

(No Model.)

M. A. HANSON.
REVOLVING CHAIR.

No. 561,165.

Patented June 2, 1896.

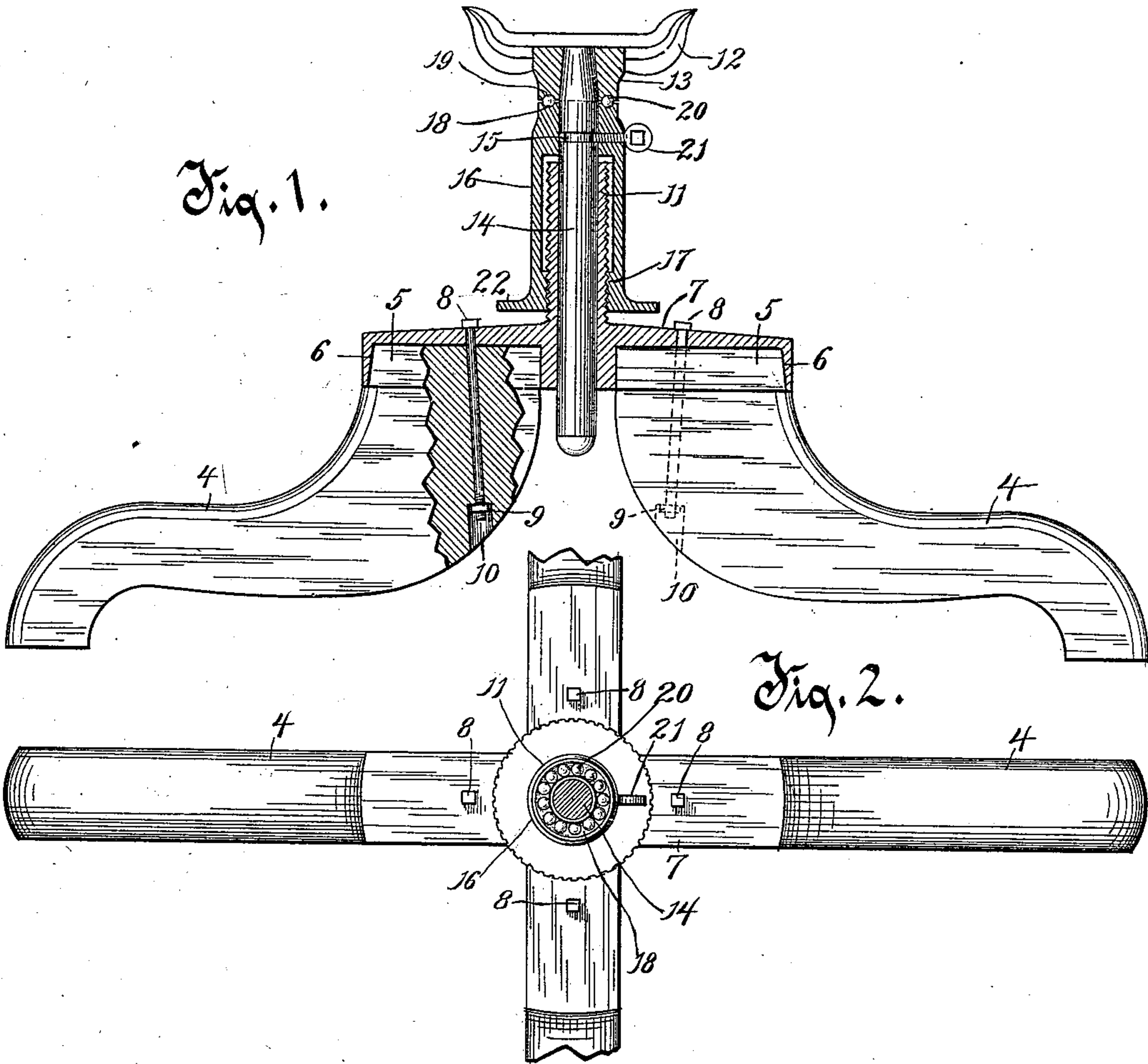
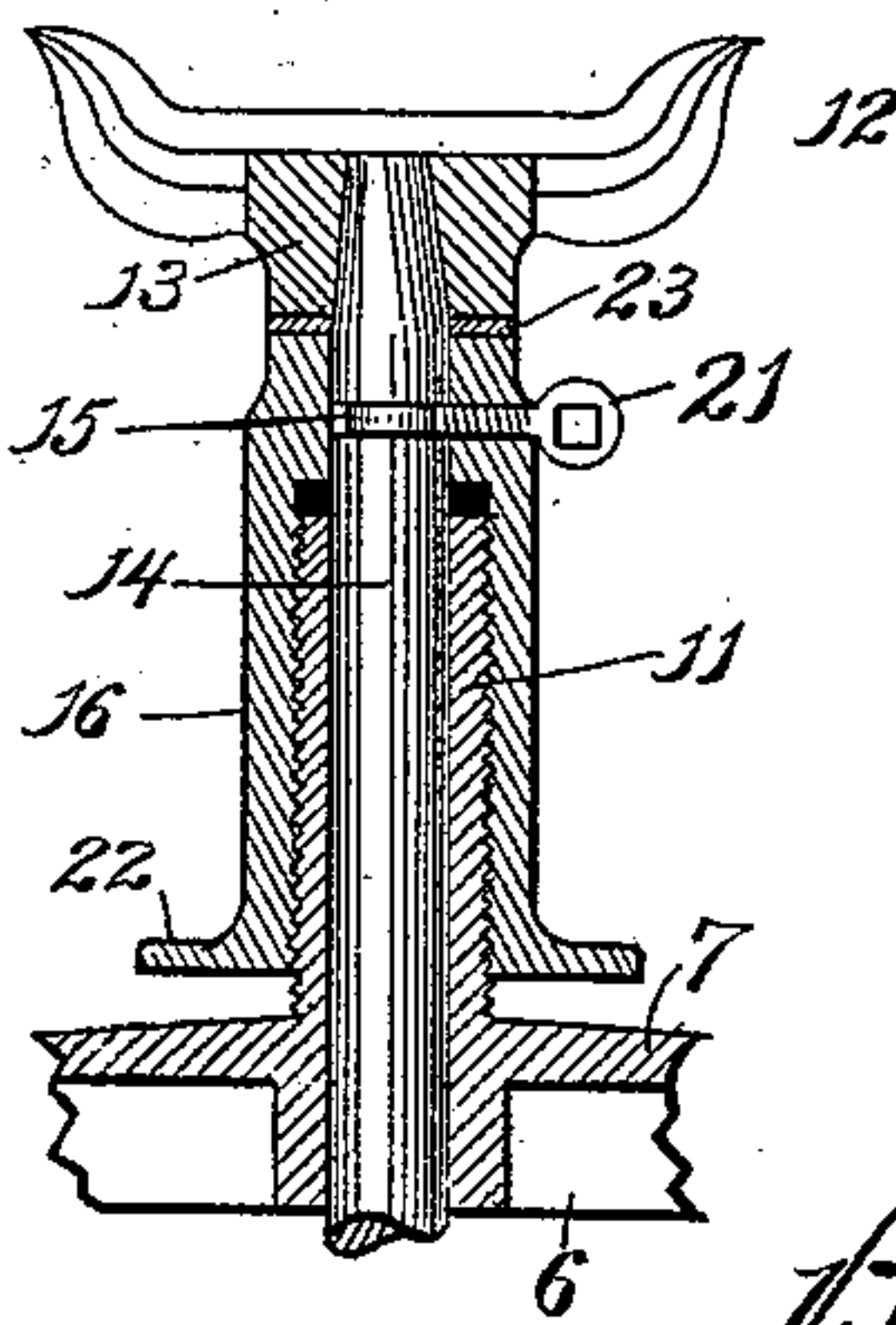


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

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REVOLVING CHAIR.

SPECIFICATION forming part of Letters Patent No. 561,165, dated June 2, 1896.

Application filed January 17, 1896. Serial No. 575,865. (No model.)

To all whom it may concern:

Be it known that I, MILES A. HANSON, of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented a new and useful Improvement in Revolving Chairs, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in revolving chairs, having particular reference to that class wherein the seat is permitted to revolve without raising it with respect to the legs, the adjustment up and down being secured by independent mechanism.

The invention consists of the devices and parts or their equivalents, as hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is an elevation of a revolving chair, parts being in section and the seat portion removed. Fig. 2 is a plan view of Fig. 1 with the bracket and depending boss removed. Fig. 3 is a detail sectional elevation of a slightly-modified construction.

Referring to the drawings, the numerals 4 indicate the supporting-legs, which legs are provided at their upper ends with reduced portions or tongues 5, which are adapted to be received in sockets 6, formed upon the under side of a cap-piece 7, said cap-piece consisting of a central hub portion and a series of radiating arms corresponding in number to the chair-legs, and each arm provided on its under side with one of the sockets 6 referred to. The cap is held firmly to the upper ends of the legs by means of bolts 8, which pass vertically through the arms and the legs and receive upon their lower ends nuts 9, disposed in suitable recesses 10 therefor in the under edges of the legs. Projecting centrally and upwardly from the cap and preferably integral therewith is an exteriorly-threaded tube 11.

The numeral 12 indicates the usual bracket to which the chair-seat (not shown) is fixed. Rigidly secured to this bracket and depending therefrom is a tubular boss 13. Rigidly fixed in the opening of this boss, and, if desired, also rigidly fixed to the bracket, is a spindle 14, said spindle extending through the tube 11. The spindle is provided near its upper end with an annular recess 15.

The numeral 16 indicates a sleeve, having the upper end of its bore considerably less in diameter than the remaining portion thereof, so as to fit snugly around the spindle. This contracted bore of the sleeve is formed by extending inwardly the upper end of said sleeve above the upper end of the upwardly-extending tube. A thickened upper extremity to the sleeve is thereby produced, which forms a broad bearing for the boss 13 to revolve upon, and at the same time no projecting lateral ledge is left upon which dust or dirt can accumulate and enter the joint between the parts, and thereby clog the same. Furthermore, said inwardly-extending portion of the sleeve forms a shoulder adapted to contact with the upper end of the upwardly-extending tube, and thereby limit the down movement of the chair. That portion of the bore of the sleeve which is of the greatest diameter encircles the tube 11, and the lower end thereof is contracted somewhat and threaded, as indicated at 17, to engage the threads of the tube 11. The upper thickened end of the sleeve is provided with an annular semicircular recess 18, and the lower end of the boss 13 with a corresponding and registering recess 19. These registering recesses are adapted to receive antifriction-balls 20.

Extending through a lateral opening in the sleeve 16 is a pin 21, the inner end of which pin fits in the annular recess of the spindle. The outer end or head of this pin is advantageously provided with a rectangular opening, which adapts it to be used conveniently as a wrench or tool for engaging the heads of the bolts 8 and removing said bolts. This pin, as shown, serves the function of preventing the bracket and its spindle from being raised vertically out of operative position, while yet not interfering with the free rotation of the chair.

When it is desired to adjust the height of the chair-seat vertically, all that is necessary to be done is to turn the sleeve 16 upon the tube 11. When the chair-seat is revolved by the occupant or otherwise, the bracket, its depending tubular boss, and the spindle rotate together, and by the provision of the antifriction-balls 20, interposed between the meeting edges of the boss and the sleeve, friction is reduced to the minimum.

For convenience in turning the sleeve 16 to adjust the vertical height of the chair-seat the lower end of said sleeve is formed or provided with an annular enlargement 22, preferably provided with a milled edge or periphery to facilitate the hand-grasp.

In the modified form shown in Fig. 3 that portion of the bore of the sleeve 16 which is of the greatest diameter and which surrounds the tube 11 is threaded throughout. The antifriction-balls disposed in the registering semicircular recesses of the sleeve and boss, respectively, are omitted, and in lieu thereof merely a washer 23 is inserted between the opposed plane faces of the respective parts.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, of the base of a chair-iron, having an exteriorly-threaded tube extending upwardly therefrom, a sleeve surrounding the upwardly-extending tube, and provided with interior threads engaging the exterior threads of said tube, the upper end of the sleeve extending inwardly over the

upper end of the tube, thereby forming a thickened upper extremity to the sleeve, said thickened portion provided with an opening leading to its bore, a tubular boss adapted for connection to the chair-seat, the lower end of said boss resting and revoluble upon the upper thickened extremity of the sleeve, a spindle rigidly connected to the boss, and extending through the contracted bore of the upper thickened portion of the sleeve, and through the upwardly-extending tube, the portion of the spindle within the bore of the thickened upper end of the sleeve being provided with an annular groove, and a pin passing laterally through the opening in the upper thickened portion of the sleeve, and engaging the annular groove of the spindle.

In testimony whereof I affix my signature in presence of two witnesses.

MILES A. HANSON.

Witnesses:

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