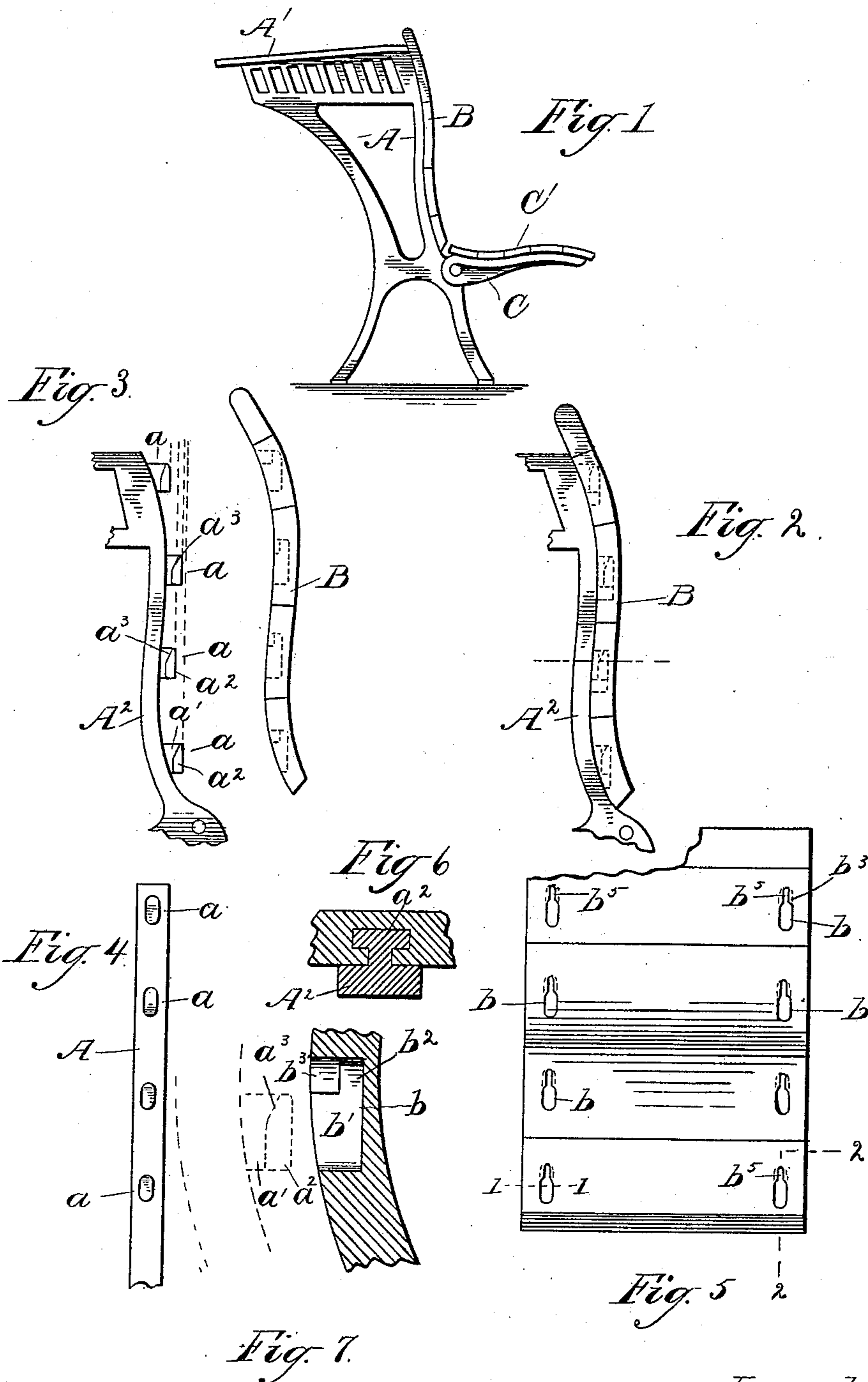


(No Model.)

H. B. HITESHEW.  
SCHOOL DESK.

No. 390,859.

Patented Oct. 9, 1888.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## SCHOOL-DESK.

SPECIFICATION forming part of Letters Patent No. 390,859, dated October 9, 1888.

Application filed April 30, 1888. Serial No. 272,358. (No model.)

*To all whom it may concern:*

Be it known that I, HARVEY B. HITESHEW, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in School-Desks, which is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

10 Figure 1 is a side elevation of a school-desk embodying my invention; Fig. 2, a similar view of the back and back-frame enlarged; Fig. 3, a view similar to Fig. 2, showing the back removed from the back-frame; Fig. 4, a  
15 front elevation of one member of the back-frame; Fig. 5, a rear view of the back; Fig. 6, a detail sectional view taken on the line 1 1 of Fig. 5 and on an enlarged scale, and Fig. 7 a detail view taken on the line 2 2 of  
20 Fig. 5 and on the same scale as Fig. 7.

Like letters refer to like parts in all the figures of the drawings.

My invention relates to school-desks and other like articles of furniture, in which a metallic frame-work is employed in connection  
25 with seats and backs of wood or other like material. These wooden parts are generally curved to conform to the curves of the body, the frame-work which receives them being of  
30 course correspondingly curved, the wooden and metallic parts being separately constructed and subsequently put together, being again separated, however, and reunited at any time for the purposes of storage and shipment.

35 My present invention relates more particularly to that class in which the curved back or seat, whether constructed in a single piece or built up in the usual manner of a number of transverse pieces or slats, constitutes as a  
40 whole a single rigid piece having the desired curvatures; and it has for its object to provide means whereby such a curved back or seat may be readily and firmly united to the frame-work, which supports it in an expeditious and  
45 efficient manner.

To these ends my invention consists in certain novel features, which I will now proceed to describe, and will then particularly point out in the claim.

50 In the drawings I have shown in Fig. 1 a school-desk consisting of the metallic frame

A, carrying the top A' and curved back B, and having pivoted to it the seat-supports C, which carry the seat C'. In the remaining  
55 figures I have shown in detail the manner in which the back B is secured to the frame A, since this construction fully illustrates my invention, although the same is of course applicable not only to the back but also to the  
60 seat or to any other curved portion of the desk or other article of furniture. The front upper portion of the frame A is shown at A<sup>2</sup> in these figures, and the two members thereof, one on each side, constitute the back-frame, the same being curved to conform to the curvature of  
65 the back B. Upon the front surface of each member A<sup>2</sup> there is mounted a series of lugs, *a*, four of these lugs being shown in the present instance, although, of course, any desired number may be employed. Each lug consists  
70 of a neck, *a'*, and a transverse head, *a''*, of greater width than said neck and projecting beyond the same at each side, as shown in Fig. 6. The head *a''* is beveled off at the top on the  
75 under side thereof, as shown at *a'''*. Upon referring to Fig. 3 of the drawings it will be seen that the lugs *a* are arranged in different planes, according to their different locations upon the curved back-frame A<sup>2</sup>, and it will  
80 also be seen that the planes in which the said lugs are arranged are parallel to each other, as indicated in dotted lines in said figure; in other words, the defining walls of the said lugs are arranged in different but parallel planes.

The back B is provided with a series of recesses or apertures, *b*, to receive the lugs *a*, with which they correspond in number and location. Each aperture consists of a body  
85 portion, *b'*, of dimensions sufficient to receive the head *a''*, said body portion *b'* being provided with an extension, *b''*, on each side of which there is arranged a locking projection, *b'''*.

Between the locking projections *b'''* there is left a slot, *b<sup>5</sup>*, to receive the neck *a'* of the lug *a*.  
95 It will be observed on referring to Figs. 2 and 3 that the recesses *b* are arranged in parallel but different planes corresponding to those of the lugs *a*.

In securing the back B to the back-frame  
100 A<sup>2</sup> it is first brought into position opposite the same, with each recess *b* opposite the corre-

sponding lug, *a*, and is then first forced against the back-frame, the lugs *a* entering the body portions *b'* of the recesses *b*. The back *B* is then moved downward in a straight line, and  
5 since the lugs and recesses are both arranged in parallel planes, which parallel planes are also parallel to the line of movement of the back during this operation, each lug will en-  
10 gage with its corresponding recess at exactly the same time and to exactly the same extent, thus serving to quickly and firmly lock the back in position upon the back-frame. When thus locked, each lug has just the same amount of work thrown upon it as each of the other  
15 lugs, the strain upon all of the lugs being equal.

Heretofore where curved backs or seats have been applied to correspondingly curved frames the locking-lugs on the frame have been arranged parallel to the curved surface  
20 thereof, and consequently in different planes which are not parallel to each other. The recesses of the back or seat have of course been similarly arranged, and consequently the back could not be moved into position by a single  
25 direct movement in a straight line, and the strain upon the lugs, as well as the holding-power exerted thereby, has been unequal. This difficulty I have overcome by arranging the lugs and recesses in different planes par-  
30 allel to each other and to the line of movement of the back while being applied and locked, thus obtaining a much more efficient fastener.

There is an additional advantage attendant upon the construction which I have devised,  
35 which advantage bears more directly upon the facility and consequent cheapness of manufacture of the desk. By reason of the several recesses having their corresponding walls in parallel planes I am enabled to cut all of these  
40 recesses simultaneously by employing bits so arranged as to enter the wood to different ex-

tents, the said bits all operating simultane-  
ously and going through the same movements. In those cases where the recesses are not ex-  
actly parallel to each other it is obvious that 45 the position of the back must be shifted each time a new recess is to be cut, and only one recess can be cut at a time. A very considerable saving both in the time employed and in the money expended in the manufacture is 50 thus saved.

It is obvious that the application of my invention is not limited to the attachment of the back, since, as hereinbefore stated, it may be employed to attach the seat or any other 55 curved portion to a correspondingly curved frame. It is also obvious that various modifications in the details of construction and arrangement of parts may be made without departing from the principle of my invention, 60 and I therefore do not wish to be understood as limiting myself strictly to the precise details hereinbefore described, and shown in the drawings.

Having thus described my invention, what I 65 claim as new, and desire to secure by Letters Patent, is—

In a school-desk or the like, the combination, with the curved frame provided with a series of locking-lugs arranged in different but 70 parallel planes, of the curved back, seat, or other part provided with a corresponding series of locking-recesses, also arranged in different but parallel planes, these planes corre-  
sponding to each other, and being parallel to 75 the plane of movement of the parts during the operation of interlocking, substantially as and for the purposes specified.

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Witnesses:

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