Dec. 13, 1927.

1,652,942



Dec. 13, 1927.

E. F. JAMES

FOLDING STOOL OR TABLE











Inventor:-Edwin F. Tarmes. By his Attorneys, buren + How on

1,652,942

Dec. 13, 1927.

E. F. JAMES

1,652,942

FOLDING STOOL OR TABLE Filed Aug. 5. 1926

3 Sheets-Sheet 3





Inventor:-Eduin F. James, By his Attorneys, Howson + Howson

55

UNITED STATES PATENT OFFICE.

EDWIN F. JAMES, OF ABINGTON, PENNSYLVANIA.

FOLDING STOOL OR TABLE.

Application filed August 5, 1926. Serial No. 127,320.

My invention relates to articles of furniture such as stools and tables and the principal object of my invention is to form such an article in a manner permitting of its be-ing collapsed or folded and compactly assembled, when in its collapsed state, into a form requiring a minimum amount of storage space.

Another object of my invention is to con-10 struct a stool of two separate elements, viz: a folding frame and a removable seat. When assembled for use the frame element is adapted to be spread, for providing a substantial support for the seat element, and the

seat element is adapted to be placed upon the 15 frame element in a manner to maintain the frame element in its spread or open state and prevent accidental collapsing of the frame. When in its compact state the frame element

20 is adapted to be folded and the seat element is adapted to fit within the folded frame element in a manner to permit of its being con-veniently carried from place to place, or stored in a minimum amount of space.

Other advantages and the details of the 25 construction of my invention will be more fully disclosed hereinafter, reference being had to the accompanying drawings, of which:

Fig. 1 is a perspective view of a stool em-80

bodying the principles of my invention; Fig. 2 is a detached perspective view of the separate elements constituting a stool constructed in accordance with the principles of 35 my invention;

Fig. 3 is a sectional elevation of the stool illustrated in Figs. 1 and 2;

Fig. 4 is a view of the stool in its collapsed state, illustrating the elements assembled for 40 storage or carrying;

Fig. 5 is a sectional view taken on the line -5 of Fig. 4;

Figs. 6 and 7 are views, similar to Fig. 4, illustrating modified forms of the invention: 45

Figs. 8 and 9 illustrate modified forms of the frame element;

Fig. 10 illustrates the modification, as shown in Fig: 9, as being in a collapsed or 50 folded state;

Fig. 11 illustrates a modified form of the seat element;

Figs. 12 and 13 illustrate a modified form of the seat element provided with a folding back; and

Fig. 14 illustrates the principles of my invention as being applied to a table.

Referring to Figs. 1 to 5 inclusive, my improved stool comprises a collapsible supporting frame element 1 and a removable seat 60 element 2.

The supporting frame 1 consists of a pair of substantially rectangular rigidly constructed frame sections 3 and 4, each being provided with longitudinal substantially 65 vertically extending leg members 5, 5 and 6, 6 respectively. The leg members 5, 5 are connected at their ends by integral transverse members 7 and 8, and the leg mem-bers 6, 6 are connected by their ends by in- 70 tegral transverse members 9 and 10.

The leg members 5, 5 and 6, 6 are of substantially equal lengths and in order to permit the frame 1 to be folded, from the form illustrated in Fig. 2 to that illustrated in 75 Figs. 4 and 5, the transverse members 7 and 8 of the frame section 3 are offset as shown at 11, in order that the frame section 3 can be placed within the frame section 4 and the transverse members 7 and 8 in operative en- 80 gagement with the transverse members 9 and 10 of the frame section 4.

The frame sections 3 and 4 are pivotally attached to each other by means of rivets 12 and 13 passing through the transverse mem- 85 bers 7-9 and 8-10 respectively.

By means of the offset portions 11 in the transverse members 7 and 8 the length of the legs 5, 5 and 6, 6 are maintained equal and 90 folding of the frame sections is permitted, thus the stool in its open state is steady and level, and when folded the legs 5, 5 and 6, 6 of the frame sections 3 and 4 lie parallel and immediately adjacent to each other and provide an open space 14 of dimensions suffi- 95 cient to accommodate the seat element 2.

The seat element 2 comprises a seat proper, 15, of substantially circular form having an integral rolled-edge flange 16. The flange 16 is provided with pockets 17 adapted to 100 accommodate the upper ends of the legs 5, 5 and 6, 6 when the stool is assembled for use and thereby prevent accidental collapsing or folding of the frame element 1. The

internal diameter of the flange 16 is such, in the flattened frame element and said relative to the spread of the upper portion of the frame 1, that said flange fits snugly over said frame and requires some force to 5 remove the seat element 2 from the frame element 1.

The pockets 17 may be dispensed with if desired and the frictional engagement of the flange 16 with the frame 1 be depended upon

10 to maintain the frame in its spread state. provided with an angularly disposed brace member 19 which is only employed when the frames are constructed of light gage ma-

15 terial or the stool is adapted to support extreme weight.

Fig. 7 illustrates the frames 3^{b} and 4^{b} as having semi-circular lower transverse members 8^{b} and 10^{b} , respectively, for the ac-20 commodation of the seat element 2^b when the frame is in a collapsed state.

Fig. 8 illustrates a frame element comprising three rectangular frame sections 1°, 3° and 4°, pivoted to each other at a common pivotal centre 12° and adapted to be folded 25 or collapsed in the same general manner as illustrated in Fig. 5.

Figs. 9 and 10 illustrate a frame element composed of a plurality of semi-rectangular 30 frame sections 3^d, 3^e, 4^d and 4^e having a common pivot 12^e. The frame when collapsed is in the form of a fan as illustrated

in Fig. 10. In Fig. 11, I have illustrated a seat ele-**35** ment 2^t which is in the form of a square, having a depending flange 16^t and being shaped at its four corners to form angular portions 17^t which function in a manner similar to the pockets 17 of the seat element 40 2 (Fig. 1) for reception of the upper end

of each of the frame sections 3 and 4. In Figs. 12 and 13, I have illustrated the stool as having a folding back rest 20 piv-oted at 21 to the flange 16^s of the seat ele-45 ment 2^g. The seat element 2^g is adapted to be placed within the folded frame element 1 in the manner above described, and when in such position the back rest 20 assumes a position illustrated in broken lines in Fig. 12. The back rest 20 is provided with a **50** 12. depending arm 22 having ears 23 which engage the leg portion of one of the frame sections for steading the back rest and also preventing relative movement between the 55 frame and seat sections.

In Fig. 14, I have illustrated my inven-tion as applied to a table. The construction is identical with that shown in Figs. 1 to 3 being of greater dimensions in proportion 60 to a stool, with an additional element 25 secured to the element 2^h, which corresponds to the seat element 2 in Fig. 1. The element 25 is of greater diameter than the element 2^{h} and functions as a table top. When frame element lies within the flange 26 of the table top 25.

I claim:

1. An article of furniture comprising a 70 collapsible frame member and a top member adapted to fit snugly upon one end of the frame member when said frame member is in an extended condition and to be entirely removed therefrom to permit col- 75 In Fig. 6, the frames 3ª and 4ª are each lapse of said frame member; the collapsible frame member comprising a pair of substantially similar sections each of which consists of a pair of spaced leg elements and a pair of transverse elements integrally con- 80 necting the said leg elements immediately adjacent the extreme ends thereof, each of said frame sections having a substantially rectangular formation outlined by said leg and transverse elements and providing an 85 open and unobstructed centre of sufficient dimensions to receive the said top member therewith when the same is entirely removed from said frame member; means for piv-otally connecting each adjacent pair of 90 transverse elements on a pivotal centre line common to both pairs of adjacent transverse elements permitting said frame member to be collapsed to a state wherein the leg elements of each section thereof lie immediate- 95 ly adjacent the leg elements of the other frame section; said top member comprising a substantially flat portion having a depending flange extending entirely around said circular flat portion and adapted to grip the 100 outer side of said leg elements of the frame member adjacent one end thereof when the frame is in an extended condition, said top member being of such dimensions as to fit within the open unobstructed centre of the 105 frame member when the frame is in a collapsed condition.

2. An article of furniture comprising a collapsible frame member and a top member adapted to fit snugly upon one end of the 110 frame member when said frame member is in an extended condition and to be entirely removed therefrom to permit collapse of said frame member; the collapsible frame member comprising a pair of substantially similar 115 sections each of which consists of a pair of spaced leg elements and a pair of transverse elements integrally connecting the said leg elements immediately adjacent the extreme ends thereof, each of said frame sections 120 having a substantially rectangular formation outlined by said leg and transverse elements and providing an open and unobstructed centre of sufficient dimensions to receive the said top member therewithin when 125 the same is entirely removed from said frame member; means for pivotally connecting each adjacent pair of transverse elements on When a pivotal centre line common to both pairs 65 folded or collapsed the element 2^h lies with- of adjacent transverse elements permitting 130

wherein the leg elements of each section tions having a substantially rectangular thereof lie immediately adjacent the leg elements of the other frame section; said top verse elements and providing an open and member comprising a substantially flat por-5 tion having a depending flange extending entirely around said circular flat portion and adapted to grip the outer side of said leg elements of the frame member adjacent 10 one end thereof when the frame is in an extended condition; pockets formed in said depending flange into which said leg elements are adapted to fit to maintain said frame member in an extended condition, said top 15 member being of such dimensions as to fit within the open unobstructed centre of the frame member when the frame is in a collapsed condition.

3. An article of furniture comprising a 20 collapsible frame member and a top member adapted to fit snugly upon one end of the frame member when said frame member is in an extended condition and to be entirely removed therefrom to permit collapse of 25 said frame member; the collapsible frame member comprising a pair of substantially similar sections each of which consists of a pair of spaced leg elements and a pair of transverse elements integrally connecting the 30 said leg elements immediately adjacent the

said frame member to be collapsed to a state extreme ends thereof, each of said frame secformation outlined by said leg and transunobstructed centre of sufficient dimensions 35 to receive the said top member therewithin when the same is entirely removed from said frame member; means for pivotally connecting each adjacent pair of transverse elements on a pivotal centre line common to both pairs 40 of adjacent transverse elements permitting said frame member to be collapsed to a state wherein the leg elements of each section thereof lie immediately adjacent the leg elements of the other frame section; an offset 45 formed in one of each of the adjacent pairs of transverse elements to facilitate the collapsing of said frame member; said top member comprising a substantially flat portion having a depending flange extending 50 entirely around said circular flat portion and adapted to grip the outer side of said leg elements of the frame member adjacent one end thereof when the frame is in an extended condition, said top member being of 55 such dimensions as to fit within the open unobstructed centre of the frame member when the frame is in a collapsed condition.

EDWIN F. JAMES.