Feb. 6, 1968 G. C. GREENE 3,367,712

STEP STOOL-CHAIR-TABLE

Filed Jan. 7, 1966 2 Sheets-Sheet 1

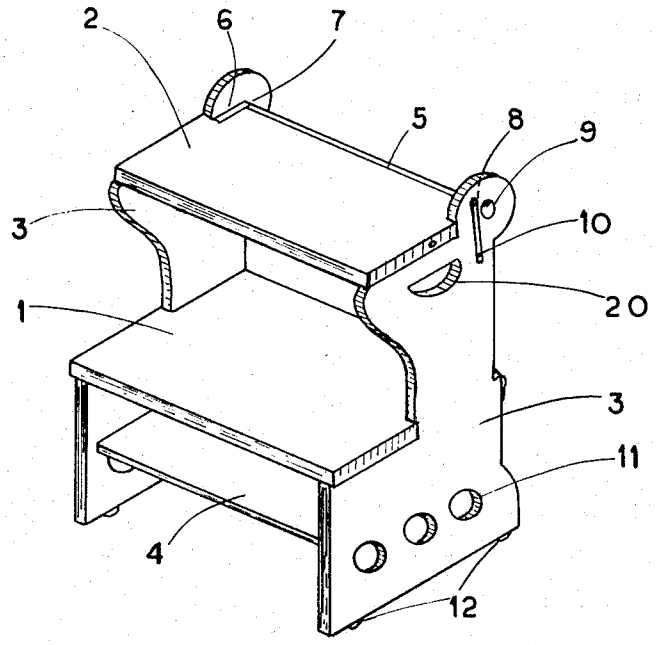


FIG. 1

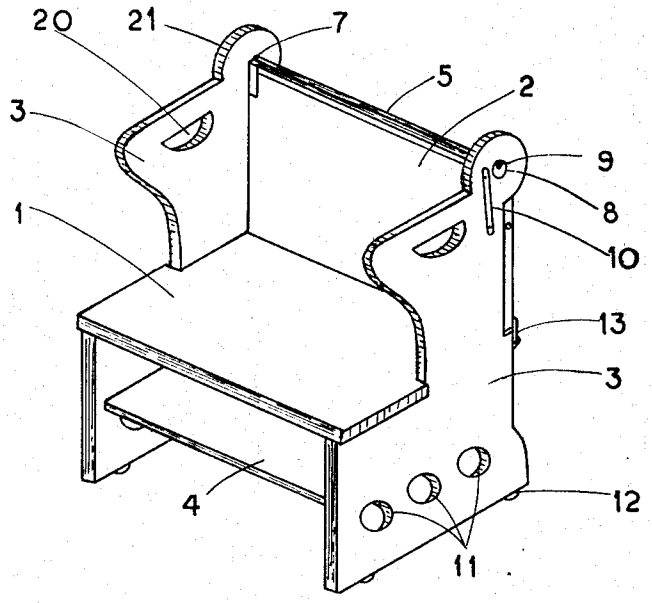


FIG. 2

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FIG. 3

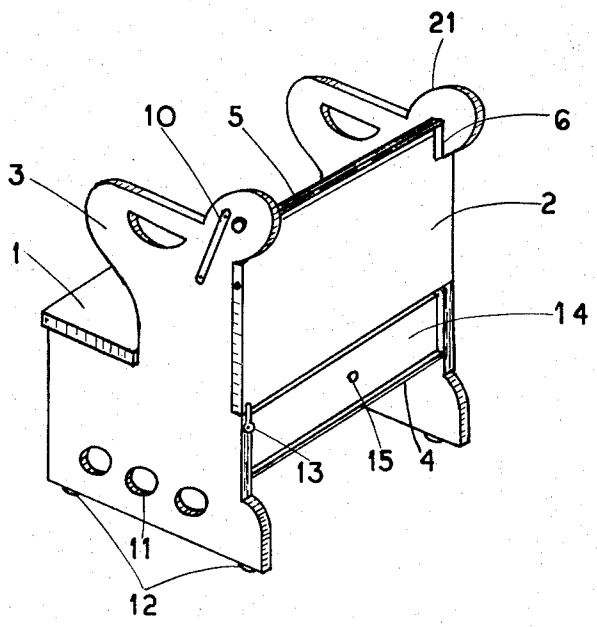
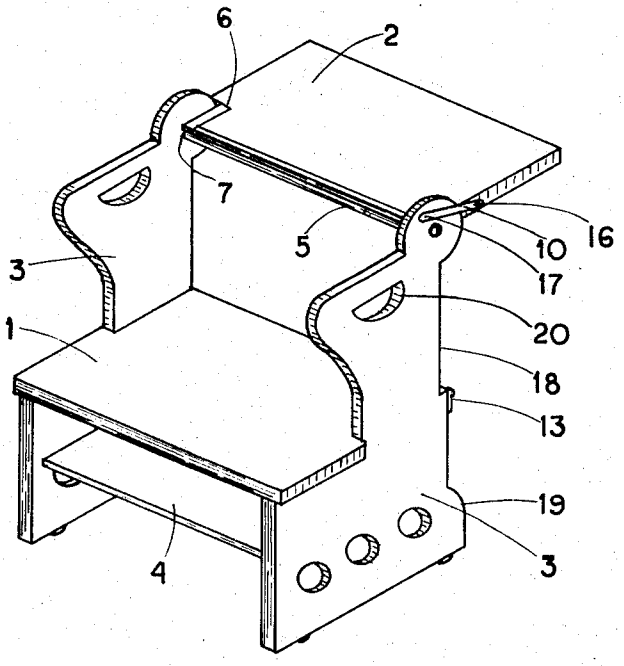


FIG. 4



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STEP STOOL-CHAIR-TABLE

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ABSTRACT OF THE DISCLOSURE

A convertible article of furniture having a support frame, a fixed seat and a pivotal member secured to the top of the frame above the seat. The pivotal member being capable of rotating about the frame to abut the top or the back of the frame, a latch is provided to retain the pivotal member in a position intermediate its abutting positions. The latch is pivotally secured by one end to the frame and its free end engages a lug on the pivotal member when it is desired to support the pivotal member in a non-abutting position.

This invention relates to an improved multiple purpose article of furniture and more particularly to an article of furniture that can be converted to either a step ladder, chair, stool or table.

While individual articles of furniture have been used for multiple purposes for many years, such articles of furniture are usually large, extremely cumbersome and not ideally suited for any one of the purposes intended. For example, chairs have served an additional purpose as a step ladder; however, the first step is much higher than it ideally should be and a chair is usually too frail to support the weight of an adult.

The present step stool in its normal condition is low enough to be used as a chair for adults, and as such it has many uses in homes, camps and shops. In shops it has much practical value as a stool where the worker can sit and have his tools right under the seat immediately available.

By turning the top step in the step stool over to a substantially vertical position, and anchoring it with a latch, it becomes a back for the chair and a very convenient and practical chair for use in kindergarten and primary schools. It is so light and well constructed, with no sharp corners, that a child can move it easily from place to place with no danger of the chair breaking and with perfect safety to the child. The seat of the child's chair is only a small distance above the floor and of a substantial width thereby making it almost impossible to be turned over.

The present invention, after a simple manual adjustment, can be converted from a child's chair to a children's table quickly and easily. When the top step is turned over to a horizontal position and anchored by a latch on the side of the main supporting frame it becomes a table. When the child reverses himself in the seat he has a table in front of him with all the numerous uses that a child can find for this unique and safe invention.

An object of this invention is to provide an improved multiple purpose article of furniture.

Another object is to provide a step ladder that converts to a child's chair, a stool, or a child's chair and table combination.

Another object is to provide a multiple purpose article of furniture that is sturdy and safe for all of its intended uses.

Another object is to provide an improved child's chair that can be easily and quickly converted into a combination chair and table for a child.

Additional advantages and objects of this invention will be observed as the specifications develop.

This multiple device is further explained in the accompanying drawings.

FIGURE 1 is a front perspective view of the combination chair when adapted to be used as a stool or step ladder;

FIGURE 2 is a front perspective view of the combination chair when adapted to be used as a child's chair;

FIGURE 3 is a rear perspective view of the child's chair of FIGURE 2;

FIGURE 4 is a front perspective view of the combination chair of FIGURE 1, adapted to be used as a combination child's chair and table.

Referring now to the drawings, wherein like reference numbers designate like or corresponding parts throughout the several views, there is shown in FIGURES 1–4, a combination chair **21** having a step seat **1** secured between a substantially vertical support frame **3**. The support frame consists of a pair of substantially "L" shaped members having a horizontal edge along their upper edge and at a point intermediate their upper and lower ends. The step seat **1** is secured between the upwardly extending legs of the frame **3** in a manner such that the step seat **1** rests upon the intermediate horizontal edge of the frame **3**.

Pivotally disposed between the upwardly extending legs of the frame **3** is a convertible member **2**. The convertible member **2** is adapted to rest upon the upper horizontal edge of the frame **3** when the combination chair **21** is to be used as a step ladder or stool. The convertible member **2** has a cut-out **6**, which is disposed between the frame **3**. The cut-out **6** allows a portion of the member **2** to be pivotally mounted between the frame **3** while allowing the body of the member **2** to rest upon the upper horizontal edge. Secured to the edge of the member **2** disposed between the frame **3** is a sheath **5**. The sheath **5** fits over the edge of the member **2** and prevents the member from splitting or breaking under strain. The convertible member **2** has a pivot rod **9** secured thereto adjacent its sheathed end. The pivot rod **9** is rotatably secured to and between the frame **3** by a pair of bearings **8**. The bearings **8** are secured within the frame **3** and the pivot rod **9** allows the convertible member **2** to pivot about the upper edge of the frame **3**.

A shelf **4** is secured between the support frame **3** below and parallel to the step seat **1** in a manner well known to those skilled in the art so that the shelf can be removed when desired. A plurality of apertures **11** are located in the support frame **3** below and adjacent the shelf **4**.

FIGURES 3 and 4 show a recess **18** located along the back edge of the frame **3** adjacent and below the upper edge of the frame where the convertible member **2** is pivotally attached. The recess **18** is of a depth substantially equivalent to the thickness of the convertible member **2** and is disposed to that when the member **2** is rotated 270° from its horizontal position upon the upper edge of the frame **3**, the member **2** will fit within the recess **18**. Disposed along the back edge of the frame **3** below the recess **18** adjacent the lower edge of the frame **3** is an extension **19**. Gliders **12** are attached to the lower edge of the frame **3** in order to facilitate the movement of the convertible chair **21** over floors and carpets.

A back stop **14** is secured between the frame **3** adjacent the shelf **4** along the rear edge of the frame **3**. The back stop **14** serves to prevent books or packages placed upon the shelf **4** from falling off and also strengthens and stiffens the chair **21**. An aperture **15** is located in the back stop **14** in order to facilitate the removal of the back stop. Located below and adjacent the upper horizontal edge of the frame **3** is a hand hole **20**. The hand hole **20** provides a means for lifting and carrying the chair in order to transport it from place to place.

In operation, when the convertible member **2** is resting upon the upper horizontal edge of the frame **3**, as shown in FIGURE 1, the convertible chair **21** can be utilized as either a step ladder or a stool upon which adults may sit. In this position the weight placed upon the convertible member **2** is distributed along the upper edge of the support frame **3**. When it is desired to convert the stool to a child's chair, as shown in FIGURE 2, the convertible member **2** is pivoted approximately 270° about the pivot rod **9** until the member **2** lies in substantially parallel juxtaposition to the back edge of the frame **3**. When in this position the member **2** fits within the recess **18** and provides a back for a child's chair, as shown in FIGURE 3, and a latch **13** is used to hold the member **2** securely in the recess **18**. The latch **13** is secured to the back edge of the frame **3** at a point below and adjacent the recess **18**.

FIGURE 4 shows the convertible chair **21** when it is adapted to be used as a child's chair and table. In this conversion the convertible member **2** is pivoted approximately 180° from its stool position of FIGURE 1 so that the member **2** is disposed at a point intermediate its stool and child's chair position. In order to retain the convertible member **2** in its intermediate table position a support means **10** is provided. The support means **10** consists of a latch pivotally secured by one end to the upper end of the frame **3**, as indicated by numeral **17**. The support means **10** is secured to the frame **3** at a point above the interconnection of the pivot rod **9** with the frame **3**. The unsupported end of the latch portion of the support means **10** has an opening therein, the opening being of sufficient diameter to cooperate with a lug extending outwardly from the side edges of the convertible member **2**, as illustrated by the numeral **16** in FIGURE 4. By varying the number of lugs or the position of the lug along the side of the convertible member **2**, the member can be positioned at various angles. FIGURE 4 shows the member **2** positioned substantially 180° from the position of FIGURE 1; however, the member **2** can be positioned 130° from the position of FIGURE 1 and thereby be used as a reading stand or it can be positioned at any angle between FIGURE 1 and 270°. When the convertible chair **21** is being used as a child's chair and table, as illustrated in FIGURE 4, the extension **19** serves a very useful purpose in preventing the chair from tilting over backwards when weight is placed upon the member **2**, pausing a moment about point **17**.

While the invention has been described in a preferred embodiment, it will be obvious to those skilled in the art that modification and substitutions can be made in some of the members herein without departing from the spirit and scope of this invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. A convertible article of furniture comprising:

a support frame;

a step seat secured to said support frame intermediate its upper and lower ends;

a convertible member pivotally mounted adjacent an edge to the upper end of said support frame and adapted to pivot from a position abutting the upper edge of said support frame to a position abutting the rear edge of said support frame; and

a support means pivotally mounted to said support frame and adapted to positively engage said convertible member when said convertible member is pivoted to a position intermediate its abutting positions, the engagement between said support means and said convertible member serving to retain said convertible member in a position intermediate its abutting positions.

2. A convertible article of furniture in accordance with claim **1**, wherein said support means comprises a latch pivotally secured by one end to said support frame, said latch having means adjacent its free end for cooperating with a lug extending outwardly from the side edges of said convertible member, whereby said latch when in cooperating engagement with said lug supports said convertible member in a position intermediate its abutting positions.

3. A convertible article of furniture in accordance with claim **1**, wherein said convertible member is adapted to pivot approximately 270 degrees between its abutting positions.

4. A convertible article of furniture comprising:

a support frame having a substantially horizontal upper and intermediate edge;

a step seat secured to said support frame and adapted to rest upon said intermediate edge;

a convertible member having a cut-away portion adapted to fit between and be pivotally secured adjacent its edge to said support frame, the portion of said convertible member extending outwardly from between said support frame being adapted to abut said upper edge when said convertible member is pivoted in one direction and to abut the rear edge of said support frame when said convertible member is pivoted approximately 270 degrees in an opposite direction;

a support means comprising a latch is pivotally secured by one end to said support frame above and adjacent the pivot point of said convertible member, said latch having means adjacent its free end for engaging a lug extending outwardly from the side edges of said convertible member, the engagement between said latch and said lug serving to retain said convertible member in a position intermediate its abutting positions.

References Cited

UNITED STATES PATENTS

183,924	10/1876	Harrison	182—33.3
1,269,967	6/1918	Sill	297—124
1,557,342	10/1925	Schlamp	182—33.3
1,710,270	4/1929	Peterson	182—33.3
1,948,387	2/1934	Levy	297—126 X
2,550,811	5/1951	Herbert	297—124
2,702,584	2/1955	Williams et al.	297—124
2,897,876	8/1959	Austin	297—124 X
3,061,369	10/1962	Haunost	297—124

FOREIGN PATENTS

3,057	1865	Great Britain.
929,272	6/1965	Germany.

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