

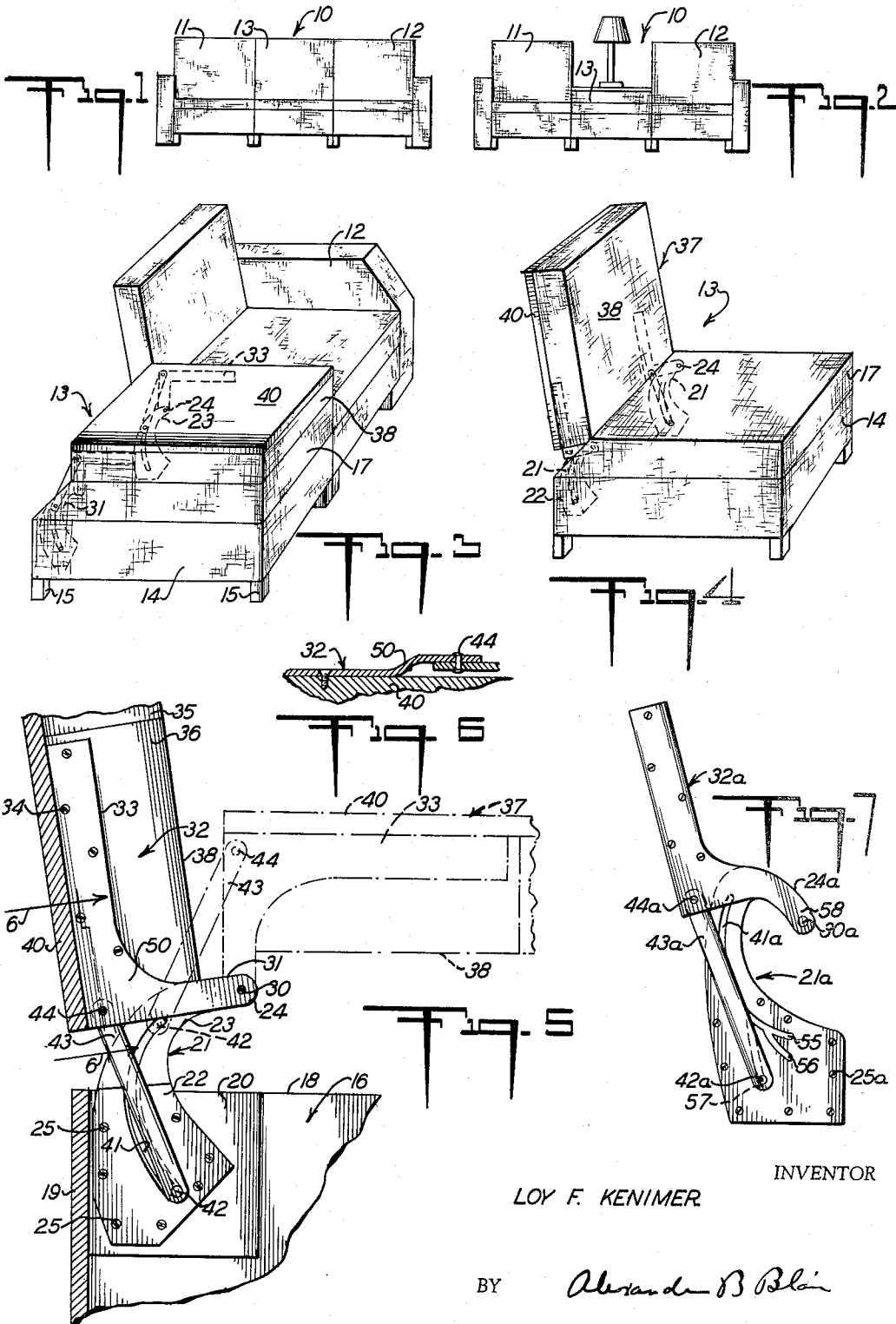
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HINGE CONSTRUCTION FOR CONVERTIBLE ARTICLE OF FURNITURE

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This invention relates to a convertible article of furniture and a hinge construction therefor, and more particularly to a chair or to a section of a sectional sofa or the like which may be converted to a table.

A primary object of the invention is the provision of an improved article of furniture of this character which may be employed alternatively as a section of a sectional sofa in either of the forms of a conventional center section or alternatively in the form of a table.

A further object of the invention is the provision of such an article of furniture which may be utilized independently of its association with a sofa either as an individual chair or as a table.

Still another object of the invention is the provision of such an article of furniture provided with an improved hinge construction whereby the top of the article may be moved to a vertical position to form a chair or to a horizontal position to form a table top and wherein by virtue of a hinge construction the back or top is substantially automatically self-locking in either position of adjustment.

Still another object of the invention is the provision of a hinge construction so arranged as to prevent, in its use with upholstered furniture, the constriction and/or resultant tearing of the upholstery fabric.

A further and more specific object of the invention is the provision of a substantially totally concealed hinge construction which will be pleasing to the eye and harmonious in its general assembly in either position of adjustment.

A further specific object of the invention resides in the provision of a hinge structure by means of which the angle of inclination of the back may be varied when the device is in the position of the chair at the desire of the user.

A further specific object is the provision of a hinge construction for use in an upholstered article of furniture of this character wherein the back of the structure when in a horizontal position is held substantially dead-level without the necessity of using additional locking means or the like.

Still other objects reside in the combination of elements, arrangements of parts and details of construction, all of which will be more fully pointed out hereinafter and disclosed in the accompanying drawing, wherein there are disclosed two preferred embodiments of this inventive concept.

In the drawings:

Fig. 1 is a front elevational view of one form of the device embodying the instant invention when utilized as a sofa;

Fig. 2 is a similar view disclosing the device as converted to a table;

Fig. 3 is a perspective view showing the assembled device in its adjusted position as a table, and further showing an additional section of a sectional sofa, certain concealed portions being shown in dotted lines;

Fig. 4 is a view in perspective of the device of Fig. 3 as shown in the position of Fig. 1;

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Fig. 5 is a vertical sectional view of a fragment of the construction of Fig. 4 showing the hinge construction in detail, an alternative position of adjustment being indicated in dotted lines;

Fig. 6 is a sectional view taken substantially along the line 6—6 of Fig. 5 as viewed in the direction indicated by the arrows, and

Fig. 7 is a detailed view of a modified form of hinge construction shown as disassociated from the remainder of the assembly. Similar reference characters refer to similar parts throughout the several views of the drawing.

Referring now to the drawings in detail, and particularly to Fig. 1, there is disclosed a sectional sofa, generally indicated at 10, comprised of two identical but opposite end sections 11 and 12 of known and conventional design and a center section 13. End sections 11 and 12 may be of any desired conventional type and design but are preferably of the type of furniture known as upholstered. The upholstery, of course, may be of any conventional design or configuration.

Referring now particularly to the center section 13, which comprises the feature of the instant invention, the same includes a base portion 14 which may or may not be provided with legs 15, and which includes a conventional base spring framework 16 and a seat or top cushion 17.

As best shown in Fig. 5, the frame 16 includes side boards 18 and a rear board 19 about which the outer upholstery is normally fastened and secured. Secured to each side board 18 is a reinforcing element or block 20 upon which is mounted a hinge element, generally indicated at 21. Two of these hinge elements are provided obviously, one on either side of the base frame, and each hinge element 21 is comprised of a broadened base portion 22 and an elongated arcuately shaped neck portion 23 which terminates in an extension 24 substantially right-angularly disposed relative to the base portion 22. The base portion 22 is adapted to be secured as by means of any desired number of screws 25 set in suitable counter-sunk apertures to the reinforcement 20.

The outer extremity of portion 24 is provided with a suitable aperture through which extends a pivot 30 which also extends through a corresponding aperture in an extending tongue 31 which comprises a portion of a second hinge member generally indicated at 32 which includes a right-angularly shaped base 33 secured as by means of suitable counter-sunk screws 34 to the inner surface of a back rest side frame member 35 provided with a reinforcement 36 which may be a metal plate or other rigid member comprising a portion of the internal framework of top or back portion 37. This top or back portion is provided on its inner or lower surface with upholstery in the form of a cushion 38 which is adapted to lie on the top of cushion 37 when the apparatus is in its position as a table. The rear or upper surface of top portion 37 is provided with a finished table top surface 40 which, when the device is in folded relation, forms the top of a table. Obviously, any desired material, finish or ornamentation may be utilized therein.

The arcuate member 21 contains an elongated slot 41 of generally arcuate configuration in which is seated a pivot pin 42 connected to a straight elongated link 43 the upper end of which is pivotally connected as at 44 to the member 32 at a point adjacent the connection of member 32 with surface board 40. The arrangement is therefore such that upon tilting the top member 32 from a seat-backing position, as shown in full lines in Fig. 5, to a horizontal table-surface providing position, as indicated in dotted lines in Fig. 5, the pivot 42 by its engagement with the upper extremity of slot 41 will hold the table top 40 in substantially exact horizontal alignment.

In Fig. 7 there is disclosed a slightly modified form

of hinge construction whereby the angle of inclination of the back, when the device is utilized as a chair, may be varied to suit the whim of the individual user. In this particular case, the lower hinge 21a is provided with the customary screw holes through which extend screws 25a and has an arcuate channel 41a which terminates in an arcuately extended portion 55 but has extending therefrom an alternate channel 56, and a substantially straight inclined channel 57 into any one of which a pivot pin 42a corresponding to the pivot 42 may be extended according to the desired angle of inclination of the back.

The pivot 42a is connected with a lever or link 43a corresponding to link 43 and connected by means of a pivot 44a to a top hinge 32a which is similar in configuration to the previously described top hinge 32. The extremity of this hinge 32a differs from that of 32 only in including a downwardly depending portion 58 which corresponds to the previously described transversely extending portion 31. This portion is connected by means of a pivot 30a to a partially reverted portion 24a of hinge leaf 21a and allows a greater slack in the accommodation of the upholstery fabric between the hinge leaves when in folded or table top relation.

From the foregoing it will now be seen that there is herein provided an improved article of convertible furniture which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiments hereinbefore shown and described, it is to be understood that all modifications herein are to be interpreted merely as illustrative and not in a limiting sense.

I claim:

1. For use in a convertible article of furniture of the character described to permit a tiltable back rest to be pivotally manipulated to form alternately a back rest for a seat portion of a chair or a table top overlying the seat portion, a hinge comprising a broadened base portion adapted to be secured to the seat portion and having an elongated arcuately shaped neck portion extending upwardly from said seat portion and disposed substantially at a right angle to said base portion, said base portion and said neck portion having an arcuate slot extending therein, a second hinge member having a right angular

base portion to complement the neck portion of said broadened base portion, a pivotal connection joining the ends of the extending neck portion and said second hinge member, a link member pivotally connected to the base portion of said second member at one end and slidably retained in the arcuate slot of the base portion and the neck portion at the other end of the link member whereby upon movement of the second hinge member the back rest will be positioned alternately at either the horizontal or substantially vertical position.

2. For use in a convertible article of furniture of the character described to permit a tiltable back rest to be pivotally manipulated to form alternately a back rest for a seat portion of a chair or a table top overlying the seat portion, a hinge comprising a broadened base portion adapted to be secured to the seat portion, said base portion having an elongated arcuately shaped neck portion extending upwardly from said base portion and a hook-like extension, said base portion and said neck portion having an arcuate slot extending therein, said slot in the base portion having a plurality of channels for selectively positioning the back rest, a second hinge member having a right angular base portion to complement the neck portion and extension of said broadened base portion, said second hinge member being provided with an extension to engage with the hooklike extension on said neck portion, a pivotal connection joining the ends of the extending neck portion and said second hinge member, a link member pivotally connected to said second member at one end and slidably retained in the arcuate slot of the neck and first named base portion at the other end of the link member whereby upon movement of the second hinge member the back rest will be positioned within one of the channels in the base portion to the desired location.

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