No. 807,815. PATENTED DEC. 19, 1905.

A. FRASER.

CHAIR.

APPLICATION FILED JUNE 3, 1905.

Fig. 1.

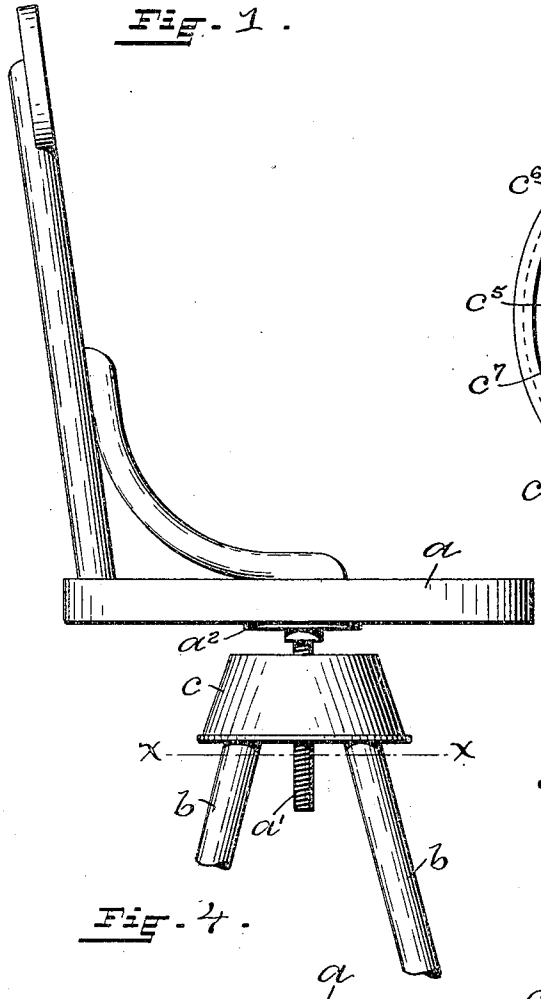


Fig. 2.

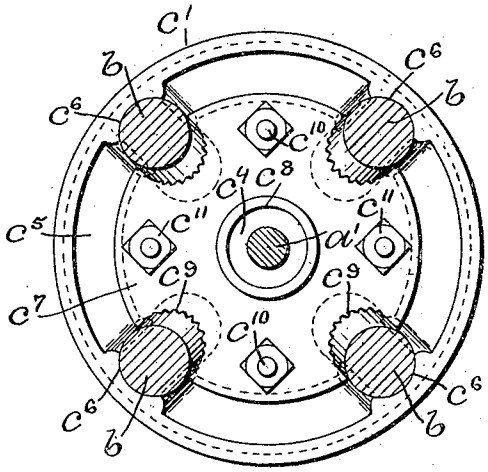


Fig. 3.

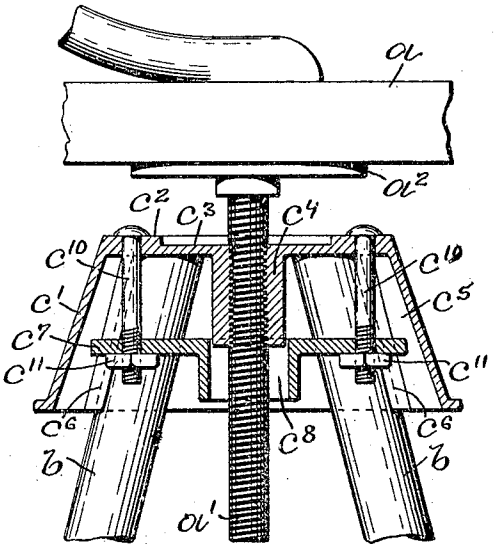
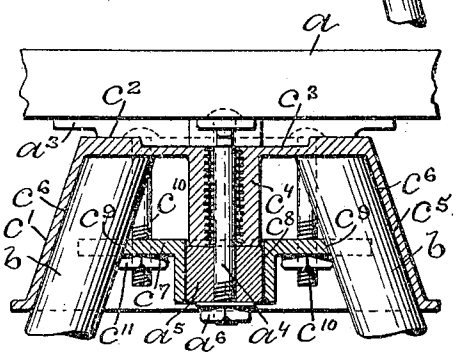


Fig. 4.



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No. 807,815. Specification of Letters Patent. Patented Dec. 19, 1905.

Application filed June 3, 1905. Serial No. 263,562.

To all whom it may concern:

Be it known that I, ALLAN FRASER, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Chairs, of which the following is a specification.

This invention has reference to an improvement in chairs, and more particularly to an improvement in the means for securing the legs to the seat of the chair.

My invention may be applied to all kinds of chairs, but is particularly applicable to office chairs or stools, the object being to firmly secure the legs to a fitting, (by clamping the same in the fitting,) which in turn is pivotally or rigidly secured to the seat of the chair.

My invention consists in the peculiar and novel construction of a chair comprising a seat, a plurality of legs, and a hollow truncated-cone-shaped fitting pivotally or rigidly secured to the seat, as will be more fully set forth hereinafter.

Figure 1 is a side view of a chair provided with my improvement and showing the lower part of the legs broken away. Fig. 2 is an enlarged detail sectional view taken on line X X of Fig. 1 looking at the under side of the fitting. Fig. 3 is an enlarged detail sectional view taken vertically through the fitting on a line with the clamping-bolts and showing the seat of the chair pivotally secured to the fitting; and Fig. 4 is an enlarged detail sectional view taken vertically on a line with the chair-legs, showing the seat of the chair rigidly secured to the fitting.

In the drawings, a indicates the seat of a chair, $b\ b$ the legs, and c the hollow truncated-cone-shaped fitting, to which the upper ends of the round legs are rigidly secured. A screw-threaded spindle a' is secured at its upper end to the disk a^2, which is centrally secured to the under side of the seat a by screws or other means.

The fitting c consists of a hollow truncated-cone-shaped shell c', having the top c^2, in which is the depression c^3, shaped to fit the bottom of the spider a^3, the downwardly-extending central hub c^4, which is internally screw-threaded for the spindle a', and the outwardly-flaring circular side wall c^5, having on its inner face the vertical semicircular grooves $c^6\ c^6$ for the round legs $b\ b$, as shown in Fig. 2. A clamping-plate c^7, having the central hole c^8 for the hub c^4 and the semicircular openings $c^9\ c^9$ in its periphery for the legs $b\ b$, is held in position to clamp the legs $b\ b$ by the clamping-bolts $c^{10}\ c^{10}$, which extend through holes in the top c^2 and the clamping-plate c^7, as shown in Fig. 3. The nuts $c^{11}\ c^{11}$ on the clamping-bolts bear on the under face of the clamping-plate, and by tightening these nuts the clamping-plate is drawn toward the top c^2, thus forcing the upper end of the legs into the grooves $c^6\ c^6$ and rigidly securing the legs in the fitting. The edges of the semicircular openings $c^9\ c^9$ in the clamping-plate may be serrated, as shown in Fig. 2, to prevent the legs from turning in the fitting.

When the seat a is rigidly secured to the fitting c, a spider a^3, shaped to fit the depression c^3 in the top of the fitting c, is secured to the under side of the seat by screws or other means. A bolt a^4 extends centrally through a hole in the spider, through the hub c^4, and through a collar a^5, placed on the end of the hub and secured by the nut a^6, bearing on the collar a^5, as shown in Fig. 4.

By the use of my improved construction in chairs the seat a may be either pivotally or rigidly secured to the fitting c. The legs $b\ b$ are rigidly secured to the fitting by tightening the nuts $c^{10}\ c^{10}$ on the clamping-bolts $c^9\ c^9$, and the legs $b\ b$ may be easily and quickly removed from the fitting for packing or carrying purposes by loosening the nuts on the clamping-bolts.

It is evident that the fitting c may be adapted to receive any number of legs, which may be of any desired shape in cross-section, without materially affecting the spirit of my invention.

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

1. In a chair, the combination of a seat a, a plurality of legs $b\ b$, a fitting c consisting of a hollow truncated-cone-shaped shell c' having the closed top c^2 in which is the depression c^3, the downwardly-extending central hub c^4 which is internally screw-threaded and the outwardly-flaring circular side wall c^5 having on its inner face the vertical grooves $c^6\ c^6$ for the legs $b\ b$, a clamping-plate c^7 having the central hole c^8 for the hub c^4 and the openings $c^9\ c^9$ in its periphery for the legs $b\ b$, bolts $c^{10}\ c^{10}$ extending through holes in the top c^2 and the clamping-plate c^7, nuts $c^{11}\ c^{11}$ on the bolts $c^{10}\ c^{10}$ bearing on the under face of the clamping-plate whereby on the tightening of the nuts $c^{11}\ c^{11}$ the legs $b\ b$ are rigidly secured in the fitting c, and means for pivotally securing the

seat a to the fitting c consisting of a screw-threaded spindle a' adapted to engage with the screw-threaded hub c^4 and secured to the disk a^2 which is secured to the under side of the seat a by screws or other means, as described.

2. In a chair, the combination of a seat a, a plurality of legs $b\ b$, a fitting c consisting of a hollow truncated-cone-shaped shell c' having the closed top c^2 in which is the depression c^3, the downwardly-extending central hub c^4 having a vertical central hole, and the outwardly-flaring circular side wall c^5 having on its inner face the vertical grooves $c^6\ c^6$ for the legs $b\ b$, a clamping-plate c^7 having the central hole c^8 for the hub c^4 and the openings $c^9\ c^9$ in its periphery for the legs $b\ b$, bolts $c^{10}\ c^{10}$ extending through holes in the top c^2 and the clamping-plate c^7, and nuts $c^{11}\ c^{11}$ on the bolts $c^{10}\ c^{10}$ bearing on the under face of the clamping-plate, whereby on tightening the nuts c^{11} c^{11} the legs $b\ b$ are rigidly secured in the fitting c, as described.

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

ALLAN FRASER.

Witnesses:
ADA E. HAGERTY,
J. A. MILLER, Jr.