

Oct. 11, 1938.

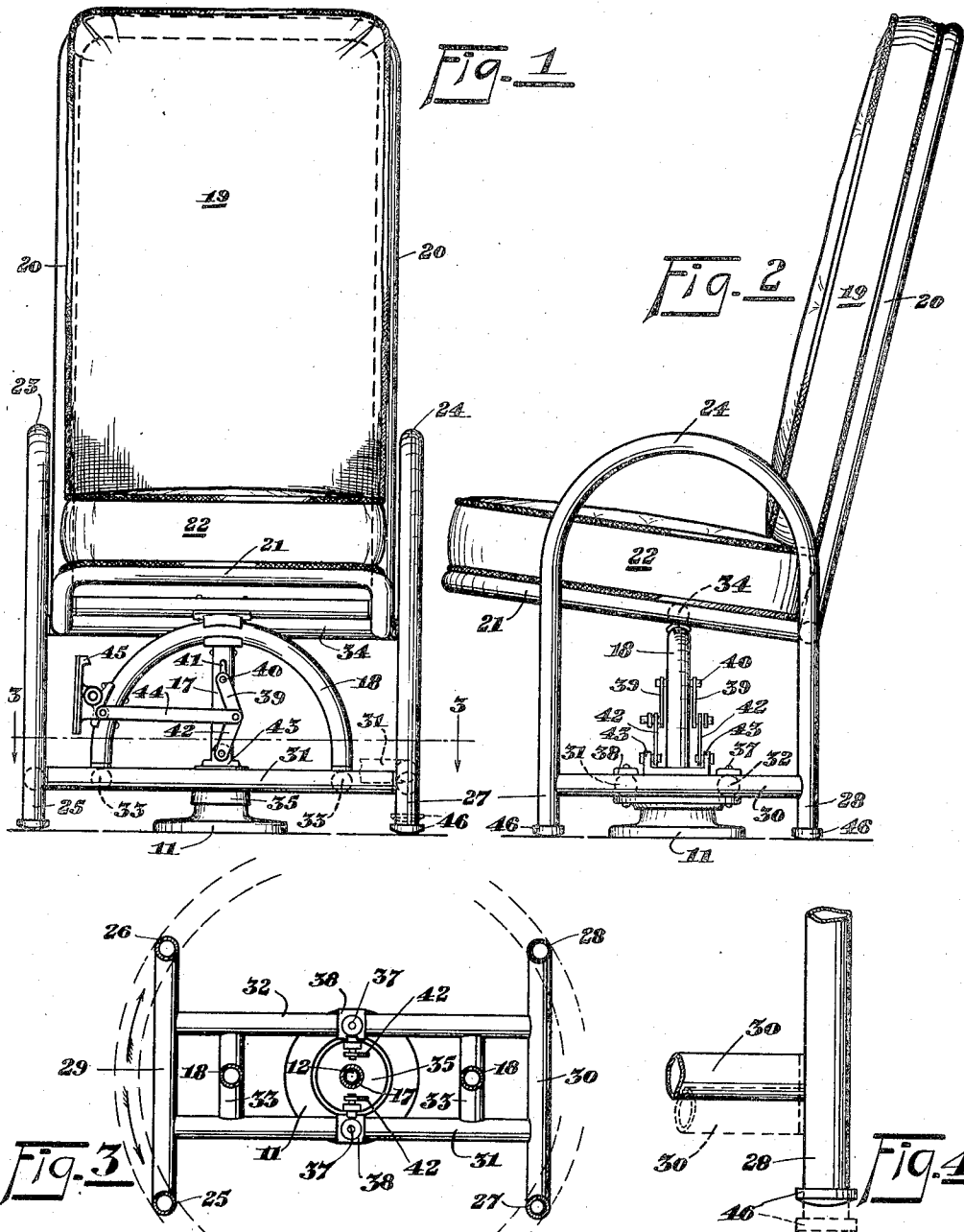
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2,132,467

CHAIR

Filed Dec. 10, 1937

2 Sheets-Sheet 1



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CHAIR

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Fig. 6

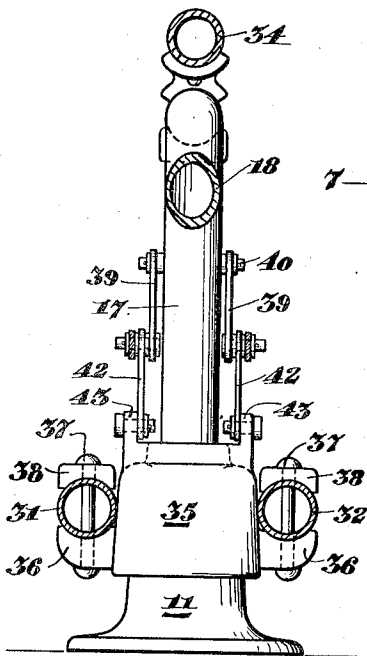


Fig. 5

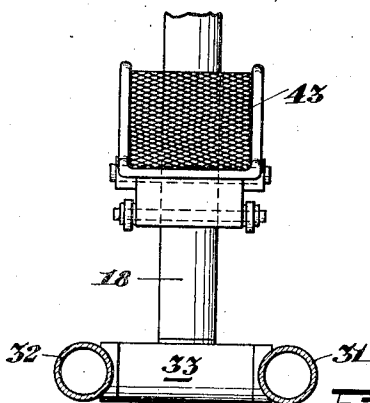
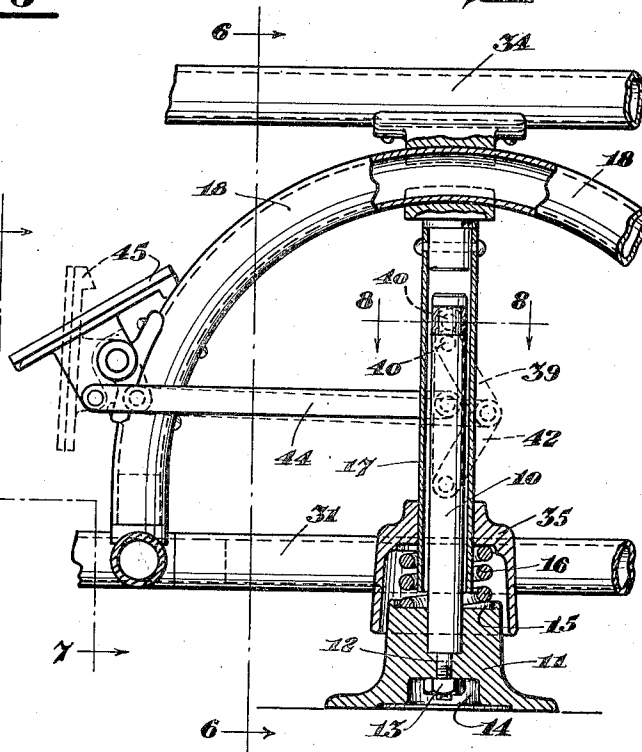


Fig. 7

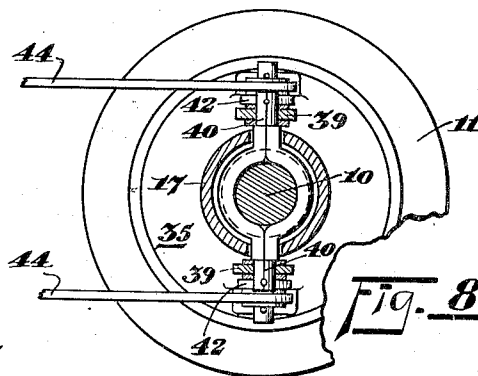


Fig. 8

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UNITED STATES PATENT OFFICE

2,132,467

CHAIR

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9 Claims. (Cl. 155—95)

The present invention relates to chairs and more particularly to chairs of the revoluble type.

The primary objects of the instant invention are to provide a chair of the general character above indicated and which is particularly well adapted for installation and use in airplanes although it is likewise adaptable for use in motor buses, railway coaches and the like; to provide such a chair which may be conveniently revolved and thereafter fixed in a predetermined rotated position; and, to provide such a chair which though light in weight, is rigid and sturdy in construction, utilitarian in its intended use and reasonably economical in manufacture and installation.

An illustrative embodiment of the invention is shown in the accompanying drawings, wherein:—

Figure 1 is a front elevational view of the chair;

Figure 2 is a side elevational view thereof;

Figure 3 is a sectional view on line 3—3 of Figure 1;

Figure 4 is an enlarged fragmentary view of one of the chair legs elevated from the floor and in its normal and rotatable position as shown in full lines from its fixedly depressed position shown in dotted lines;

Figure 5 is an enlarged fragmentary view of a portion of the under carriage of the chair, the central supporting pedestal and its base being shown in central vertical section;

Figure 6 is a sectional view thereof on line 6—6 of Figure 5;

Figure 7 is a sectional view on line 7—7 of Figure 5; and

Figure 8 is an enlarged sectional view on line 8—8 of Figure 5.

Referring then to the drawings wherein like parts of the structure shown are designated by the same numerals in the several views, a tubular pedestal 10 is here shown as secured to a base 11 in vertical disposition relative thereto as by a bolt 12 passed through the tubular pedestal and by its nut 13 in screw threaded engagement therewith which is in engagement with the roof of the base within the well 14 therein. The upper end of the base 11 is provided with a seat 15 upon which a coiled expansion spring 16 is supported and which spring encircles a tubular column 17 slidably and rotatably embracing the pedestal 10.

The chair from whose arcuate under frame member 18 the tubular column 17 is rigidly secured and from which it centrally depends, generally comprises an upholstered back 19 secured within an inverted U-shaped tubular back support 20 secured adjacent the rear side lengths of a tubular seat support 21 upon which the upholstered seat 22 is mounted and to which the seat is secured. A pair of oppositely disposed inverted U-shaped tubular members 23, 24 forming

arms for the chair are secured adjacent opposite sides of the seat support 21 and provide spaced depending front and rear legs 25, 26, 27 and 28 for the chair. Reinforcing tubular members 29, 30 connect each front leg 25, 27 with its rear leg 26, 28 respectively and each reinforcing member 29, 30 is connected by a pair of spaced parallel and transverse tubular reinforcing members 31, 32. The opposite ends of the arcuate frame member 18 are each secured to a tubular cross member 33, fixed between the pair of spaced parallel tubular reinforcing members 31, 32 and the medial or upper portion of this arcuate frame member is secured to a transverse tubular member 34 fixed between opposite sides of the seat support 21.

The centrally depending tubular column 17 is provided with a rigidly fixed bell portion 35 near its lower end which springably seats upon the upper end of the coiled expansion spring 16 for normally elevating the legs 25, 26, 27 and 28 of the chair above the floor.

This bell portion 35 is provided with a pair of oppositely disposed and laterally projecting lugs 36 upon which the transverse tubular members 31, 32 are each seated and to which each is secured as by rivets 37 passing through plates 38 seated upon the upper lengths of each member 31, 32, which rivets likewise pass through each of said members and through each lug 36, all as best shown in Figures 2, 3 and 6.

A double toggle having two of its pair of links 39 pivotally connected to the pedestal 10 by means of a pintle 40 passing through slots 41 in the tubular column 17 and having two of its other pair of links 42 pivotally connected to upstanding ears 43 integrally formed with the bell portion 35 of the column 17, is pivotally connected intermediate each of its pairs of links by a pair of spaced parallel double links 44 whose opposite ends are each pivotally connected to a pedal 45 which in turn is pivotally connected to the arcuate frame member 18, as best shown in Figures 1 and 5.

Thus in operation, since the legs of the chair are normally elevated above the floor as shown in full lines in Figure 4 because the bell portion 35 of the tubular column 17 is supported on the coiled expansion spring 16, movement of the pedal from its position shown in full lines in Figure 5 to its position shown in dotted lines in the same view breaks the toggle and compresses the spring to depress the legs of the chair into frictional engagement of their rubber capped feet 46 with the floor.

It will thus be seen that the chair herein shown and described may be conveniently revolved when unoccupied and thereafter fixed in a predetermined rotated position by pedally operated means.

While but one specific embodiment of the in-

vention has been herein shown and described, it will be understood that certain details of the construction shown may be altered or omitted without departing from the spirit of this invention as the same is defined by the following claims.

I claim:

1. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a chair having a plurality of depending legs and provided with a depending tubular column slidably embracing and springably supported by the pedestal for normally elevating the legs above the floor, a toggle having one link pivotally connected to the pedestal and having its other link pivotally connected to the column, and mechanism operatively connected with the toggle for depressing the spring supported column to effect frictional engagement of the legs with the floor.

2. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a chair having a plurality of depending legs and provided with a centrally depending tubular column slidably and rotatably embracing and springably supported by the pedestal for normally elevating the legs above the floor to permit rotation of the supported chair, a toggle having one link pivotally connected to the pedestal and having its other link pivotally connected to the column, and pedally controlled mechanism operatively connected with the toggle for depressing the spring supported column to effect frictional engagement of the legs with the floor to thereby prevent rotation of the chair.

3. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a chair having a plurality of depending legs and provided with a depending tubular column slidably embracing and springably supported by the pedestal for normally elevating the legs above the floor, and mechanism operatively connected intermediate the spring supported column and its supporting pedestal for depressing the column to effect frictional engagement of the legs with the floor.

4. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a coiled expansion spring encircling the pedestal and supported upon the base thereof, a chair having a plurality of depending legs and provided with a depending tubular column slidably embracing the pedestal and having a portion supported upon said spring for normally elevating the legs above the floor, and mechanism operatively connected intermediate the spring supported column and its supporting pedestal for depressing the column to effect frictional engagement of the legs with the floor.

5. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a coiled expansion spring encircling the pedestal and supported upon the base thereof, a chair having a plurality of depending legs and provided with a centrally depending tubular column slidably and rotatably embracing the pedestal and having a portion supported upon said spring for normally elevating the legs above the floor

to permit rotation of the supported chair, and mechanism operatively connected intermediate the spring supported column and its supporting pedestal for depressing the column to effect frictional engagement of the legs with the floor.

6. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a coiled expansion spring encircling the pedestal and supported upon the base thereof, a chair having a plurality of depending legs and provided with a centrally depending tubular column slidably and rotatably embracing the pedestal and having a portion supported upon said spring for normally elevating the legs above the floor to permit rotation of the supported chair, a toggle having one link pivotally connected to the pedestal and having its other link pivotally connected to the column, and pedally controlled mechanism operatively connected with the toggle for depressing the spring supported column to effect frictional engagement of the legs with the floor to thereby prevent rotation of the chair.

7. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a chair having a plurality of depending legs and provided with a depending tubular column slidably embracing and springably supported by the pedestal for normally elevating the legs above the floor, a toggle having one link pivotally connected to the pedestal and having its other link pivotally connected to the column, a single link pivotally connected at one end intermediate the pivotally connected toggle links, and a pedal pivotally connected to the chair frame and to the other end of the single link to break the toggle for depressing the spring supported column to effect frictional engagement of the legs with the floor.

8. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor in vertical disposition relative thereto, a chair having a plurality of depending legs and provided with a centrally depending tubular column slidably and rotatably embracing and springably supported by the pedestal for normally elevating the legs above the floor to permit rotation of the supported chair, a toggle having one link pivotally connected to the pedestal and having its other link pivotally connected to the column, a single link pivotally connected at one end intermediate the pivotally connected toggle links, and a pedal pivotally connected to the chair frame and to the other end of the single link to break the toggle for depressing the spring supported column to effect frictional engagement of the legs with the floor.

9. In a structure of the class described, a chair supporting pedestal adapted to be secured to the floor, a chair rotatably supported upon the pedestal and having a plurality of depending legs, an expansion spring interposed between the pedestal and the chair for normally elevating the legs above the surface of the floor, and mechanical means operatively connected to the chair and to the pedestal for depressing the chair to cause the legs thereof to frictionally engage the surface of the floor for preventing rotation of the chair.

WALTER M. HANSON.