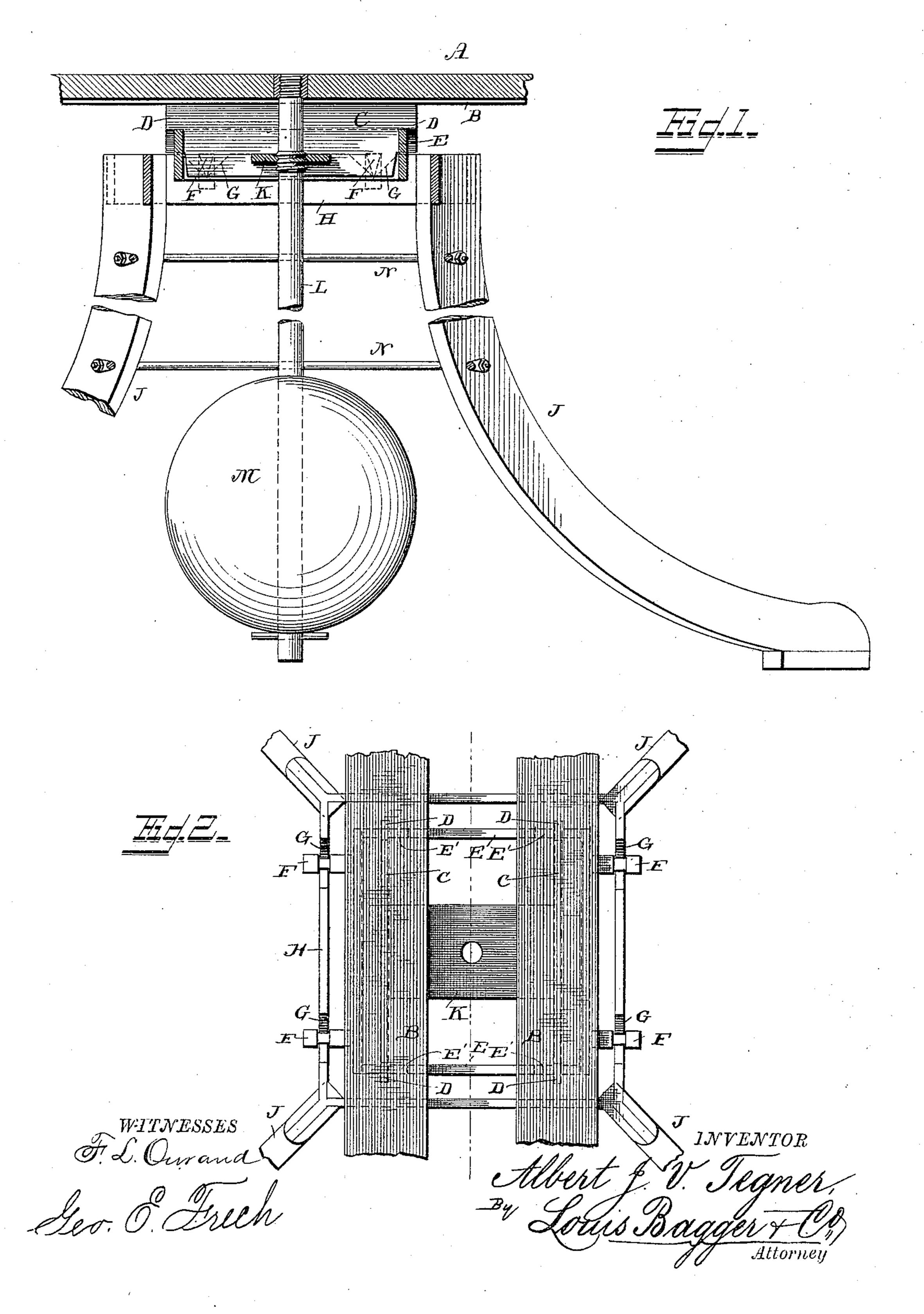
A. J. V. TEGNER.

SELF LEVELING SHIPS' FURNITURE.

No. 323,231.

Patented July 28, 1885.



United States Patent Office.

ALBERT JOHANNES VICTOR TEGNER, OF COPENHAGEN, DENMARK.

SELF-LEVELING SHIP'S FURNITURE.

SPECIFICATION forming part of Letters Patent No. 323,231, dated July 28, 1885.

Application filed May 7, 1885. (No model.)

To all whom it may concern:

Be it known that I, Albert Johannes Victor Tegner, a subject of the King of Denmark, residing at Copenhagen, in the King5 dom of Denmark, have invented certain new and useful Improvements in Self-Leveling Ship's Furniture; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others to skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to self-leveling ship's furniture—such as berths, chairs, and the like; and it has for its object to provide articles of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency, and which, while sufficiently sensitive for all practical purposes, shall be without that excessive sensitiveness which renders ship's furniture which is equipped with the ordinary gimbal hangings uncomfortable under many circumstances.

With these ends in view the invention consists in the improved construction, arrangement, and combination of parts, which will be hereinafter fully described, and particular30 ly pointed out in the claims.

In the drawings hereto annexed, Figure 1 is a vertical transverse sectional view illustrating the application of my invention to a ship's chair, of which latter, however, only the bottom of the seat has been shown. Fig. 2 is a top view of the same, the bottom of the chair-seat having also been removed.

The same letters refer to the same parts in both the figures.

A designates the bottom of the chair-seat, to the under side of which are attached a pair of metallic brace-plates, B B, to the under sides of which are secured a pair of parallel boards or plates, C C, placed vertically or on edge, and provided at their ends with arms D D, beveled on their under sides, so as to present sharpened or V-shaped edges.

E designates a rectangular frame, two of the sides of which are provided with V-shaped 50 notches E' E', forming seats for the arms D D, and the other two sides of which are provided

with laterally-extending beveled or sharpened arms F F, adapted to rest in V-shaped notches or seats G G, formed in the upper edges of two of the side pieces of a frame, H, which is suitably mounted upon the upper ends of the legs J J of the chair.

The boards or plates C C are connected by a transverse brace-board, K, through which passes a screw-threaded stem, L, the upper 60 end of which is fixed in the bottom of the chair-seat, as shown, and the lower end of which carries a heavy balance-weight, M. The legs of the chair may be connected by transverse rungs or braces N N.

From the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of this invention will be readily understood.

The construction is simple and inexpensive, 70 and furniture equipped with this improvement will be found to be self-leveling to almost the same extent as when equipped with gimbal hangings, the sole difference, practically, being the substitution of a pair of parallel axes 75 for each single axis used in the ordinary gimbal hanging. This arrangement causes one of the arms to leave its bearings whenever the ship rolls heavily to one side or the other, but does not move it with a slight roll. This al- 80 ternate lifting of one of the arms and seating it while the other arm is lifted out of its bearings causes the furniture to become quiet sooner than it does in the common manner of fastening it with only one axis, thus prevent-85 ing that unsteadiness that is almost as objectionable as the rolling of the vessel.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In self-leveling ship's furniture, the combination of a bed-frame, two opposite sides of which are provided each with two V-shaped notches, a frame having laterally-extending arms provided with beveled under edges resting in the said notches, and a top frame having two pairs of arms resting in V-shaped notches in the said intermediate frame, and provided with a downwardly-extending stem carrying a suitable balance-weight, substantion tially as and for the purpose set forth.

2. In self-leveling ship's furniture, the com-

bination and arrangement, as herein described, of a set of frames, each provided with two distinct parallel axes of oscillation, one of said frames resting upon the other, with the axes of one frame at right angles to the axes of the other, substantially as herein described, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT JOHANNES VICTOR TEGNER.

Witnesses:

FREDERICK WOLFF, EMIL HANSEN.