(No Model.)

F. R. BEAL.

SCHOOL SEAT.

No. 475,076. Patented May 17, 1892.

Fig. 1.

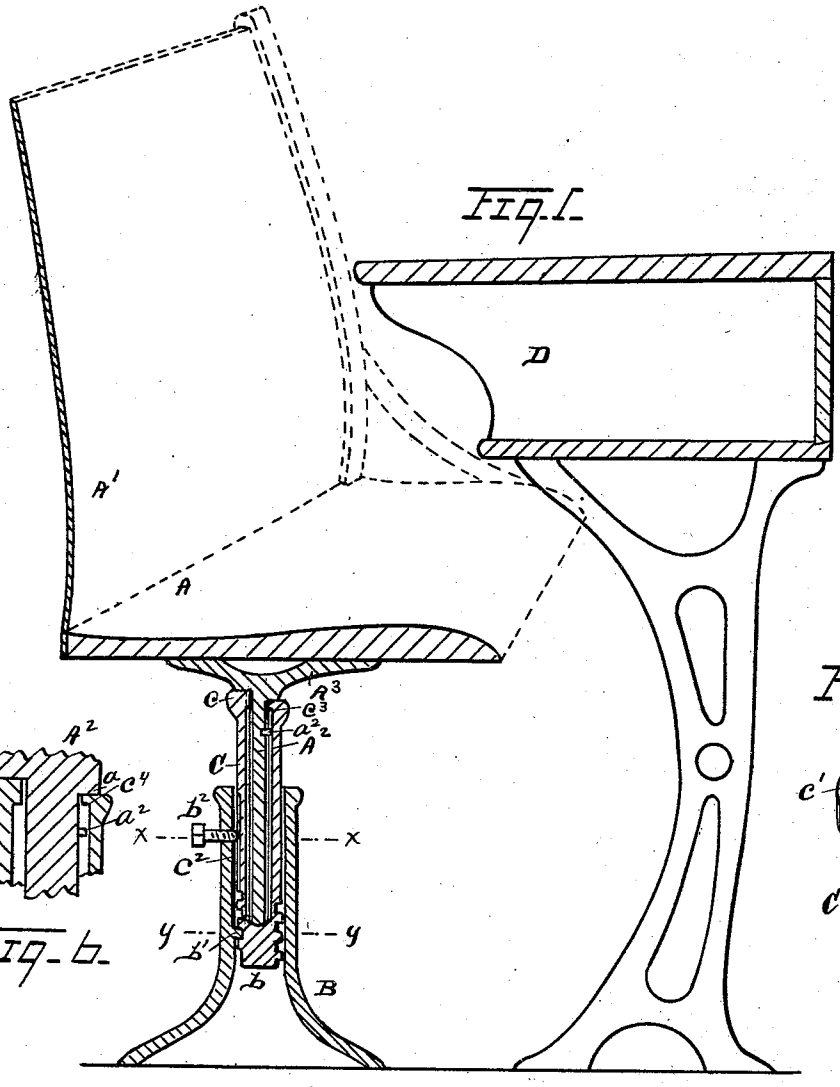


Fig. 6.

Fig. 2.

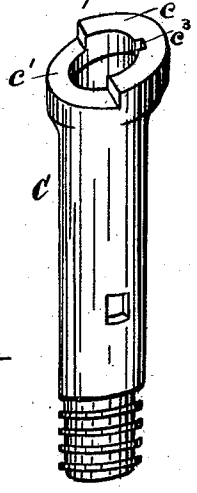


Fig. 4.

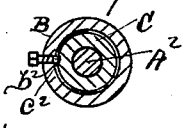


Fig. 3.

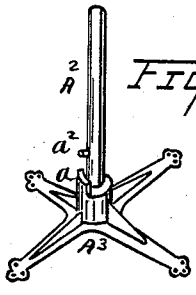
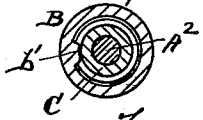


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANCIS R. BEAL, OF NORTHVILLE, MICHIGAN.

SCHOOL-SEAT.

SPECIFICATION forming part of Letters Patent No. 475,076, dated May 17, 1892.

Application filed February 27, 1891. Serial No. 383,124. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS R. BEAL, a citizen of the United States, residing at Northville, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in School-Seats; and I declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to certain new and useful improvements in seats, and more particularly to school-seats.

My invention relates to the general construction, arrangement, and combination of devices and appliances hereinafter specified and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of a seat and accompanying desk, showing, also, in dotted outline the seat partially rotated. Fig. 2 is a separate view of the intermediate socket. Fig. 3 is an inverted view of the spider and the supporting-shaft in perspective. Fig. 4 is a horizontal section on the line $x\,x$, Fig. 1. Fig. 5 is a similar section on the line $y\,y$, Fig. 1. Fig. 6 is an enlarged view of certain details in section, showing a modification of portions of the device illustrated in Fig. 1.

A represents the seat proper, provided with a back A′ and with a supporting-shaft A^2 engaged therewith in any suitable manner, as by means of a spider A^3.

B represents the base or pedestal, the same being constructed with a socket, as shown at *b*, provided with one or more threads *b*′. The base and socket at its upper end is preferably made integral, as shown.

Instead of engaging the shaft A^2 directly in the base, my invention contemplates the employment of an intermediate socket C, screw-threaded at its lower end to form a screw-threaded engagement in the socket *b* of the base B. In this manner it will be seen the socket C is vertically adjustable in the base to adjust the height of the seat as desired. The socket C is constructed to receive the shaft A^2 upon the seat proper, the shaft being rotatable therein. My invention contemplates, however, the limitation of the rotation of the shaft in the socket C so that the back A′ of the seat will be prevented from striking the edge of the desk D in front of it, as the seat is rotated either to the right or to the left, as would be the case if the rotation of the seat were not so limited. To secure this limitation of the rotation as shown, I construct the top of the socket C with a shoulder *c*, extending a suitable distance above its upper edge, leaving a recess *c*′ opposite said shoulder. The spider A^3 is also constructed with a shoulder *a*, adapted to engage in the recess *c*′ of the socket C and to strike against the extremities of the shoulder *c*, when the seat is rotated to a desired distance in either direction, and thereby stop the farther rotation of the seat in that direction. When the socket C has been vertically adjusted to carry the seat to the desired height, the socket may be held in such a given position and prevented from turning by means of a set-screw b^2, located in the base. It will be obvious, also, that in so securing the socket C in a given position it is essential to always locate the shoulder *c* toward the rear of the seat to effect the desired limitation of the rotation of the seat. To this end the socket C may be formed with a recess or groove c^2, which when brought opposite the set-screw will bring the shoulder *c* into proper position, the set-screw being located at the rear of the base and engaged in said groove when tightened in place to hold the socket from turning.

To prevent the disengagement of the shaft in the socket C, the one is made to interlock the other. To this end the shaft may be formed with a pin or shoulder a^2 and the socket C with a groove c^3 to receive the said pin or shoulder, the said groove and pin being so located, respectively, as not to be in alignment when the seat is in proper position, thereby preventing any disengagement of the parts until the pin and groove are brought into alignment. The upper end of the socket C is provided with an inwardly-extended flange c^4, under which the pin is engaged to hold the shaft in place.

I would have it understood that I do not limit myself to the precise details of every

feature of the invention as hereinbefore described, as they might be varied without departing from the scope of my invention.

What I claim as my invention is—

1. A school-seat consisting of the following elements, in combination: a seat, a base provided with a vertical socket *b*, a supporting-shaft A^2, engaged with the seat, and an intermediate socket C, having a direct adjustable engagement with the base in said socket *b*, said socket C directly receiving said supporting-shaft, said shaft rotatable in the socket C and interlocked therewith to prevent their disengagement when the seat is in normal position, and the socket C and shaft A^2, formed the one with a recess and the other with a shoulder to enter said recess, whereby the shaft has a limited rotation in said socket, substantially as set forth.

2. The combination, with a seat provided with a supporting-shaft, of a base, an intermediate socket C, having a screw-threaded engagement with the base and supporting said shaft, said socket interlocked at its upper end with said shaft to prevent their disengagement when the chair is in normal position and provided with a shoulder *c* and a recess *c'* between the ends of the shoulder, and said shaft provided with a shoulder *a* to engage in said recess to limit the rotation of the shaft in the socket, substantially as described.

3. The combination, with a seat, of a supporting-shaft, a base, an intermediate socket having a vertically-adjustable engagement with said base and supporting said shaft, said socket formed with a shoulder *c* and groove c^2, both located on the same side of the socket, and the base provided with a set-screw to engage said groove and hold the socket in a desired position, substantially as described.

4. The combination, with a seat, of a supporting-shaft rigidly engaged therewith, a base and an intermediate socket adjustably engaged with the base, said shaft and socket interlocking one with the other to prevent both their disengagement and also an independent vertical movement of the shaft when the seat is in normal position, said shaft and socket constructed the one with a recess and the other with a shoulder entering said recess, said shaft thereby having a limited rotation in said socket, substantially as described.

5. The combination, with a seat, of a supporting-shaft engaged therewith and provided with a shoulder a^2, a base, and an intermediate socket adjustably engaged with the base, said socket formed with a groove c^3 and with an inwardly-extended flange c^4 to receive and engage said shoulder to prevent an independent vertical movement of said shaft when the seat is in normal position, said shaft and socket the one formed with a recess and the other with a shoulder entering said recess, the shaft thereby having a limited rotation in said socket, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

FRANCIS R. BEAL.

Witnesses:
E. MAY GREER,
W. E. AMBLER.