk-top castings, and a shaft journaled in said top castings with its ends projecting through the slots in the standards; with cables attached to said shaft and to said standards, whereby the desk-top may be adjusted, and nuts on said shaft for clamping the parts, substantially as described.

5. In an adjustable support for school furniture, the combination of the opposite standards having slots substantially as described, and the desk-top castings, and interlocking guide ribs and grooves on said standards and castings; with a shaft journaled in the top castings, and projecting through the slots in the standards, and the cables attached by one end to the shaft and by the other end to the standard, substantially as described and for the purpose set forth.

6. In an adjustable support for school furniture, the combination of the desk-top casting having ribs or projections, and the standards each having an elongated slot and grooves at the sides of the slots for the accommodation of said ribs or projections; with a shaft journaled in said top-castings and projecting through the slots in the standards, pulleys on said shaft, and cables attached to the pulleys and the standard, whereby upon rotating the shaft the top may be raised or lowered, substantially as described.

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

WILFORD CUSIC HUDSON.

In presence of—

CLARA MILLS,
GRACE CURTIS.