

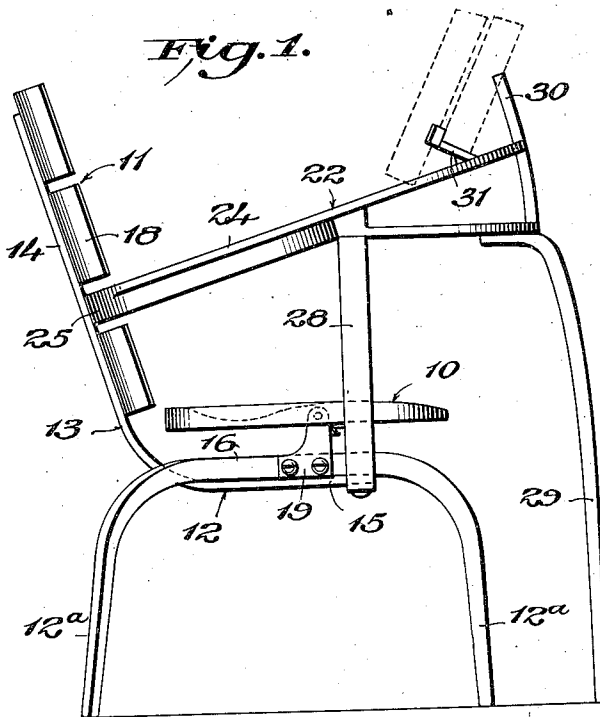
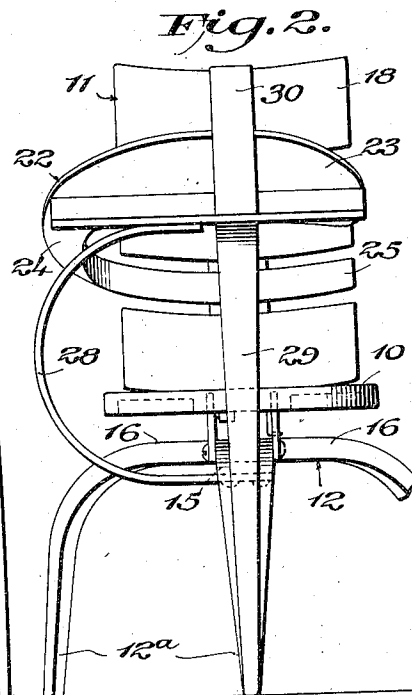
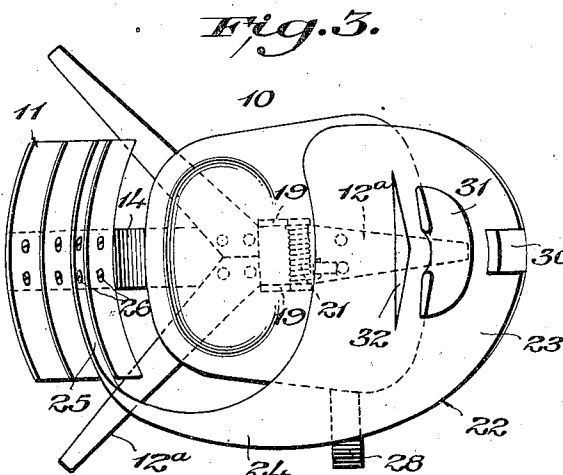
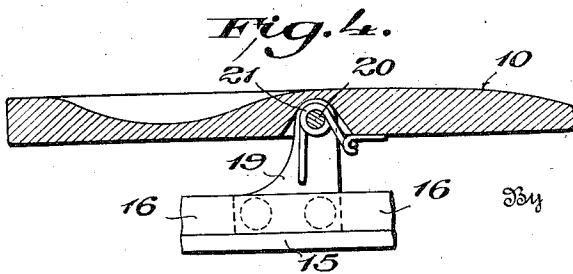
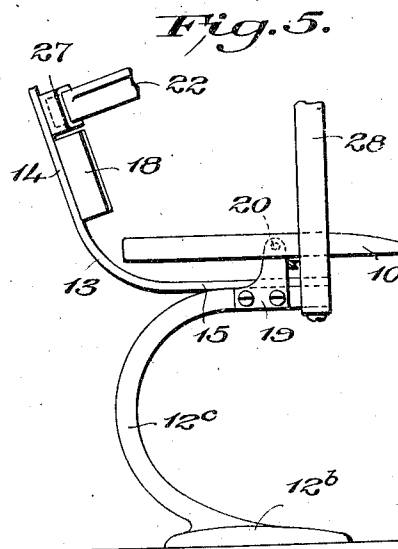
Sept. 30, 1947.

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2,428,087

FURNITURE

Filed June 30, 1943



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UNITED STATES PATENT OFFICE

2,428,087

FURNITURE

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Application June 30, 1943, Serial No. 492,909

9 Claims. (Cl. 155-77)

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This invention relates to new and useful improvements in furniture, and has particular reference to improvements in chairs for classroom or similar use.

An object of the invention is to provide a chair embodying a construction adapting the same readily to be converted from a simple chair to a tablet-arm chair, chair-desk or the like.

Another object of the invention is to provide a chair which may be supported either by legs or a pedestal base or its equivalent and which, in either case, is equally as readily adapted to have attached thereto a tablet arm, desk element, table or the like.

Another object of the invention is to provide a chair embodying a spring-restrained seat which is yieldably tiltable to accommodate pupils or other persons of various different sizes and to support them in proper sitting posture.

Another object of the invention is to provide a tablet-arm chair or chair-desk according to which the tablet-arm element or the desk element, as the case may be, is provided with novel means for supporting a book in proper reading or reference position with respect to a pupil or other person occupying the seat of the chair.

The above and other objects of the invention will in part be obvious and will be hereinafter more fully pointed out.

In the accompanying drawings, wherein like characters of reference denote corresponding parts in the different views:

Fig. 1 is a side elevation of a chair constructed in accordance with one practical embodiment of the invention.

Fig. 2 is a front elevation of the chair.

Fig. 3 is a top plan view of the chair.

Fig. 4 is an enlarged longitudinal section through the seat of the chair showing the tiltable mounting therefor; and

Fig. 5 is a view similar to Fig. 1 showing a pedestal base support for the chair.

Referring more in detail to the accompanying drawings, it will be observed that the present chair includes, as usual, a seat 10, a back 11 and supporting means 12 for said seat and back which, according to Figs. 1 to 4, is in the form of legs 12^a, but which, if desired, may be in the form of a pedestal base 12^b or its equivalent as shown in Fig. 5.

The back 11 comprises an L-shaped strap 13 of suitable thickness and width including an upright portion 14 and a horizontal portion 15 extending forwardly from the lower end of said upright portion, and in accordance with the inven-

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tion the legs 12^a, if they are employed as the supporting means 12, have inturned upper end portions 16 which extend over said strap portion 15 and are suitably fastened thereto. If, on the other hand, the supporting means 12 is in the form of a pedestal base or its equivalent, as illustrated in Fig. 5, it includes a C-shaped standard 12^c upon the top of the upper end portion of which the strap portion 15 is suitably fastened. In either case, transverse slats 18 or the like are suitably fastened to the front of the strap upright portion 14 to constitute a support for the back of the person occupying the chair, and said slats or the like are suitably curved on a smaller radius than is customary to prevent pressure on the base of the spine and to make more intimate contact with the right and left shoulder and buttock portions which are padded areas capable of giving support with comfort.

The seat 10 is mounted upon the legs 12^a or the standard 12^c; as the case may be, by means of a pair of brackets 19, and it is a feature of the invention that these same brackets 19 may be employed whether the chair supporting means 12 is in the form of legs or a pedestal base. In other words, if the supporting means 12 is in the form of legs, three legs preferably are employed, one at the front and center of the chair and the other two diverging rearwardly, and the brackets 19 are fastened against the opposite side faces of the upper end portion of the front leg. If, on the other hand, the supporting means 12 is in the form of a pedestal base, including a standard such as the standard 12^c, the brackets 19 are fastened against the opposite faces of the upper end portion of said standard.

In either case, a horizontal pintle 20 which extends transversely relative to the chair connects the brackets 19 with the seat 10 so that the seat is pivotally mounted upon the supporting means 12 for forward and rearward tilting movement. Moreover, a suitable spring 21 such, for example as a coil spring surrounding the pintle 20 and having one of its ends suitably anchored to one of the brackets 19 and its other end suitably anchored to the seat 10, tends constantly to hold said seat 10 in a substantially horizontal position and to resist rearward tilting movement thereof. The spring 21 is amply strong to prevent any appreciable rearward tilting of the seat under the weight of an average or lighter than average person occupying the same. The pintle 20 is located so that the center of gravity of heavier persons is approximately over the pivot point while the center of gravity of lighter persons is disposed

somewhat in rear thereof. Thus, the additional weight of heavier occupants is offset by the fact that their center of gravity moves forward toward or over the pivot point. The raising and lowering of the rear end of the seat tends to correct the distance between the writing surface and the seat for tall and short occupants. Accordingly, said seat readily adapts itself to best sitting posture positions for persons of different sizes and weights occupying the chair. Moreover, the top of the seat 10 preferably is contoured with an additional recess to conform as nearly as possible to the tuberosities of the ischium of the average person occupying the same so that the person's weight is distributed substantially uniformly over the seat.

Both the strap 13 and the slats 18 preferably are formed from spring metal or other flexible material so as to yield in response to a person's weight being imposed upon the same and thus contribute to the comfort of the person occupying the chair.

A tablet-arm 22 for use with the chair is shown in the drawings and includes a work supporting front portion 23 of any suitable size and shape, an arm rest portion 24 extending rearwardly from one side of said work supporting portion 23, and a slat 25 extending inwardly from the rear end of said arm rest portion 24 to be detachably fastened to the chair back 11.

The slat 25 may be detachably fastened to the chair back 11 in any suitable manner. For example, it may be fastened to the strap portion 14 by screws 26 as illustrated in Fig. 3, or said strap portion 14 may be provided with a slot 27 in the form of a sleeve into which the slat 25 may be inserted, as illustrated in Fig. 5. In either case, one of the slats of the back 11 is constituted by the slat 25 or, equivalently, by the sleeve 27 which accommodates slat 25.

The sleeve 27 or the slat 25, as the case may be, projects forwardly and may be padded to give support at the small of the back.

When the slat 25 is operatively attached to the back 11 the tablet arm 22 is disposed at a forward and upward inclination with the work supporting portion 23 thereof disposed above the seat 10 in front of the space occupied by a person sitting in the chair and with the arm rest portion 24 disposed at one side of said space, as shown in Figs. 2 and 3. In this connection, in order effectively to support the front part of the tablet arm 22, a C-shaped member 28 of metal or any other suitable material, is fastened at its lower end to the strap portion 15 or to the upper end of the standard 12, as the case may be, and at its upper end is fastened to the under side of the work supporting portion 23 of said tablet arm at any suitable point so as to constitute a strut between said tablet arm and the support 12. The medial portion of said member 28 is, of course, disposed sufficiently far outwardly with respect to the slat 10 so as not to interfere with a person occupying said seat. Moreover, said member 28 is detachably fastened to either or both the tablet arm 22 and the support 12 to permit ready removal of the tablet arm from the chair if and when desired. Furthermore, a chair desk or the like of the same general construction as the tablet arm 22 may be used in place of said tablet arm and may be attached to the chair in the same manner as said tablet arm.

While the member 28 may be relied upon to effectively support the front portion of the tablet arm 22 or, equivalently, a chair desk, an addi-

tional support for either of said elements may be employed if desired, said additional support being in the form, for example, of a leg 29 attached to an under portion of the tablet arm or the chair desk, as the case may be, at the front end thereof and resting upon the floor in front of the chair. The front leg of the chair supporting means may be eliminated when the leg 29 is employed. A table may be attached to the basic furniture and supported by a pair of legs similar to the leg 29, if desired.

Rising from the work supporting portion 23 of the tablet arm 22 at the front end thereof is a book back supporting element 30, while suitably fastened to said work supporting portion 23 inwardly with respect to said element 30, is a ledge element 31 upon which the lower edge of a book may rest with its back supported by the element 30, the dispositions of said elements 30, 31 being such as to support a book in proper reading or reference position to the eyes of a person occupying the seat 10. In addition, the portion 23 of the tablet arm has formed in the upper face thereof, inwardly with respect to the element 31, a groove 32 to accommodate the lower edge of a book with its back supported by the element 31. Thus, provision is made for supporting a book in either of two different positions upon the tablet arm, these two different positions being approximately the proper reading or reference positions for a tall or a short person occupying the chair.

From the foregoing it will be seen the present chair provides for comfortably seating in correct sitting posture pupils or other persons of different heights within a given height range and, at the same time provides for readily converting the chair from a simple chair to a tablet-arm chair or to a desk chair or the like in a minimum of time and with little effort.

While the invention has been described in connection with a few practical embodiments, it is to be clearly understood that various changes in the details of construction and arrangement of parts may be made without departing from the scope of the invention as set forth in the appended claims:

I claim:

1. A chair comprising a seat, a back, and a support for said seat and back, said back including a strap fastened to and rising from said support, slats fastened to said strap, a work supporting member in front of said back and said seat above the latter, and an arm rest extending rearwardly from one side of said member and terminating in a slat fastened to said strap.

2. A chair as set forth in claim 1 including a C-shaped support for the work supporting member fastened at one end to said member and at its other end to the seat and back support.

3. A chair comprising a seat, a back, and a support for said seat and back, said back including a strap fastened to said support and rising therefrom, slats fastened to said strap, a work supporting element in front of said back above said seat, and an arm rest at one side of the chair connecting one side of said element with one end of one of said slats.

4. A chair as claimed in claim 3, wherein the seat is connected to said support by pivotal means providing for yielding pivotal movement of said seat independently of said back and said work supporting element.

5. A chair as claimed in claim 3, wherein the support is provided upstanding bracket means on which said seat is pivotally mounted for re-

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silently yielding pivotal movement independently of said back and said work supporting element.

6. A chair as claimed in claim 3, wherein the support is provided with spaced upstanding brackets carrying a pintle for pivotally supporting said seat and wherein a coil spring is disposed around said pintle and connected to said seat and one of said brackets whereby the seat is mounted for yielding pivotal movement independently of said back and said work supporting element.

7. A chair comprising a seat, a back, and a support for said seat and back, said back including a strap having a horizontally disposed lower end portion and an upright portion rising therefrom, said support comprising legs having inward turned upper end portions disposed upon and fastened to the lower end portion of said strap, a pair of brackets fastened to opposite sides of one of said legs, said seat being pivotally mounted upon said brackets for forward and rearward tilting movement independently of said back, and spring means holding said seat normally in a predetermined position and yieldably resisting tilting movements thereof.

8. A chair as set forth in claim 7 including a work supporting element disposed in front of the back above the seat, an arm rest extending rearwardly from one side of said work support, and a slat extending inwardly from said arm rest across the strap and detachably fastened to the latter for supporting said arm rest.

9. A chair as set forth in claim 7 including a work supporting element disposed in front of the back above the seat and arm extending rearwardly from one side of said work support and fastened to the strap of said back, and a C-shaped support for the front end portion of said work support detachably fastened at one end to said

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work support and at its other end to the support for said seat and back.

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