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COMBINATION SCHOOL DESK AND CHAIR

Filed Sept. 24, 1925

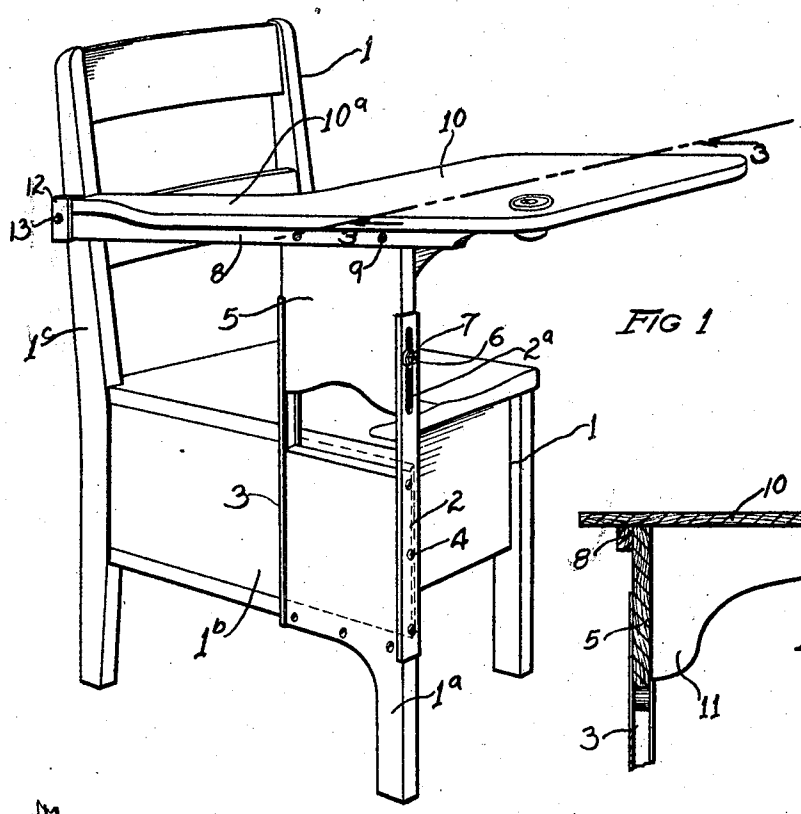

FIG 1

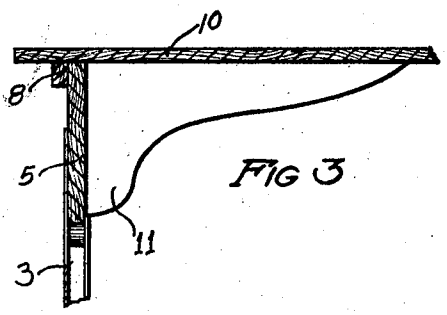

FIG 3

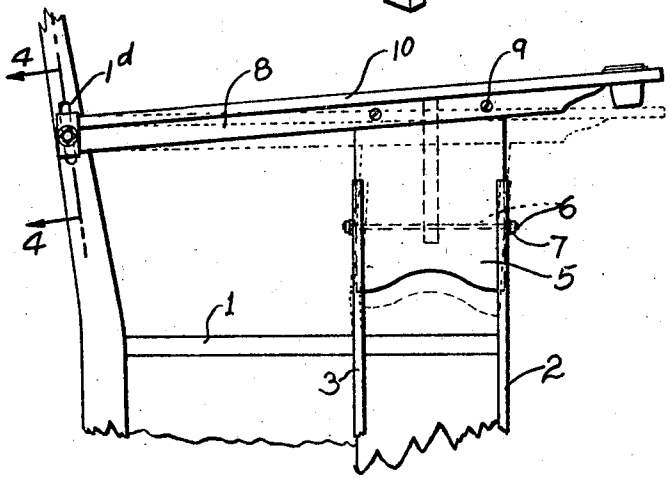

FIG 2

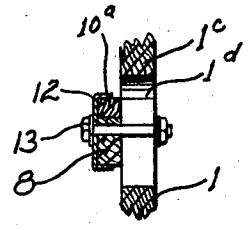

FIG 4

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UNITED STATES PATENT OFFICE

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COMBINATION SCHOOL DESK AND CHAIR

Application filed September 24, 1925. Serial No. 58,307.

Our invention relates to a combination school desk and chair, also commonly known as a school chair desk, and the objects of our invention are: First, to provide an article of furniture of this class which, though made of relatively light construction, embodies the necessary features of strength required in an article of furniture of this class, as well as the desirable features of various adjustments to fill the manifold needs; second, to provide an article of furniture of this class in which the desk is supported near one edge only in a manner to be vertically and angularly adjusted and still provides considerable and sufficient rigidity at its free or opposite edge, because of unreasonable weight applied thereon, to withstand considerable distorting and breaking force; third, to provide an article of furniture of this class having a vertically adjustable desk and an arm rest or chair arm connected to the desk and vertically adjustable therewith, said arm adding considerably to the strength and rigidity of the desk against distortion by reason of weight applied at its free or overhanging edge; fourth, to provide an article of furniture of this class having a combined desk and chair arm, the rear end of which chair arm serves as the pivotal axis for the pivotal or angular adjustment of the desk, the downwardly extending or supporting bracket near one edge of the desk being supported in metallic supports readily yieldable in one direction to conform with the supporting bracket of the desk, thus eliminating expensive construction to provide an angularly adjustable desk; fifth, to provide a chair of this class having on its one side a pair of spaced apart supporting channels adapted to support therebetween a supporting bracket for a desk and adapted to yield readily in one direction to conform with the angularly shifted position thereof when angularly adjusting the desk of the chair; sixth, to provide as a whole a novelty constructed combination school desk and chair, and seventh, to provide an article of furniture of this class which is particularly simple and economical of construction, durable, practical, and which will not readily deteriorate or get out of order.

With these and other objects in view, as will appear hereinafter, our invention consists of certain novel features of construction, combination and arrangement of parts and portions, as will be hereinafter described in detail and particularly set forth in the appended claims, reference being had to the accompanying drawings and to the characters of reference thereon, which form a part of this application, in which:

Figure 1 is a perspective view of our combination school desk and chair, taken from the front, side and top, showing the general arrangement thereof; Fig. 2 is a fragmentary side elevational view thereof, taken from the righthand side of the chair, showing by dotted lines an angularly shifted position of the desk; Fig. 3 is a fragmentary sectional elevational view thereof, taken through 3—3 of Fig. 1, and Fig. 4 is an enlarged fragmentary sectional view thereof, taken through 4—4 of Fig. 2, showing the connection of the rear end of the shiftable chair arm with the one upright back supporting rail of the chair proper.

Like characters of reference refer to similar parts and portions throughout the several views of the drawings.

The chair 1, upright desk supporting members 2 and 3, screws 4, desk supporting bracket 5, bolt 6, nuts 7, desk reinforcing strip 8, screws 9, desk member 10, reinforcing bracket 11, strap 12, and the bolt 13, constitute the principal parts and portions of our combined school desk and chair.

The chair 1 of our combined school desk and chair may be of conventional construction, as illustrated in the drawings, except that the right forward leg in the conventional position is omitted and another leg 1^a secured to the chair proper ahead and slightly to one side of the conventional position, as shown. This leg is relatively wide at its upper portion and secured in any suitable manner to an extended side panel 1^b or other portion at the right side of the chair. Over the front and rear edges of the upper portion of the leg member 1^a is secured, by means of screws 4, a pair of oppositely disposed upright desk supporting members 2 and 3, respectively. These

members 2 and 3 are metal channel irons with their channel portions receiving the edges of the leg member and extend a considerable distance above said leg member. These upright desk supporting members or channel irons are of such weight as to be readily distortable toward and from each other, as will be described later.

Between the channel portions of the members 2 and 3 extending above the leg member 1^a is supported the lower end of the desk supporting bracket 5, preferably made from a piece of board. In the web portions in the upper ends of the channel irons 2 and 3 are longitudinal slots, indicated by 2^a in Fig. 1. Extending transversely through the bracket 5 in the direction of the width is a long bolt 6, which extends outwardly through the longitudinal slots of the members 2 and 3. The bracket 5 is rigidly held between the members 2 and 3 by means of nuts 7 secured on the outer threaded ends of the bolt 6. To the upper end and at the outer side of the bracket 5 is secured, by means of screws 9 or any other suitable means, a desk reinforcing strip 8 which extends fore and aft, preferably at a slight angle with the horizontal, and slightly forwardly of and backwardly from the bracket 5 to the right side of the right back supporting rail 1^c of the chair 1. The desk member 10 is provided at its right side with a backwardly extending arm support or portion 10^a, which is formed preferably as an integral or continuous part of the desk member. The member or strip 8 is secured at its upper edge to the under side and near the righthand edge of the desk member and the arm portion thereof. The desk member is supported rigidly or reinforced relatively to the bracket 5 and the strip 8 by a bracket 11 secured to the adjacent inner sides of said members.

The rear end of the arm portion 10^a is reduced to the thickness of the reinforcing strip 8, as shown. Over the outer sides and upper and lower sides of the arm portion 10^a and the strip 8, at their rear ends, is positioned a metal strap or clip 12 for strengthening the rear ends of said members relatively to each other. Through the strap 12 and the strip 8 extends a bolt 13 which also extends through a substantially vertical slot 1^d in the back rail 1^c of the chair. This slot 1^d is considerably wider than the diameter of the bolt 13 to permit of vertical shifting of the desk and also angular shifting thereof, it being noted that the back rail 1^c of the chair is inclined at a slight angle as in conventional chair back construction.

It will be here noted that the unit construction of the desk 10 and the arm support 10^a, the latter of which has considerable vertical depth at its rear end which is secured adjacent the outer side of the back rail, provides a vertically adjustable desk for chairs, of considerable strength, particularly at its free or overhanging opposite edge in case unreasonable weight is applied at said edge, as when a person is leaning thereon or thereagainst.

When desiring to tilt the desk to another position, as shown by dotted lines in Fig. 2 of the drawings, the nuts 7 are merely loosened up and the front end of the desk forced downwardly. The nuts 7 are then tightened against the channel members 2 and 3, causing the same to distort slightly, as shown by dotted lines in Fig. 2, the distortion of the members 2 and 3, however, being corrected again when the nuts are loosened and the desk shifted to the position shown by solid lines, by reason of the inherent spring and readily yieldable nature of the channel members in the direction of their flanges.

Though we have shown and described a particular construction, combination and arrangement of parts and portions and have made reference only to the application of our combination desk and chair for school purposes, we do not wish to be limited to this particular construction, combination and arrangement nor to the specific application to school chairs, but desire to include in the scope of our invention, the application of our structure to other classes of chairs and the structure, combination and arrangement substantially as set forth in the appended claims.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In an article of furniture of the class described, a chair structure having an upwardly extending portion at its back side, a desk member having an arm supporting portion at its one side and extending backwardly from the main desk portion thereof, said arm supporting portion being pivotally connected at its rear end to the upwardly extending portion of the chair structure, and spaced apart desk supporting members, fixed at one of their ends to the chair structure and yieldable at their opposite ends in the direction of a plane passing through both, bracket means secured to the forward portion of said desk member and means adjustably supporting said bracket between the yieldable ends of said desk supporting members for supporting the forward portion of said desk member in vertically and tiltably shiftable relation to said chair structure.

2. In an article of furniture of the class described, a chair structure having an upwardly extending portion at its back side, a desk member having an arm supporting portion at its one side and extending backwardly from the main desk portion thereof, said arm supporting portion being pivotally connected at its rear end to the upwardly extending portion of the chair structure, a pair of spaced apart and oppositely disposed channel mem-

bers secured to one side of said chair structure and extending above the seat portion thereof and with the flanges thereof extending toward each other, said channel members being readily yieldable toward and from each other, and a desk supporting bracket, extending downwardly from the under side and near one edge of the desk member, positioned between the channel portions of the upwardly extended ends of said channel members, adjustable means supporting said bracket between said upwardly extending channel portions.

3. In an article of furniture of the class described, a chair structure having a forwardly extended portion at its one side and provided with a back, a pair of oppositely disposed channel members secured at their lower ends and with the flanges thereof extending toward each other, to the forwardly extended portion of said chair structure, with the upper ends of said channel members extending above the seat portion of said chair structure, a desk member, provided with a desk portion and an arm supporting portion extending backwardly therefrom at one side thereof as a unitary part of said desk portion, the rear end of said arm supporting portion being vertically shiftably supported at the one side of the back of said chair structure and adapted to be pivoted therewith about said supported portion, and a bracket secured to said desk member at the under side thereof, and near the edge provided with said arm supporting portion, with its lower end positioned between the channel portions of said channel members and adjustable means supporting said bracket between the upper extending ends of said channel portions.

4. In an article of furniture of the class described, a chair structure having a forwardly extended portion at its one side and provided with a back, a pair of oppositely disposed channel members secured at their lower ends and with the flanges thereof extending toward each other, to the forwardly extended portion of said chair structure, with the upper ends of said channel members extending above the seat portion of said chair structure, a desk member, provided with a desk portion and an arm supporting portion, extending backwardly therefrom at one side thereof as a unitary part of said desk portion, the rear end of said arm supporting portion being vertically shiftably supported at the one side of the back of said chair structure and adapted to be pivoted therewith about said supported portion, a bracket secured to said desk member at the under side thereof, and near the edge provided with said arm supporting portion, with its lower end positioned between the channel portions of said channel members adapted to be variously secured therebetween in upright and tilted positions, and a single bolt extending through the whole of said bracket and through slots in said channel members for rigidly securing said bracket in the various vertical or tilted positions therebetween.

In testimony whereof we have hereunto set our hands at San Diego, California, this 8th day of September, 1925.

PAUL SCHIEFER.
ROBERT W. GETTY.