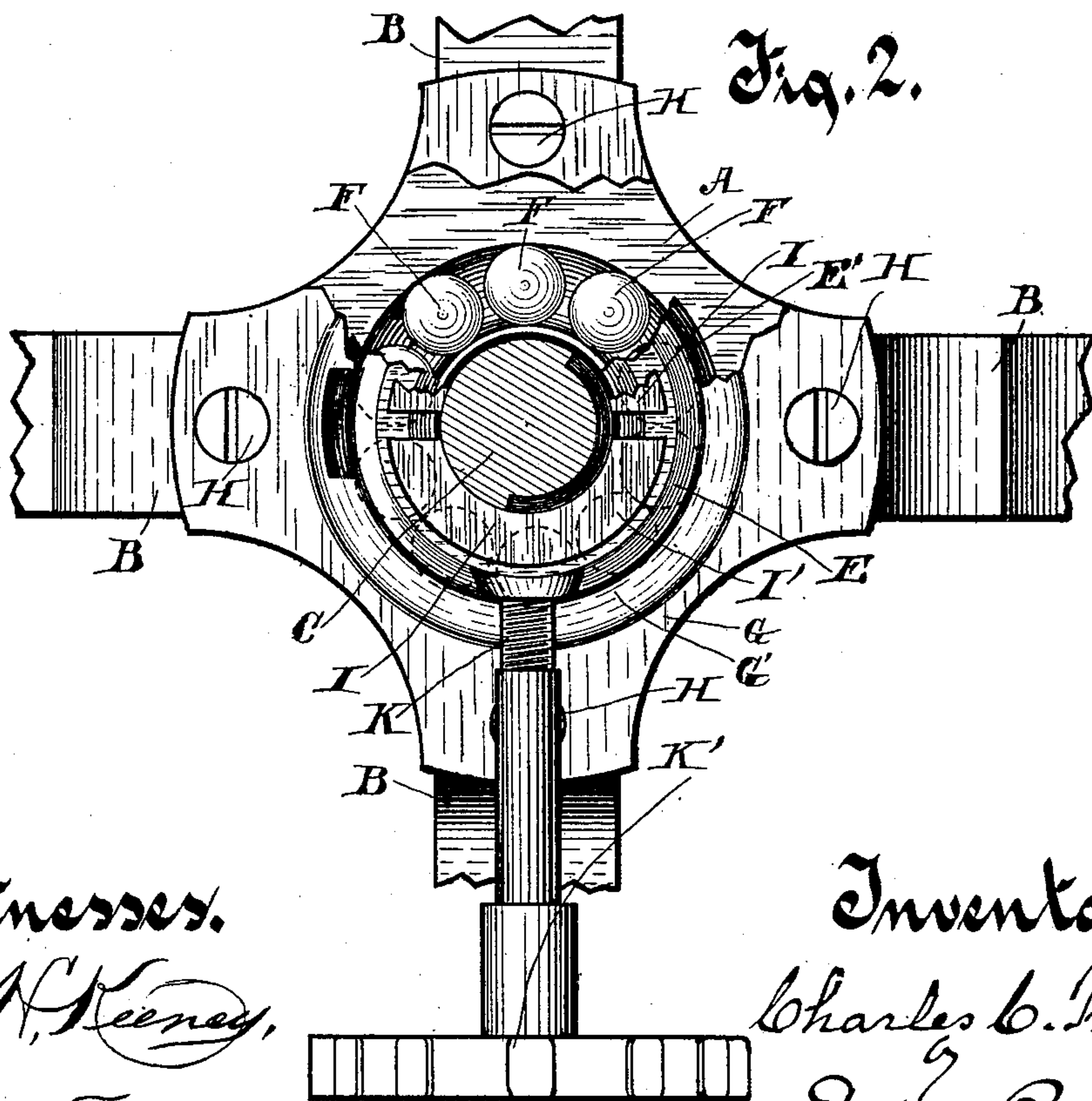
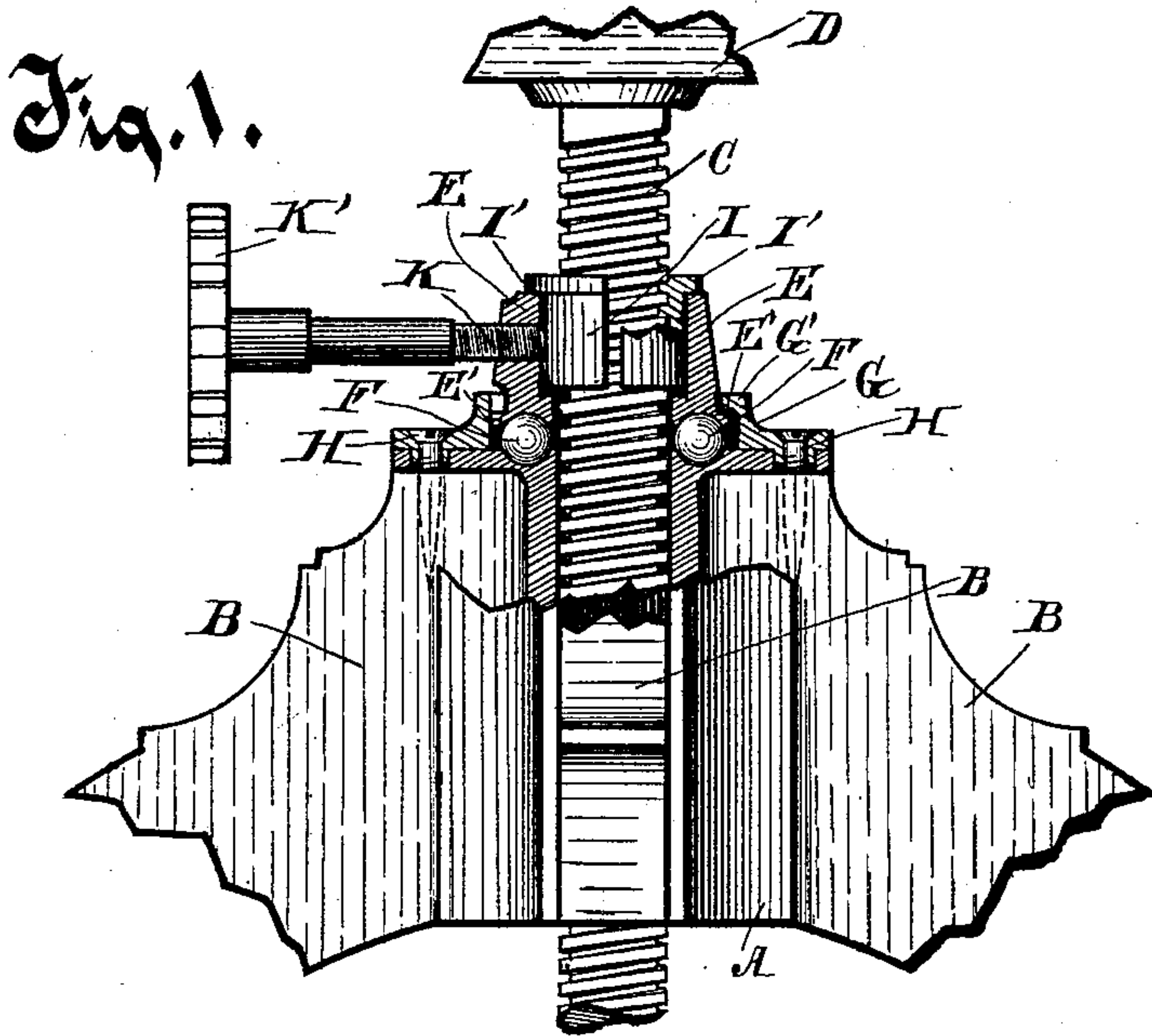


(No Model.)

C. C. TRAPP.
REVOLVING CHAIR.

No. 434,743.

Patented Aug. 19, 1890.



Witnesses.
C. H. Keeney,
Anna Faust.

Inventor.
Charles C. Trapp
Erwin Benedict
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES C. TRAPP, OF PORT WASHINGTON, WISCONSIN, ASSIGNOR, BY MESNE ASSIGNMENTS, TO JOHANNA TRAPP, OF SAME PLACE.

REVOLVING CHAIR.

SPECIFICATION forming part of Letters Patent No. 434,743, dated August 19, 1890.

Application filed April 24, 1890. Serial No. 349,326. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. TRAPP, of Port Washington, in the county of Ozaukee and State of Wisconsin, have invented new and useful Improvements in Revolving Chairs; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention in revolving chairs relates particularly to a device by which the chair-seat may be raised or lowered by rotating it, and by means of which device being properly set therefor the chair-seat may be revolved freely without either raising or lowering it.

In the drawings, Figure 1 is a side elevation of my improved device, parts being in section to show interior construction. Fig. 2 is a top plan view of the device, parts being broken away to show interior construction.

A metal head A is provided with sockets in its sides, in which the inner and upper ends of the legs B B are received and on which the head is supported, the legs being at the same time secured thereto. The metal head is provided with a vertical central aperture through which the screw-threaded spindle C moves freely, the aperture through the head being slightly larger than the greatest diameter of the screw. The spindle is provided with a head D, on which the chair-seat is supported. A ring E, having a central aperture of greater diameter than the diameter of the screw of the spindle C, encircles the spindle and rests and rotates on the top surface of the head A, but preferably anti-friction balls F are inserted between the head A and ring E in annular grooves therefor in the top of the head and in the bottom of the ring E. These balls may or may not be used, as preferred, though their use greatly facilitates rotary movement of the ring E on the head A. A cap or guard G, having a central circular opening and an inwardly-projecting flange G' encircles the base of the ring E and is secured permanently to the head A conveniently by means of screws H H passing through the guard and through apertures therefor in

flanges of the head and turning into the legs B B. The flange G' fits about the ring E just above flange E', projecting outwardly from the base of the ring E. By this construction the ring E is retained movably in place near to or against the head A, on which it rotates freely. A split or two-part sleeve-nut I, in which the spindle C turns by its screw-thread, is located loosely within the ring E, the nut being provided at its top edge with a laterally-projecting flange I', which rests on the top of the ring E and supports the nut movably therein. A set-screw K, provided with a small hand-wheel K', turns through the ring E against the split nut I, and is adapted by being turned firmly against the nut to clasp the ring, the nut, and the spindle rigidly together.

In operation when the set-screw K is turned firmly against the split sleeve-nut I so as to clasp the ring, the sleeve-nut, and the spindle rigidly together, the chair-seat will then revolve freely on the bearing formed by the ring E resting on the head A, either with or without the interposed balls F, and when the set-screw K is turned out from its seat sufficiently to release the split nut I from clamping the spindle rigidly to the ring E, the spindle will, on rotation thereof by revolving the chair-seat or otherwise, turn freely in the sleeve-nut, thereby raising or lowering the chair-seat by the rotation of the screw-threaded spindle in the nut. When rotating the spindle in the nut I, it may be necessary to hold the ring E against rotation, which can be conveniently done by grasping the wheel K' with one hand while with the other hand the seat can be rotated.

The sleeve-nut, the spindle, and the ring are to be clamped together rigidly at all times except only when the chair-seat is to be raised or lowered by turning the spindle in the nut.

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

1. In a revolving chair having a head, as A, provided with a central vertical aperture and with a spindle C affixed to the chair-seat and arranged to move freely in the aperture in the head, the combination of a ring E, a split sleeve-nut I, and a set-screw turning through

the ring against the split nut, substantially as described.

2. In a revolving chair, the combination, with a metal head supported on the legs and
5 a screw-threaded spindle affixed to the seat and passing movably through the head independently of its screw-thread, of a ring, as E, about the spindle, a guard, as G, whereby the ring is held rotatably near to the head, a split
10 nut, as I, about the spindle within the ring, and a set-screw turning through the ring against the nut, substantially as described.

3. In a revolving chair having a metal head supported on the legs, which head is provided
15 with a vertical aperture through which a screw-threaded spindle carrying a seat thereon passes movably independently of its screw-

thread, a ring, as E, encompassing the spindle, anti-friction balls interposed between the ring and the supporting-head, and a guard 20 secured to the head and retaining the ring movably thereto, in combination with a divided sleeve-nut about the spindle within the ring provided with a flange whereby it is supported on the ring, and a set-screw turning 25 through the ring against the nut, substantially as described.

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

CHARLES C. TRAPP.

Witnesses:

H. L. COE,

J. J. CRAMER.