Feb. 9, 1932. F. O. GARDINER 1,844,753

FURNITURE CONSTRUCTION

Filed Feb. 25, 1931

Fig-2-

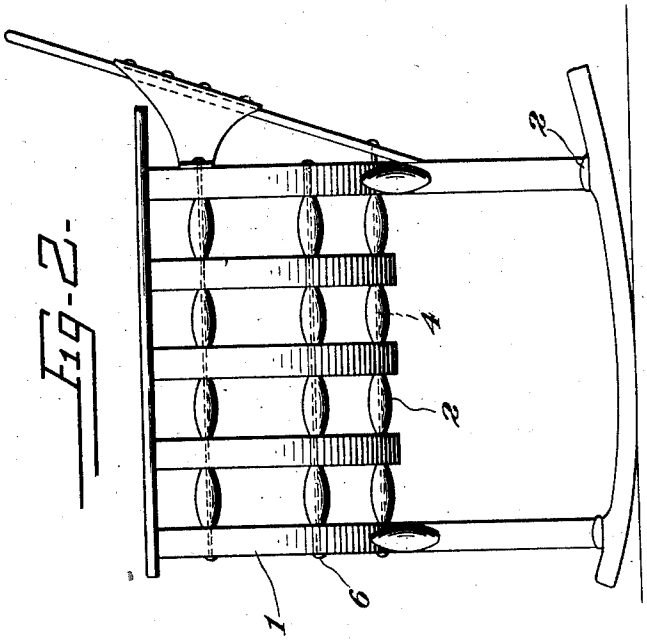
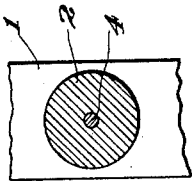


Fig-4-



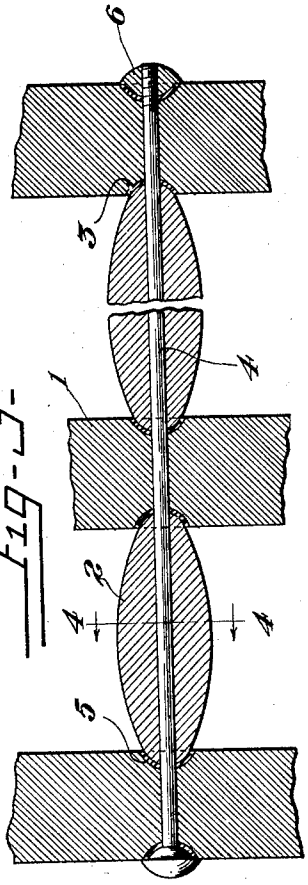
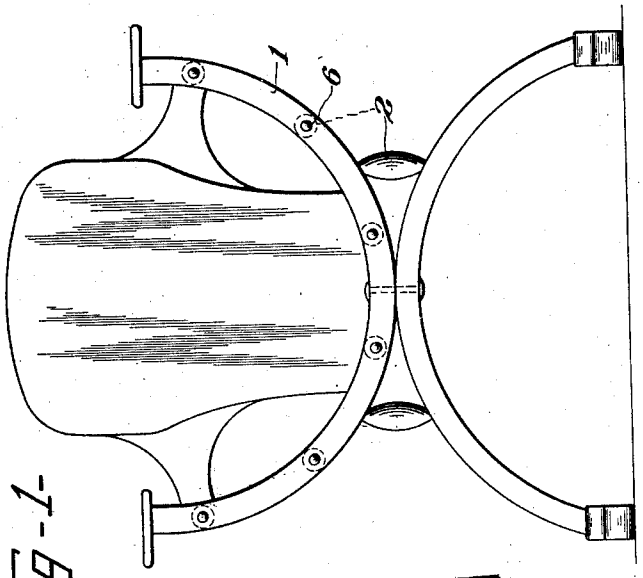


Fig-3-

Fig-1-



Frank O. Gardiner INVENTOR

BY Victor J. Evans and Co. ATTORNEY

WITNESS:

Patented Feb. 9, 1932

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UNITED STATES PATENT OFFICE

FRANK O. GARDINER, OF ALMA, MICHIGAN

FURNITURE CONSTRUCTION

Application filed February 25, 1931. Serial No. 518,185.

My present invention has reference to a furniture construction and my object is to connect the parts of an article of furniture in a manner that will eliminate looseness and squeaking in hot and dry atmospheres, and likewise prevent the compression of wooden members in damp climates or under humid conditions, and consequently to present an article of furniture in which the parts constituting the same are effectively connected to present an artistic appearance and which will effectively withstand climatic changes.

To the attainment of the foregoing the invention consists in the improvement hereinafter described and definitely claimed.

In the drawings:

Figure 1 is an elevation of an article of furniture in the nature of a chair constructed in accordance with this invention.

Figure 2 is a side elevation thereof.

Figure 3 is a sectional view to illustrate the manner in which the wooden parts of the chair are held spaced and connected.

Figure 4 is a transverse sectional view approximately on the line 4—4 of Figure 3.

While in the showing of the drawings I have illustrated the improvement in connection with an artistic form of chair. It is to be understood that the improvement is not to be restricted to this particular article of furniture as other articles of furniture such as different types of chairs, beds, daybeds, radio stools, baby cribs, etc., are designed to be constructed in accordance with my invention.

The spaced wooden members 1 of the article of furniture are held in proper relation with respect to each other by spacer elements 2. In the showing of the drawings the spacer elements are round in cross section and gradually decrease in thickness from their center to their ends and their said ends are rounded. The spacer members 2 may be of wood, metal, glass, composition or any other desired substance or material, and the confronting faces of the members 1 are provided with concaved depressions 3 in which the rounded ends of the spacer members 2 are received. I pass transversely through the wooden parts 1 and longitudinally through the spacer members 2 a bolt 4 that has an ornamental head whose inner face is convex and is received in a concaved depression in one of the outer members or parts 1. On the head, as well as on the rounded ends of the spacer members there are arranged cross sectionally concavo convex or cup-shaped washers 5. The washers 5 are in the nature of compensating members and may be of rubber or any other material that possesses a desired resiliency or yieldability. The end member 1 through which the threaded end of the bolt 4 passes is also concaved or depressed for the reception of another compensating washer and this washer is engaged by the concaved face of an ornamental nut which is screwed on the bolt 4.

Articles of furniture having their parts connected in a manner as above described are not susceptible to separation incident to climatic changes, as the compensating washers 5 are both compressible and expansible. These washers not only take care of the contraction and expansion of the wooden members 1 and the spacer members 2 but also take care of any expansion and contraction of the metal bolt 5 and the metal nut 6, and the nut 6, when screwed tightly on the bolt will hold the parts associated without liability of the same becoming loosened or wobbling.

Having described the invention, I claim:

1. An article of furniture comprising spaced wooden members, spacer elements between said members, bolts passing through the members and spacer elements connecting said members and elements and compressible compensating washers supported on the bolts and in contacting engagement between the members and the spacer elements.

2. An article of furniture comprising spaced wooden members, spacer elements between said members having rounded ends and said members having cup-shaped depressions to receive the rounded ends of the elements therein, the end members being also provided on their outer faces with cup-shaped depressions, metal bolts having the inner faces of their heads convexed, passing transversely through the members and longitudinally through the spacer elements,

nuts having convexed inner faces screwed on the bolts and received in the depressions of one of the outer wooden members, and cup-shaped compressible compensating washers received in the depressions of the said members for contacting engagement with the walls of the depressions, the concaved faces of the nuts and bolts and the rounded ends of the spacer elements.

In testimony whereof I affix my signature.

FRANK O. GARDINER.