

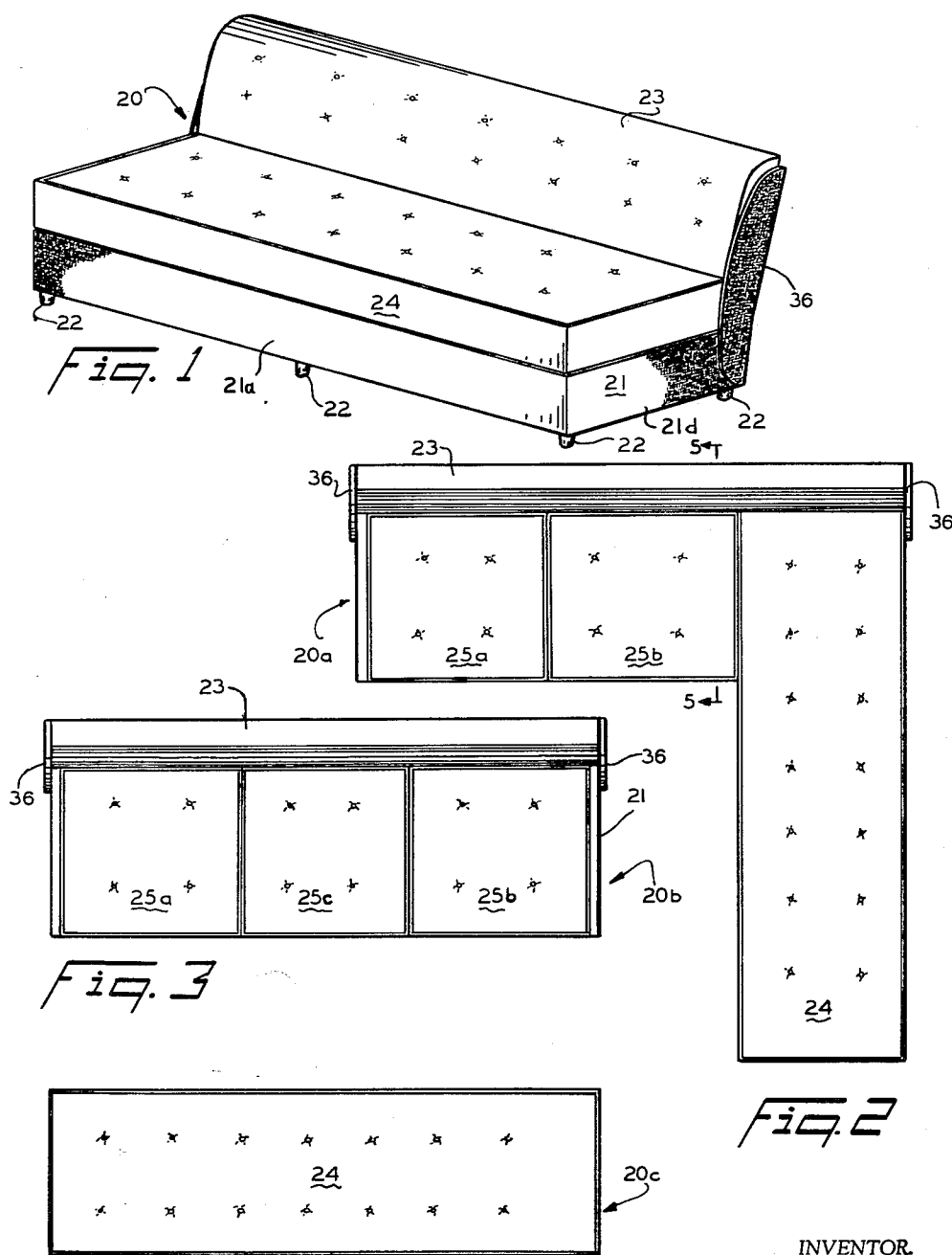
June 1, 1965

E. WANZENRIED
EXPANSIBLE COUCH

3,186,758

Filed Oct. 31, 1963

3 Sheets-Sheet 1



INVENTOR
ERNEST WANZENRIED

BY

Richard von K. Bume
Atty.

June 1, 1965

E. WANZENRIED

3,186,758

EXPANSIBLE COUCH

Filed Oct. 31, 1963

3 Sheets-Sheet 2

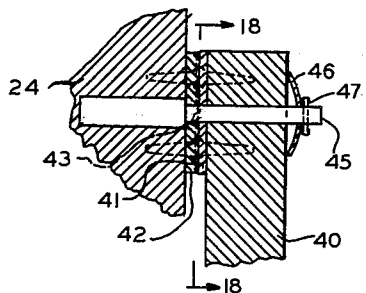


Fig. 17

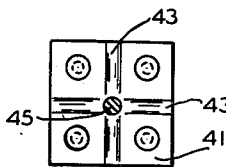


Fig. 18

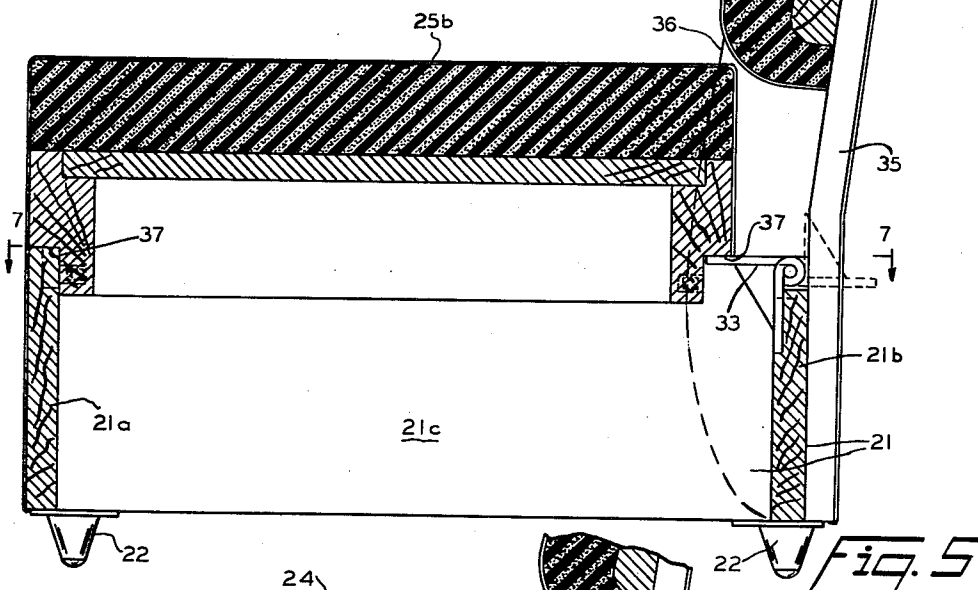
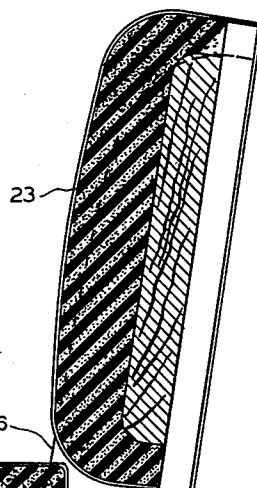


Fig. 5

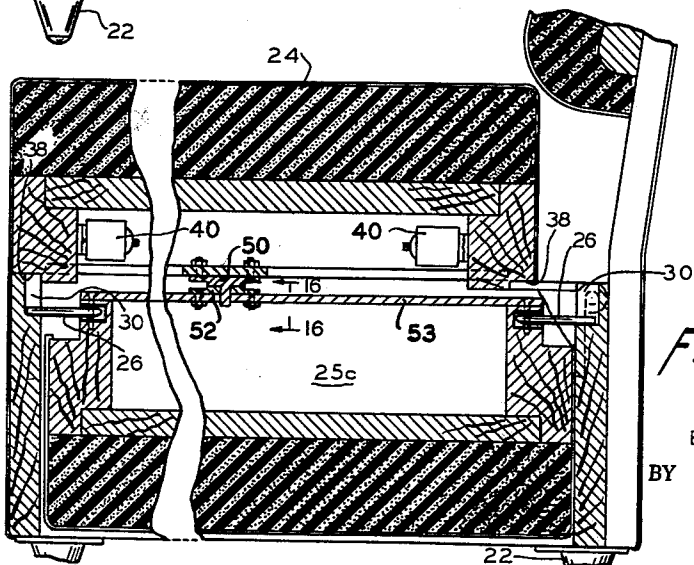


Fig. 6

INVENTOR
ERNEST WANZENRIED

BY

Richard von K. Bunn
Atty.

June 1, 1965

E. WANZENRIED

3,186,758

EXPANSIBLE COUCH

Filed Oct. 31, 1963

3 Sheets-Sheet 3

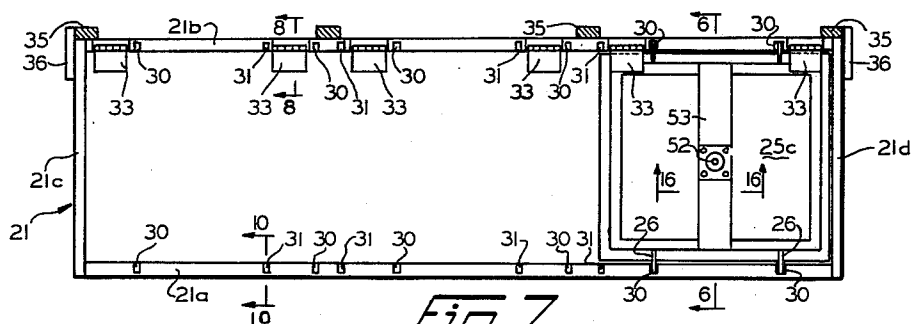


Fig. 7

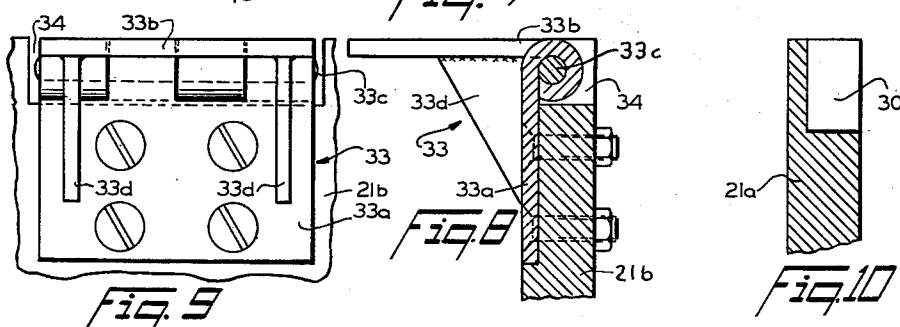


Fig. 9

Fig. 6

Fig. 10

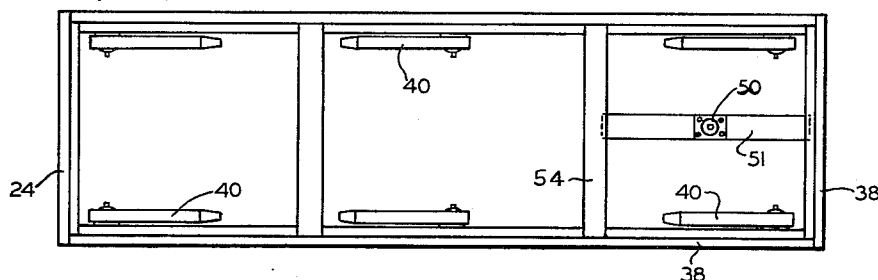


Fig. 11

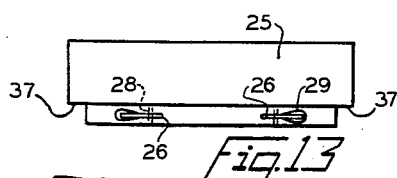


Fig. 13

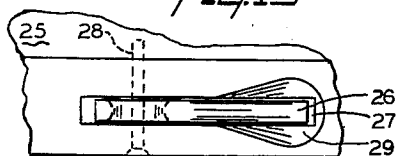


Fig. 14



Fig. 15

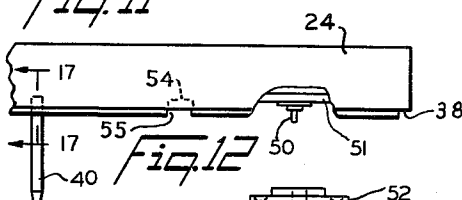


Fig. 12

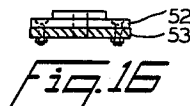


Fig. 16

INVENTOR
ERNEST WANZENRIED

BY Richard K. Burns
Atty.

1

3,186,758

EXPANSIBLE COUCH

Ernest Wanzenried, Turin Road, Rome, N.Y.

Filed Oct. 31, 1963, Ser. No. 320,259

6 Claims. (Cl. 297-118)

This invention relates to an expansible couch, and has particular reference to a couch which may be expanded either to an L-shaped corner couch or to a couch and a separate settee.

The primary object of the invention is to provide a couch which may be easily and quickly expanded to an L-shaped corner couch.

Another important object is to provide a couch in which all the necessary members for expanding the couch to an L-shaped corner couch or to a couch and separate settee are stored and concealed within the couch.

Other objects and advantages will become apparent from the following description taken in conjunction with the accompanying drawings in which:

FIGURE 1 is a perspective view of an unexpanded couch according to the invention;

FIGURE 2 is a plan view of the couch of FIGURE 1 expanded to an L-shaped corner couch;

FIGURES 3 and 4 are plan views of the couch of FIGURE 1 expanded to form a couch and separate settee respectively;

FIGURE 5 is an enlarged sectional view on the line 5-5 of FIGURE 2;

FIGURE 6 is a fragmentary enlarged sectional view on the line 6-6 of FIGURE 7;

FIGURE 7 is a sectional view on a reduced scale on the line 7-7 of FIGURE 5;

FIGURE 8 is an enlarged sectional view on the line 8-8 of FIGURE 7;

FIGURE 9 is a fragmentary side elevational view of the parts shown, and as viewed from the left, in FIGURE 8;

FIGURE 10 is an enlarged fragmentary sectional view on the line 10-10 of FIGURE 7;

FIGURE 11 is a bottom plan view of the unitary seat section of FIGURE 4;

FIGURE 12 is a fragmentary side elevational view of the seat section of FIGURE 11, partly broken away to show the pivot pin member;

FIGURE 13 is a side elevational view of a seat unit normally stored as shown in FIGURE 6;

FIGURE 14 is a fragmentary enlarged elevational view of a support pin of the unit of FIGURE 13;

FIGURE 15 is a plan view of the support pin of FIGURE 14;

FIGURE 16 is an enlarged sectional view on the line 16-16 of FIGURE 7;

FIGURE 17 is an enlarged fragmentary sectional view on the line 17-17 of FIGURE 12; and

FIGURE 18 is a sectional view on the line 18-18 of FIGURE 17.

Referring more particularly to FIGURES 1-4 inclusive, the couch 20 has a hollow frame section 21 provided with legs 22, an upholstered back 23 and a unitary seat section 24. Means are stored within the frame section 21 for converting the couch 20 of FIGURE 1 to either an L-shaped corner couch 20a as shown in FIGURE 2, or to a couch 20b as shown in FIGURE 3 and a separate settee 20c as shown in FIGURE 4.

Referring to FIGURES 5, 6 and 7, provision is made for storing upholstered seat units 25 (individually indicated as 25a, 25b and 25c in FIGURE 3) within the hollow frame section 21. Each of the seat units 25, as shown in FIGURE 13, is provided at its front and rear sides with support pins 26 pivotally secured in horizontally

2

extending slots 27 by pins or screws 28, as best seen in FIGURE 14. Bevelled finger notches 29 are cut in the sides of the seat units so that the pins may be grasped and swung out of slots 27 so as to project horizontally from the sides of the units for supporting the units 25 in storage.

The front and rear side members 21a and 21b, respectively, of frame section 21, are connected by end members 21c and 21d and are provided with grooves or notches 30 in which the pins 26 of the seat units 25 may be engaged when the seat units are inverted and placed within the frame section for storage, as best seen in FIGURES 7 and 10. The seat unit 25c has the same length as width, and the units 25a and 25b have the same width but are somewhat longer. In FIGURE 7 the seat unit 25c is shown stored at the right end of the couch, but other grooves 31 similar to the grooves 30 are provided in frame section 21 so that the units 25 may be stored in the reverse order with unit 25c at the left end of the couch, if desired.

To facilitate the storage of the seat units 25 in the frame section 21 and their removal therefrom, six hinged support members 33 are provided along the top of the rear side member 21b. Each member 33 has a portion 33a secured in a recess in side member 21b and a support plate 33b is hingedly connected thereto by the pin 33c, as best seen in FIGURES 8 and 9. Transversely disposed braces 33d are secured to the support plates 33b to provide stop portions, adapted to rest against the portions 33a, for maintaining the plates 33b in a horizontally disposed position. Side member 21b is notched at 34 to accommodate each member 33 so that it can be swung from a support position, as shown in full lines in FIGURE 5, upward and rearward to a position shown in broken lines while storing or unstoring the seat units 25.

The upholstered back 23 is supported on frame section 21 by uprights 35 bolted or otherwise secured to the frame section 21. Back 23 extends from the top of the couch to substantially the normal level of the top of the seat section 24, there being suitable space below back 23 so that seat units 25 may be easily stored and unstored. End boards 36, best shown in FIGURES 1 and 5, are secured to frame section 21 and conceal this space at either end of the couch.

Back 23, seat units 25, and the seat section 24 are shown upholstered and provided with foam rubber cushions, but it will be understood that conventional upholstered spring and pad construction may be used. Components of the frame and seat members, shown in the drawings as wood, may be of any other suitable material.

The underside of each seat unit 25 is provided with a marginal shoulder 37 (FIGS. 5 and 13), and the underside of the seat section 24 is provided with a marginal shoulder 38 (FIG. 12), the shoulders being adapted to rest on and be supported by the top of the frame section 21 and the support plates 33b at the rear of the couch.

The seat section 24 is provided with floor legs 40 of appropriate height pivotally secured to the side members of this section. These legs are normally swung up within the seat section, as shown in FIGURE 11. Each leg 40 has a plate 41 secured thereto and a cooperating plate 42 is secured to the side member of section 24 as shown in FIGURE 17. Plate 41 is grooved at 43-43 as shown in FIGURE 18, the two grooves being at right angles, and plate 42 has corresponding beads or ridges 44 adapted to engage the grooves for holding the legs folded, as in FIGURE 11, or extended, as illustrated in FIGURE 12.

At the intersection of grooves 43 and ridges 44, a pivot pin 45 extends through the plates 42 and 41 and transversely through the leg 40. A cupped spring washer 46 on the inner end of the pivot pin 45 bears against the leg 40

and against a retaining rivet or headed pin 47 through the end of pivot pin 45. This arrangement provides detent means for holding each leg in normal folded position at the bottom of seat section 24 or in pendant extended position for supporting the seat section when it is swung out to form an L-shaped couch as hereinafter described.

For guiding the seat section 24 when it is extended to form an L-shaped corner couch, a pivot pin member 50 is secured to a suitable cross member 51 on the bottom of seat section 24 as shown in FIGURES 11 and 12. A cooperating pivot socket member 52 is secured to an appropriate cross brace 53 at the bottom center of seat unit 25c. Since seat section extends across the front side member 21a of the frame section when the couch is expanded, another cross brace member 54 may be conveniently secured in a recess in the bottom of section 24 to provide a notch 55 at either end of member 54 so that this end of section 24 may be evenly supported on the frame section.

In operation, the couch 20 normally has seat units 25 stored within frame section 21 and supported by the projecting pins 26 seated in grooves 30 or 31. The seat section 24, with legs 40 folded up therewithin, is supported on frame sections 21, the shoulders 38 resting on the end members 21c and 21d and side member 21a. The shoulder 38 at the rear side of the section is engaged and supported by the hinged members 33.

When it is desired to expand the couch to an L-shaped corner couch, the seat section is raised slightly and turned out to the position as shown in FIGURE 2, the pivot pin member 50 in its socket 52 aligning one end of the seat section in frame section 21. The notch 55 permits the end of section 24 which is aligned with the stored seat unit 25c to rest evenly on the hinged support members 33 and the top of the side member 21a. The four legs 40 at the extended end of the seat section 24 are turned down to support this projecting end. Seat units 25a and 25b are then removed from storage, inverted and placed in the position indicated in FIGURE 2.

Since the seat unit 25c, the bottom of which is provided with the cooperating pivot connection, can be freely moved, it can also be located at the left end of the couch so that the section 24 extends from this end when the couch is expanded when the arrangement of the furniture in the room makes this location more desirable.

Further flexibility in arrangement is provided in that section 24 may be removed completely from the couch and all three of the seat units 25 may be inverted as shown in FIGURE 3. Section 24 is provided with six legs 24, as shown in FIGURE 11, so that all the legs may be turned down and section 24 then becomes a separate settee which may be used at any location in the room remote from the couch 20b.

Furthermore, whether the couch 20 is used unexpanded or expanded to form an L-shaped couch or completely expanded to form a couch and separate settee, all parts not needed for the particular arrangement desired are concealed and stored within the couch itself.

It will now be apparent that there has been provided a useful article of furniture for homes with limited space. The couch can readily be expanded to provide additional seating space, all the parts needed for the expansion having been stored and concealed within the unexpanded couch.

As will be apparent to those familiar with the art, the invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. The embodiment disclosed is therefore to be considered in all respects as illustrative rather than restrictive, the scope of the invention being indicated by the appended claims.

What is claimed is:

1. An expansible couch having an elongated hollow four-sided frame section provided with floor legs, a back supported on said frame section and overlying a portion

of the frame section along its back side, a plurality of seat units narrower than the frame section and normally stored within said frame section, each of said seat units having retractable means for supporting the unit in said frame section, a unitary removable seat section of substantially the same width and thickness as said seat units and of a length substantially equal to the sum of the lengths of said seat units and normally supported above said stored units on said frame section, and movable seat supporting means beneath said back and secured along the back of said frame section, said supporting means being normally concealed by the overlying back and adapted to be moved from seat-supporting position during storing and unstoring of said seat units, said seat section having a plurality of legs adapted to support said seat section at its normal height, said seat section legs being normally stored beneath said seat section and being movable to a position for supporting said seat section independently of said frame section and said seat units being adapted to be supported by the seat supporting means in place of said seat section.

2. An expansible couch comprising a hollow elongated frame section, a plurality of seat units normally stored in inverted position within said frame section, an elongated unitary seat section normally supported on said frame section above said stored seat units, and coacting means on the bottom of said unitary seat section and on the bottom of one of said seat units for guiding said seat section while said seat section is pivotally turned in a horizontal plane relative to said frame section, said coacting means being separable for removing said seat section completely from said frame section, said seat section having normally retracted legs movable into supporting position when the seat section is pivotally turned relative to said frame section or completely separated therefrom.

3. An expansible couch including a hollow elongated frame section provided with floor legs, an upholstered back supported on said frame section, a plurality of upholstered seat units normally stored within said frame section, each of said seat units having a plurality of retractable horizontally-extending support members engaged with said frame section, a unitary upholstered seat section normally supported above said stored units on said frame section, hinged means mounted on the back side of said frame section for supporting said seat section and said seat units on said frame section, said hinged means being adapted to be swung upwardly and outwardly for storing and removing from storage said seat units, said seat section being provided with floor legs normally stored beneath said seat section and adapted to be pendantly secured thereto for supporting said seat section independently of said frame section, whereby said seat section may be partially supported on said frame section and partially on said pendant legs, and all but one of said seat units may be removed from storage and supported on said frame section for forming an L-shaped couch, or all of said seat units may be supported on said frame section and said seat section may be concurrently independently supported for forming a couch and separate settee.

4. An expansible couch including a hollow elongated frame provided with floor legs, a forwardly-projecting, upholstered back supported on and above said frame, a plurality of upholstered seat units narrower than said frame and normally stored inverted within said frame, each of said seat units having a plurality of retractable, horizontally-extending support pins projecting therefrom adjacent the bottom thereof at the front and back sides and engaged in grooves in the top of said frame, a unitary upholstered seat section of the same width as said seat units and normally supported above said stored units on said frame; a plurality of hinged support brackets mounted along the back side of said frame section for supporting said seat section and said seat units on said frame, said brackets being adapted to be swung upwardly for storing and unstoring said seat units; said seat section being provided with hinged floor legs normally folded

5

along the bottom of said seat section and adapted to be swung downward to a vertical position for supporting said seat section at normal height independently of said frame section; said seat units being of the same effective height as said seat section; one of said seat units being equal in length and width, and the total length of all said seat units being substantially equal to the length of said seat section; whereby said seat section may be partially supported on said frame section and partially supported on some of said hinged legs, and all but said one of said seat units may be removed from storage and supported upright on said frame for forming an L-shaped couch, or all of said seat units may be supported upright on said frame and said seat section may be concurrently independently supported by said hinged legs for forming a couch and separate settee.

5. An expansible couch as defined in claim 4 and having interengaging pivot members secured respectively to the center of the bottom of said seat section adjacent one end, and to the center of the bottom of said one of said seat units.

6. The expansible couch as defined in claim 1 wherein a selected one of the seat units is of substantially the same length as the seat section width, whereby the seat section may be turned in a horizontal plane with respect to the frame and have its one end supported by the seat support-

6

ing means and have its other end project from the frame section supported by said seat section legs, and the seat units other than the selected one may be supported on said frame alongside said seat section one end to form an L-shaped corner.

References Cited by the Examiner

UNITED STATES PATENTS

96,266	10/69	Reety.	
331,706	12/85	Hofstatter.	
348,653	9/86	Bretherton.	
479,071	7/92	Holstein	297—233
651,124	6/00	Stienen	5—26
907,311	12/08	Bowdon	297—118
2,845,112	7/58	Borenstein	297—118
2,925,851	2/60	Weiss	297—233 X
3,055,704	9/62	Darwin	297—118
3,082,435	3/63	Philips et al.	5—2

FOREIGN PATENTS

39,376	9/15	Sweden.
169,300	8/34	Switzerland.
817,190	10/51	Germany.
957,728	8/49	France.

FRANK B. SHERRY, *Primary Examiner.*