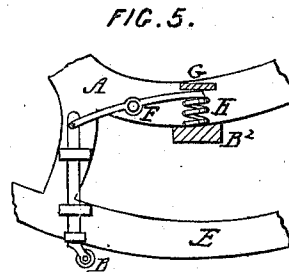
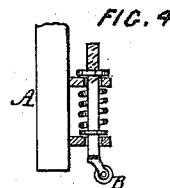
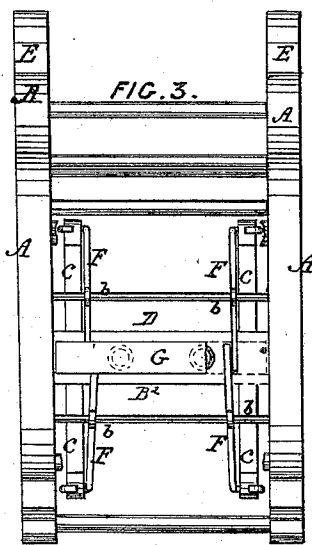
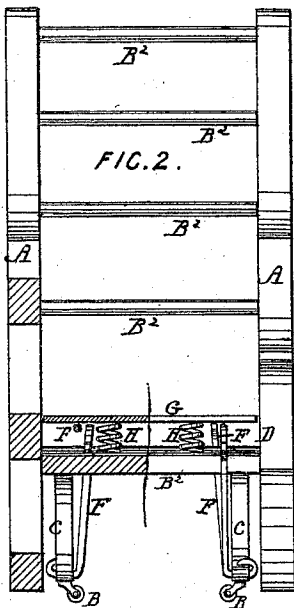
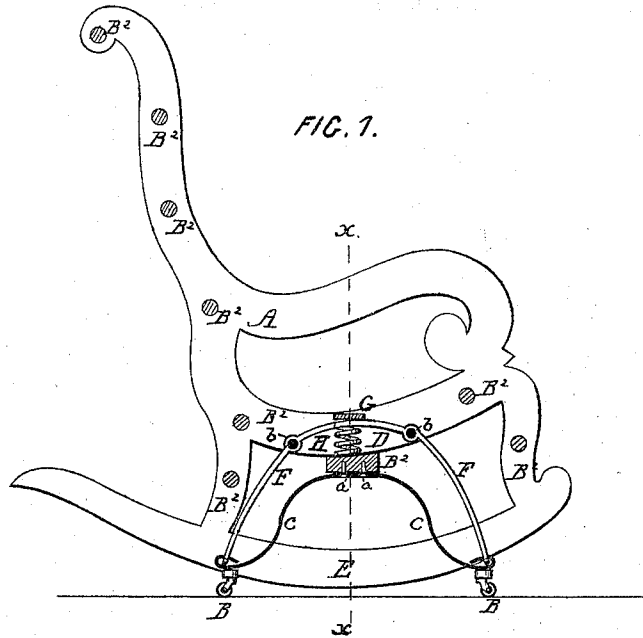


J. H. TRAVIS.

Caster Attachments for Furniture.

No. 140,097.

Patented June 17, 1873.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH H. TRAVIS, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN CASTER ATTACHMENTS FOR FURNITURE.

Specification forming part of Letters Patent No. **140,097**, dated June 17, 1873; application filed May 26, 1873.

To all whom it may concern:

Be it known that I, JOSEPH H. TRAVIS, of Charlestown, in the State of Massachusetts, have invented an Improved Application of Casters to Chairs and other Seats, of which the following is a specification:

This invention consists in the application to, and combination with, a chair or other seat, of caster wheels or rollers, in such manner that under the ordinary weight of the chair, or other seat, the seat is at rest upon the casters, and otherwise clear of the floor; but under any additional weight—as for instance, that of the person occupying the seat—it will be brought to a rest upon its supporting frame or legs.

In the accompanying plate of drawings my improved application of casters to chairs and other seats is illustrated as applied to a rocking-chair—

Figure 1 being a central vertical section, from front to rear, of a rocking-chair having casters applied to it according thereto; Fig. 2, a cross-section in plane of line *x x*, Fig. 1; and Fig. 3, a plan view.

The chair in the several views above recited, is shown simply as to its frame-work, without being upholstered.

In the drawings, A A represents two similar side frames, joined together by cross-bars B², and otherwise constructed and adapted in any of the ordinary modes for use as a rocking-chair; B, caster-wheels, four in number. These caster-wheels B may be of any of the usual constructions, and they are secured in the ordinary manner to two similar spring-bands, C, of metal, one caster at or near each end of the bands. The bands C are of a similar semi-circular shape from end to end, and midway between their two ends they are secured by screws *a*, or otherwise, to the cross-bar B², under the seat portion D of the frames A, so that the chair, when under its own weight only, will be supported or at a rest, through the casters upon the floor, as shown in Fig. 1, and the rockers E will be entirely free of contact with the floor. F, angular levers. These levers F are four in number, each hung upon a separate fulcrum, *b*, of the seat portion D. Each lever F at its lower end is similarly hung to an outer end of a caster-carrying band, C,

and at its upper end is similarly arranged within the seat D, and therein connected, the one lever to the others, by a common horizontal rail or bar, G. H, springs. On these springs H the bar G rests, and they are interposed between the said bar and any suitable part of the seat-frame, being attached both to the bar and to the seat-frame.

Under an arrangement of parts such as above described, obviously, if weight be applied to the chair sufficient to overcome the power of the spring-bands C, which carry the casters, the chair will come to a rest by its rockers on the floor; and if the said weight be applied directly to the common bar G of the levers F, not only does the chair come to a rest by its rockers, as aforesaid, on the floor, but the casters are in addition lifted from contact with the floor, in consequence of, and by and through the movement of, the levers F from the downward depression or movement of the bar G. If, in either of the above instances, the weight be removed, the reaction of the spring-bands C in the one case, and of such bands and the springs F in the other case, lifts the chair from a rest on its rockers to a rest on its casters.

From the above it is evident that under the described application of casters to a chair or other seat, the seat when unoccupied will be upon its casters, but when occupied will be upon its rockers, or its other ordinary supports or legs, according to the style of the chair, &c.; and that the change from casters to the ordinary supports, rockers or legs, as the case may be, or vice versa, is accomplished automatically, and simply because weight or pressure is in the one case applied to, and in the other removed from, the chair or other seat.

The combination of the lever connection, herein described, with the caster-carrying bands, secures the entire removal of the casters from contact with the floor, which in rocking-chairs obviously is an advantage, as it leaves the chair free to be rocked without hindrance from the action of the spring-bands C.

It is not intended to limit this invention to the combination of the lever connection, herein described, with the spring-bands C; nor to the particular arrangement of the casters herein described, either of themselves or their con-

nection with the levers; nor to any one particular mode of applying the casters to the chairs or other seat, to operate substantially as described; for obviously all can be varied in many particulars, and yet secure the automatic change of the seat from casters to its ordinary legs or other supports, and vice versa—as for instance, (see Fig. 4,) wherein the casters are shown as adapted to play up and down in a direct vertical line, spiral springs forcing them down when the seat is unoccupied, and yielding to the pressure or weight when occupied; and as shown in Fig. 5, wherein the casters are shown as adapted to be moved directly from the seat, according as it is occupied or unoccupied—a spring or springs of suitable power being adapted to the levers to throw and hold the seat on its casters when unoccupied.

It may be well to here observe that when

the casters under this invention are adapted for operation from the seat, it is intended that that part of the mechanism which is at the seat shall be incased by the upholstering of the seat, and otherwise properly constructed to cause no uneasiness or annoyance to the person occupying the chair.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with a caster, of a spring which automatically lifts the article from the floor, so that it may rest on the caster, except when forced down by the weight of the person, or otherwise, substantially as described.

J. H. TRAVIS.

Witnesses:

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EDWIN W. BROWN.