June 30, 1953 S. C. WILLIS ET AL 2,643,703

SIDE FRAME FOR CHAIR-DESKS

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Fig. 1

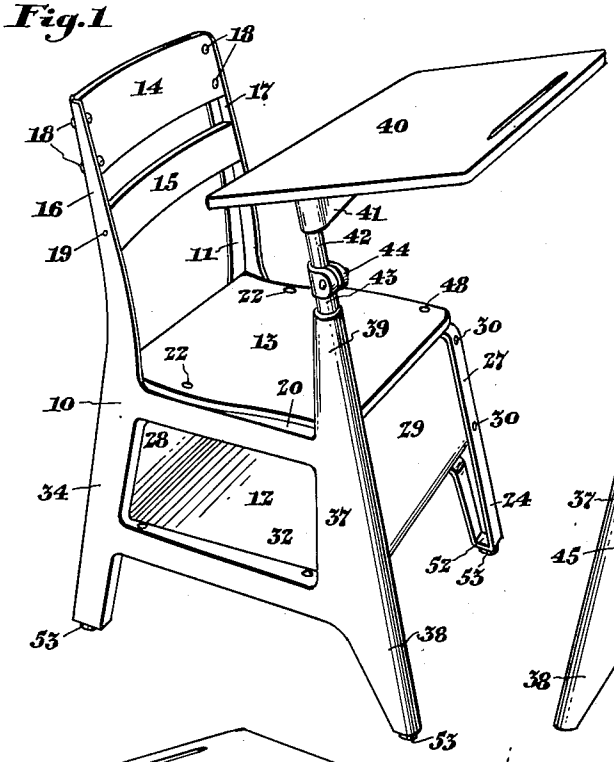


Fig. 3

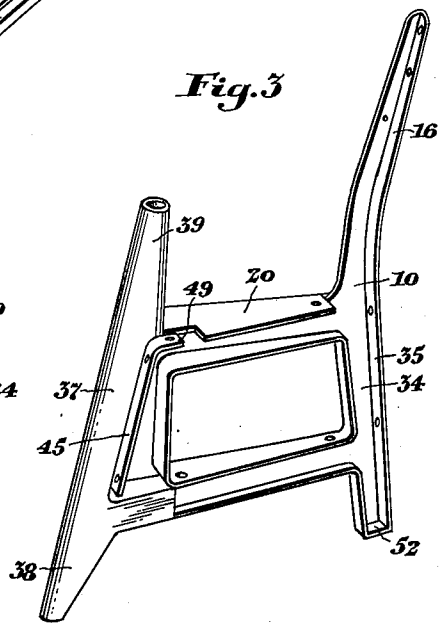


Fig. 2

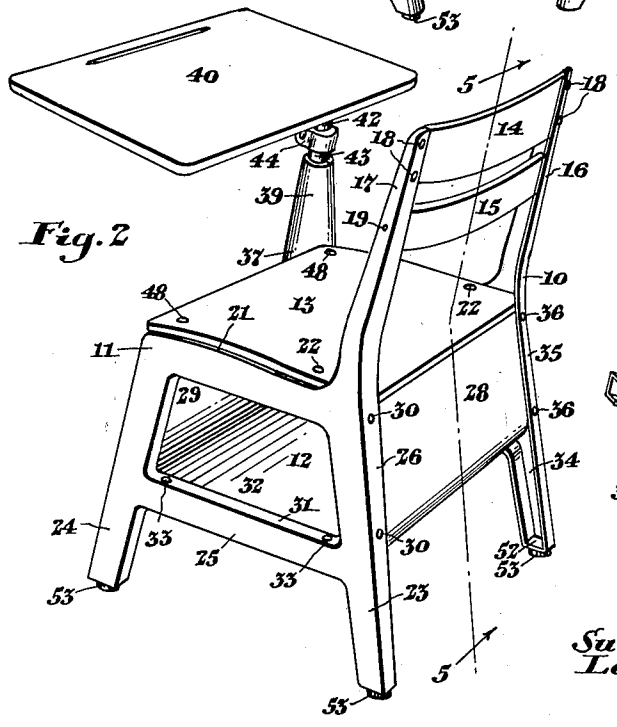
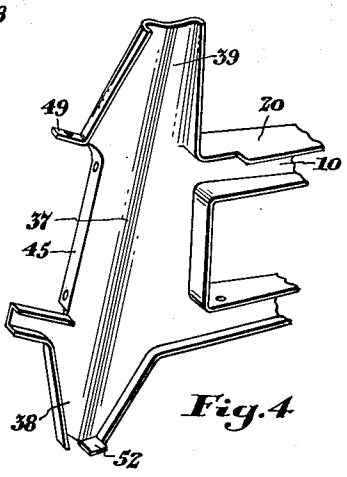


Fig. 4



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Fig. 5

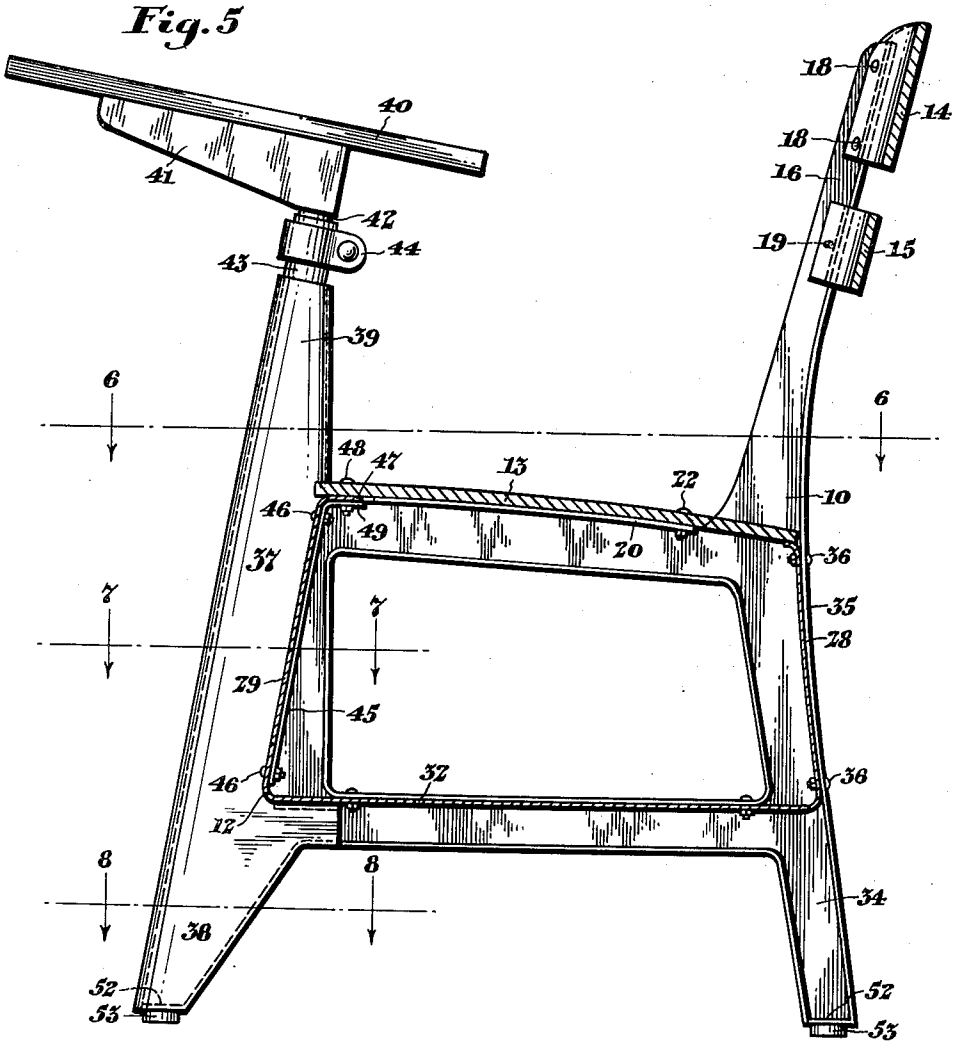


Fig. 6

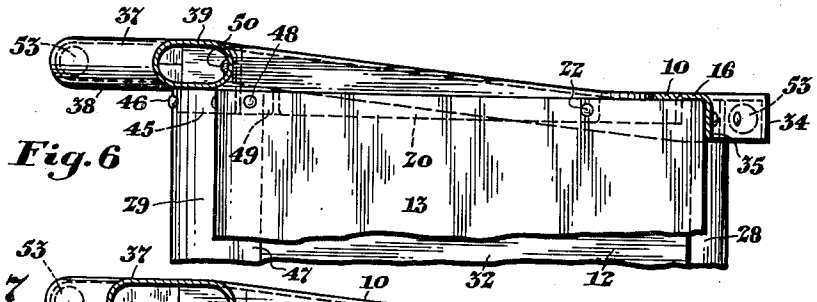


Fig. 7

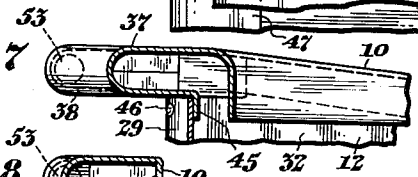
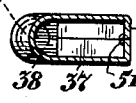


Fig. 8



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Patented June 30, 1953

2,643,703

UNITED STATES PATENT OFFICE

2,643,703

SIDE FRAME FOR CHAIR-DESKS

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Application March 2, 1950, Serial No. 147,282

2 Claims. (Cl. 155—128)

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The present invention relates to chair-desks and more particularly to chair-desks for use in classrooms.

The primary objects of the invention are to provide a structure comprising a chair and a desk-top or "writing arm" permanently mounted on the chair and movable therewith, and to provide such a structure which is simply and sturdily constructed and attractive in appearance.

An illustrative embodiment of the invention is shown in the accompanying drawings, wherein:

Figure 1 is a front and right-hand side perspective view of a chair-desk constructed according to the present invention;

Figure 2 is a rear and left-hand side perspective view of the same;

Figure 3 is an inside perspective view of one of the side frames of the chair-desk, being the right-hand side frame of the chair-desk shown in Figure 1;

Figure 4 is a fragmentary view of a portion of the side frame shown in Figure 3, during a phase of the frame's fabrication;

Figure 5 is an enlarged, central vertical sectional view of the chair-desk, taken on the line 5—5 of Figure 2; and

Figures 6, 7 and 8 are fragmentary, horizontal sectional detail views taken on the lines 6—6, 7—7 and 8—8 respectively of Figure 5.

Referring now in detail to these drawings, the chair there shown generally comprises a right-hand side frame 10 and a left-hand side frame 11, which frames are connected by and form mutual supports for a sheet steel cross-sectionally V-shaped book box 12, a chair seat 13, and a chair back consisting of an upper back rail 14 and a lower back rail 15. The side frames 10 and 11 are fabricated from integral sheets of steel and have upright rear portions 16, 17 respectively to which the upper back rail 14 is secured as by means of rivets 18 and to which the lower back rail 15 is pivoted as at 19. The side frames 10 and 11 also have inwardly flanged, substantially horizontal portions 20, 21 respectively to which the rear part of the seat 13 is secured as by means of rivets or bolts 22.

The left-hand side frame 11 has a depending rear portion 23 (see Figure 2) forming the left rear leg of the chair, a depending front portion 24 forming the left front leg of the chair, and a horizontal connecting rail 25 connecting the depending leg portions 23 and 24 for lending rigidity to the structure. The leg portions 23 and 24 of the left-hand side frame 11 have inwardly turned flanges 26, 27 respectively thereon to which the

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upstanding rear and front walls 28, 29 of the book box 12 are respectively secured as by means of rivets or bolts 30. The connecting rail 25 of the left-hand side frame 11 has a similar inwardly turned flange 31 to which the bottom 32 of the book box 12 is secured as by means of rivets or bolts 33 (see Figure 2).

The right-hand side frame 10 of the chair-desk has a depending rear portion 34 forming the right rear leg of the chair, which rear leg portion 34 has an inwardly turned flange 35 to which is secured the rear wall 28 of the book box as by means of rivets or bolts 36. The right-hand side frame 10 has a continuous upstanding tubular front portion 34 formed by bending the metal sheet of this side frame 10 inwardly and then rearwardly as best illustrated in Figures 4 and 3. This front portion 37 of the right-hand side frame 10 is disposed to one side of the seat 13 so as not to impinge on the front edge of the seat thus affording greater comfort for the chair occupant. The tubular front portion 37, sloping upwardly and rearwardly, depends below the seat to form the right front leg 38 of the chair and also extends above the seat to form an upright support 39 for a desk top 40 which is mounted on its upper end by means of a bracket 41 secured to the underside of the desk top 40. The bracket 41 has a depending arm or rod 42 telescopically fitted within a tubular element 43 mounted in the upper part of the support 39, and a clamp generally designated 44 is provided for securing the rod 42 within the tubular element 43 in a known manner, thus to secure the desk top 40 in vertically adjusted position.

The tubular front portion 37 of the right-hand side frame 10 has on its inner wall an inwardly turned flange 45 to which is secured the front wall 29 of the book box 12 as by means of rivets or bolts 46 (see Figure 5). The upper edge 47 of the front wall 29 of the book box 12 is turned rearwardly and forms a support for the front edge of the seat 13 which is secured thereto as by means of rivets or bolts 48, the right-hand bolt 48 passing also through the rearwardly turned upper end 49 of flange 45 on the side frame 10.

The meeting rearward edges of the tubular upright support 39 of the side frame 10 are secured together as by welding indicated at 50 in Figure 6, and the meeting rearward edges of the depending front leg 38 of the side frame 10 are likewise secured together as by welding indicated at 51 in Figure 8, so that the exposed portions of

the continuous tubular front portion 37 of the side frame 10 are entirely enclosed.

If desired the lower ends of the legs may be provided with inwardly turned horizontal flanges 52 as shown, to the undersides of which are affixed suitable glides 53 in any conventional manner.

It will thus be seen that the invention provides a novel chair-desk built upon integral sheet metal side frames which form the legs, seat support, back support and book box support of the unit, and that one of the integral side frames also forms a support for the desk-top of the unit, and that the chair-desk thus constructed is simple, sturdy, comfortable and attractive.

While but one specific embodiment of the invention is herein shown and described, it will be understood that numerous details may be altered or omitted without departing from the spirit of the invention as the same is defined by the following claims.

We claim:

1. A side frame for a chair-desk, said side frame comprising a unitary metal sheet fabricated to form a substantially horizontal middle portion forming a chair seat support, a continuous rear portion depending below the seat support to form a rear chair leg and extending above the seat support to form a chair back support, and a continuous front portion depending below the seat support to form a front chair leg and extending above the seat support to form a desk top support, the forward marginal edge of said continuous front portion being curled inwardly from the plane of the aforesaid portions and thence rearwardly and outwardly to form a continuous tubular column.

2. A side frame for a chair-desk, said side frame comprising a unitary metal sheet fabricated to form a substantially horizontal middle portion forming a chair seat support, a continuous rear portion depending below the seat support to form a rear chair leg and extending above the seat support to form a chair back support, and a continuous front portion depending below the seat support to form a front chair leg and extending above the seat support to form a desk top support, the forward marginal edge of said continuous front portion being curled inwardly from the plane of the aforesaid portions and thence rearwardly and outwardly to form a continuous tubular column sloping in an upwardly-rearwardly direction.

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LAURENCE W. BRULIN.

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