Jan. 26, 1960 J. L. JOHNSTON 2,922,463

COMBINATION CHAIR-TABLE DEVICE

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Fig. 1

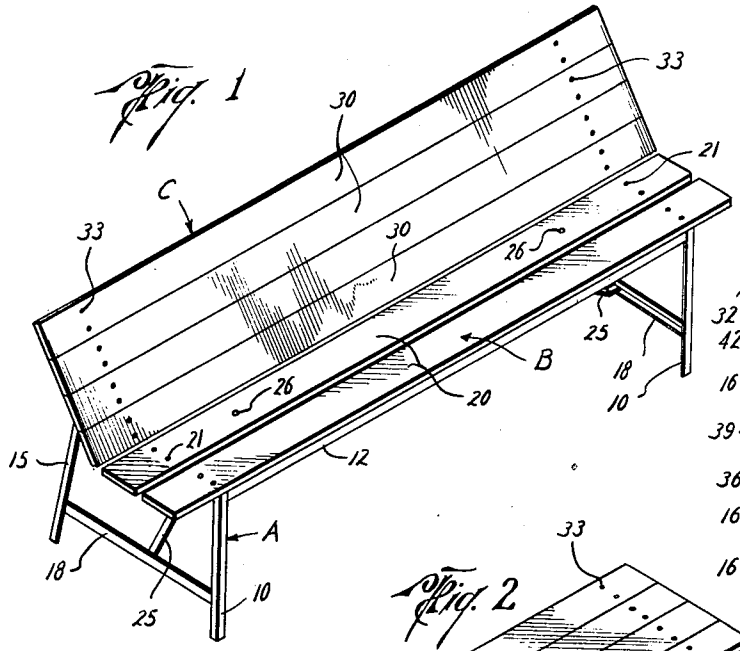

Fig. 3

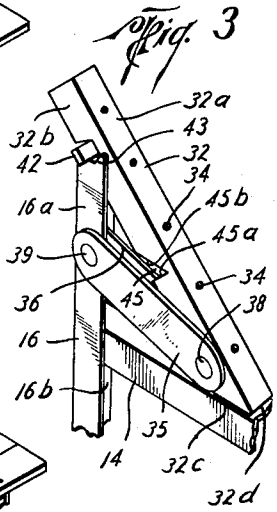

Fig. 2

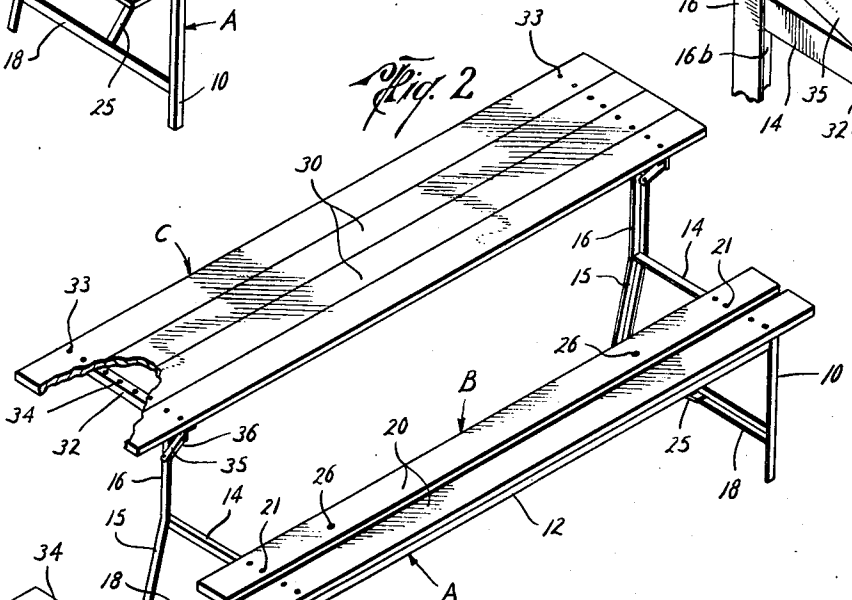

Fig. 4

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COMBINATION CHAIR-TABLE DEVICE

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1 Claim. (Cl. 155—43)

This invention relates to new and useful improvements in combination chair-table devices.

An object of this invention is to provide a new and improved chair or bench which can be readily converted into a table having a seat therewith.

An important object of this invention is to provide a new and improved combination chair-table device which is so constructed that one portion of the device serves as a backrest in one position and a tabletop in another position.

Another object of this invention is to provide a device which is usable as a chair or table and which has a backrest-tabletop portion which is pivotally mounted for sliding movement to a substantially horizontal position for use as a tabletop, such device having stops for limiting the sliding movement of said backrest-tabletop portion so as to retain such portion in either the backrest position or in the tabletop position.

The construction designed to carry out the invention will be hereinafter described, together with other features thereof.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawings forming a part thereof, wherein an example of the invention is shown, and wherein:

Figure 1 is an isometric view illustrating the device of this invention in position for use as a chair or bench.

Figure 2 is an isometric view illustrating the device of this invention in position for use as a table.

Figure 3 is an isometric view illustrating in detail the linkage at one side of the device for connecting the backrest-tabletop portion of the device to the frame for sliding pivotal movement, such linkage being in the backrest position.

Figure 4 is a view similar to Figure 3, but illustrating the linkage for the device in the tabletop position.

In the drawings, the letter A designates the frame of the combination chair-table device of this invention. A seat portion B is secured to the frame and it is the portion of the device upon which persons sit during the use thereof, whether the device is being used as a chair or bench or is being used as a table. The backrest-tabletop portion C of the device serves as the backrest for persons using same when the device is in the chair or bench position (Figure 1); however, the portion C serves as a tabletop when the portion C has been moved to the table position (Figure 2). As will be explained in detail hereinafter, the portion C of the combination device of this invention is so mounted on the frame A that it can be moved with a sliding pivotal movement from the chair or bench position (Figure 1) to the table position (Figure 2), or vice versa.

The frame A has front legs **10** which are substantially vertical and which are connected by a horizontal front bar **12** extending therebetween and secured thereto by welding or other securing means. A horizontal side bar **14** extends rearwardly from each front leg **10**. The side

bars **14** are connected to rear legs **15** which extend substantially vertically, and each of which extends upwardly above the horizontal side bars **14**, such extension being identified by the numeral **16**. The front legs **10** and the rear legs **15** are supported by lower side braces **18** which are welded or otherwise secured to the legs **10** and **15**. The members **10**, **12**, **14**, **15**, **16**, and **18** are all preferably formed of angle bars which are of iron or steel or some other similar relatively strong metal or other material; all of such members are secured together by welding or any other securing means.

The seat portion B of the device is formed of two or more boards **20** which are attached to the side bars **14** by screws **21** or any other suitable securing means. The boards **20** are preferably formed of redwood for outdoor use, but it will be appreciated that metal or any substantially rigid material can be used. In fact, the seat portion B can be formed of a single piece which is attached to the frame A. In order to make the device more rigid, brace members **25** are provided which extend from the lower side braces **18** to one of the boards **20** of the seat portion B. The brace members **25** are connected to the lower side braces **18** by bolts, rivets, welding or any other suitable securing means and the upper portions of the brace members **25** are connected to one of the boards **20** by screws **26** or any other suitable securing means.

The backrest-tabletop portion C of the device is preferably formed of a plurality of boards **30** which can be formed of various materials, but in the usual case, for outdoor use, the boards **30** would be redwood. It will be appreciated, of course, that the portion C can be formed of a single sheet or plate and may be formed of metal or any other substantially rigid material. The boards **30** are secured to support bars **32** disposed at each end of the frame A (Figure 3). Bolts or screws **33** are used and extend through the openings **34** in each of the support bars **32** for securing the boards **30** to the support bars **32**. In Figure 2, a portion of the boards **30** are shown as being cut away to illustrate the mounting of the boards on the support bars **32**.

In Figure 3, the left support bar **32** (as viewed from the front of Figure 1) is shown separately from the boards **30** in order to illustrate the pivotal connection of the backrest C to the frame A of the device. As can be seen in Figure 3, the support bar **32** is an angle iron formed with the forward portion **32***a* and the side portion **32***b*. The forward portion **32***a* is in contact with the rear surfaces of the boards **30**. The side portion **32***b* is at a right angle to the forward portion **32***a* of the support bar **32** and it has its forward or lower end connected to links **35** and **36**. The links **35** and **36** are identical in shape and construction and each has one end thereof connected to the forward end of the side portion **32***b* of each support arm **32** by a pivot pin **38**. The other ends of the links **35** and **36** are connected to the upright extension **16** by a pivot pin **39**.

When the device of this invention is in use as a chair or bench, the backrest-tabletop portion C is in the position shown in Figure 1 and the support bars **32** are in the position shown in Figure 3 for the left bar **32**. When the bars **32** are in such position, the lower edges **32***c* and **32***d* contact the upper side member **14** to thereby transfer a portion of the weight or load caused by a person leaning backwardly on the portion C from the bars **32** to the side members **14** of the frame A.

Each bar **32** is formed with a stop lug **42** which extends laterally outwardly and which stops or limits the forward movement of each bar **32** by contact with an upwardly extending projection or stop **43** formed on the outside portion **16***a* of the upright extension **16**. The stop lug **42** of each bar **32** also rests upon the top edge of the out-

side portion **16***a* of the vertical extension **16** so that when the portion C is in the backrest position, a part of the weight of the person leaning against the portion C is also transferred to the upright section **16** which in turn transfers such weight to the frame A.

When it is desired to move the backrest-tabletop portion C to a substantially horizontal position for use of same as a tabletop (Figure 2), the portion C is pivoted by sliding same upwardly and backwardly. As the portion C is thus moved upwardly and backwardly, the pivotal movement is obtained through the pivot links **35** and **36** as the lower edge **32***e* of each support bar **32** rides or slides along the upper edge of the rear portion **16***b* of each vertical upright **16**. When the bars **32** are in a substantially horizontal position, so as to properly locate the portion C in a substantially horizontal position for use as a table, the pivotal movement of the bars **32** and the table portion C is stopped by the contact of a stop surface or wall **45***a* of notch or recess **45** with the rear section or portion **16***b* of each upright **16**. It will be observed that an inclined notch surface or wall **45***b* is formed in the notch **45** so that as the rearward pivoting motion of the bar **32** occurs, the bars **32** are properly guided for the stopping contact of the stop surface **45***a* with the rear portion **16***b*. The inclined surface **45***b* on each bar **32** also facilitates the sliding motion of the bar **32** as it returns from the substantially horizontal position of Figures 2 and 4 to the inclined position of Figures 1 and 3.

The operation or use of the device of this invention is believed evident from the foregoing description. The device can, of course, be used as a chair or bench (Figure 1) or it can be used as a table (Figure 2).

When the device is in the chair or bench position, the weight of a person or persons leaning against the pivoted portion C is distributed to the frame A by reason of the contact of the lower edges **32***c* and **32***d* of each support bar **32** and also by reason of the contact of the stop lugs **42** on the bars **32** which engage the upper edge of the upright extension **16**. The stop lugs **42** also contact the stop projections **43** on the upright extensions **16** to prevent the inadvertent forward swinging of the portion C when in the backrest position.

For moving the device of this invention from a chair or bench position to the table position, the pivoted portion C is pulled or lifted upwardly or reawardly from the backrest position so as to pivotally swing same to the substantially horizontal position for use as a tabletop. As the portion C is pulled or raised upwardly and rearwardly, the lower edge **32***e* of each bar **32** rides or slides along the upper edge of the rear portion **16***b* of each vertical extension **16**. The rearward sliding movement continues until the stop surface **45***a* of each notch **45** engages with the rear portion **16***b* of each upright extension **16**. It will be evident that the stop wall **45***a* is formed so as to provide a recess therewith which permits the bars **32** to drop downwardly to accurately locate the portion C in a horizontal position for use as a table. The portion C is thus retained in its horizontal position and is held against inadvertent release from the table position.

When the pivoted portion C is to be moved from its

table position to the backrest position for use as a chair or bench, the pivoted portion C is urged forwardly, but is not lifted. The portion C is raised upwardly by the sliding contact of the inclined wall **45***b* of the recess or notch **45** so that the support bars **32** again have their lower edges **32***e* in sliding engagement with the upper edge of the rear portion **16***d* of the upright extension, whereby the sliding movement as the bars **32** pivot downwardly is obtained. Such pivotal movement is of course controlled by the pivoted links **35** and **36** and the downward movement is stopped when the lower edges **32***c* and **32***d* of each support bar contact the upper surface of the horizontal side bars **14**. The stop lugs **42** also contact the stop projections **43** to restrain forward movement of the upper end of the backrest-tabletop portion C.

It is believed evident that the construction illustrated may be varied and still obtain the same advantages of this invention. For example, only one link, such as **35**, could be used rather than the two links **35** and **36**. It is also believed evident that the frame A can be modified to include additional braces or have a different shape.

The foregoing disclosure and description of the invention is illustrative and explanatory thereof and various changes in the size, shape and materials, as well as in the details of the illustrated construction, may be made within the scope of the appended claim without departing from the spirit of the invention.

What is claimed is:

A device adapted to be used as a table or chair, comprising a frame, a seat portion mounted on said frame, a backrest-tabletop portion adapted to serve as a backrest in one position and a tabletop in another position, means connecting said backrest-tabletop portion to said frame for movement from the backrest position to the tabletop position, said last mentioned means including, a pair of upright extensions on said frame extending upwardly from the level of the seat portion, a pivoted link pivotally connected from a point substantially midway between the upper end of each extension and said seat portion to a point at the lower end of the backrest-tabetop portion for pivotal movement of said backrest-tabletop portion relative to said frame, said backrest-tabletop portion including a member for sliding engagement with the upper end of each upright extension as said backrest-tabletop portion is pivoted relative to the frame, and said upright extensions and said links supporting said backrest-tabletop portion with said lower end thereof extending inwardly of said uprights but sufficiently displaced from a position directly above said seat portion to enable a person to sit on said seat portion while using said backrest-tabletop portion as a table.

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