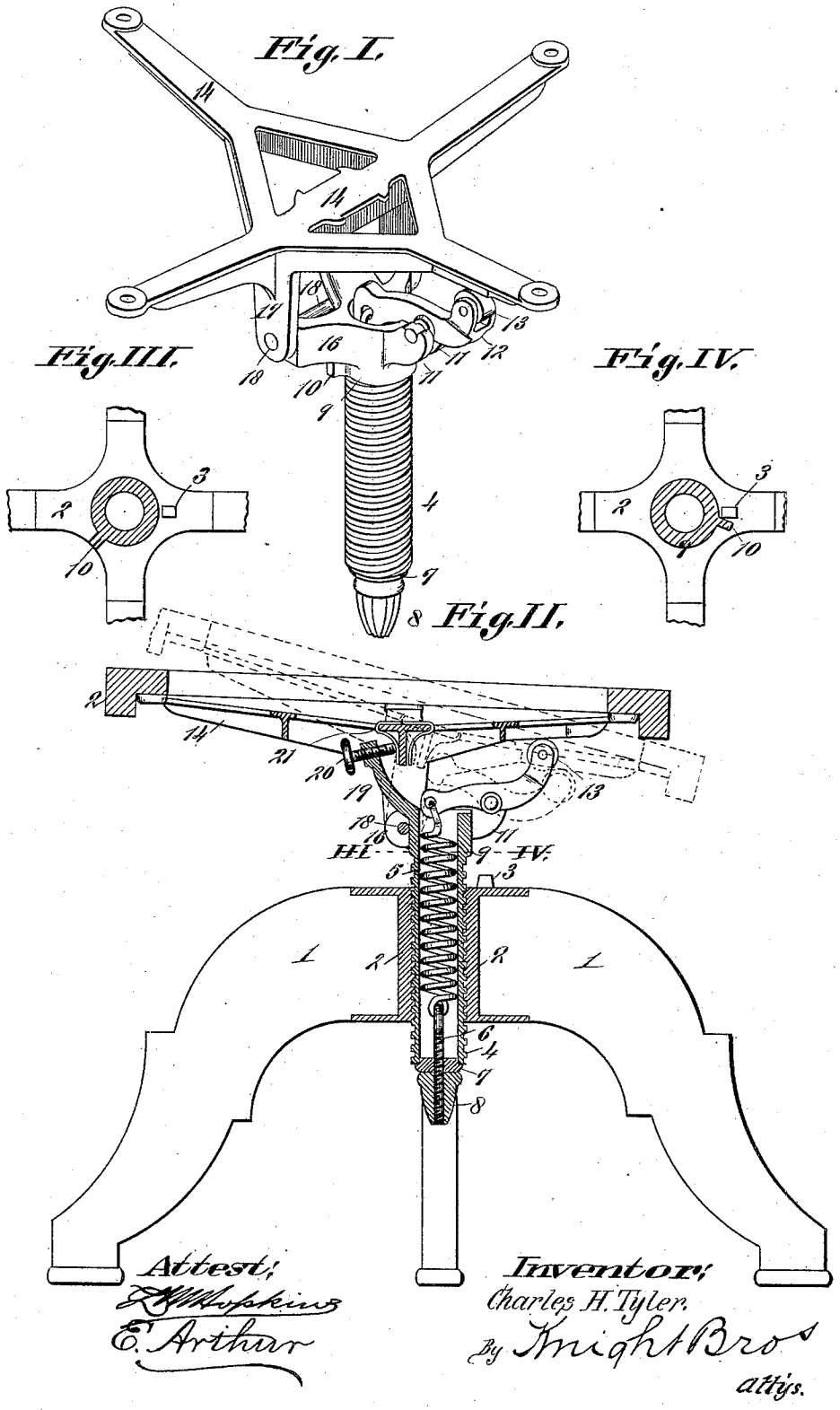
(No Model.)

C. H. TYLER.

OFFICE CHAIR.

No. 398,293. Patented Feb. 19, 1889.



N. PETERS. Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

CHARLES H. TYLER, OF ST. LOUIS, MISSOURI.

OFFICE-CHAIR.

SPECIFICATION forming part of Letters Patent No. 398,293, dated February 19, 1889.

Application filed May 3, 1887. Serial No. 236,979. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. TYLER, of the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Office-Chairs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure I is a perspective view of my improvement. Fig. II is a vertical section. Figs. III and IV are cross-sections taken on line III IV, Fig. II, showing the stem, sleeve, and part of the base of the chair.

My invention relates to certain improvements in office-chairs; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, 1 represents the base of the chair; 2, a screw-threaded sleeve or socket secured to the base, and on top of which there is a lug, 3, the function of which will be mentioned hereinafter.

4 represents a hollow stem which fits in the screw-threaded socket 2. On the inside of the hollow stem there is a spring, 5. Attached to the lower end of the spring is a screw or threaded rod, 6, the lower end of which passes through a hole in a cap, 7, which fits on the lower end of the hollow stem.

8 is a thumb-nut on the lower end of the rod 6, which may be moved up or down to regulate the tension of the spring. On the upper end of the hollow stem is a head, 9, having a lug, 10, which, when the stem is nearly spent, (screwing downward,) engages with the lug 3 on the socket and prevents the screw from going down so far that it becomes fast or jammed in the socket. On the head 9 there is an arm, 11, and to the arm is pivoted a lever, 12, one end of which is attached to the spring 5, and on the other end there is, preferably, attached a friction-roller, 13.

14 represents a spider, to which the body of the chair is attached. The spider has projections 17, journaled to arms 16 on the stem at 18, so that the spider can move into the position shown in dotted lines, Fig. II, to allow the tilting of the chair. One of the arms of the spider comes in contact with and bears against the roller 13, secured to the lever 12, and the lever and spring 5 thus keep the spider in a horizontal position, except when forced back by the user. The spring, being located within the stem, is at the center of motion, so as to be undisturbed whatever the position of the chair, and is out of the way and out of sight, and, with the lever 12, performs effectually the function for which it is designed.

The head 9 has an extension, 19, provided with a screw, 20. Around the center of the spider is a strap, 21, which comes against the inner end of the lever 12 and the screw 20 to deaden the noise each time the spider is tilted. The spider has notches 22 to receive the strap.

By turning the screw 20 in or out the spider, when in its substantially horizontal position, may be inclined more or less.

I claim as my invention—

1. In a chair, the combination of a base, a hollow screw-stem supported thereon, a spider or support pivoted to said stem, a seat carried by said spider or support, a spring within the said hollow stem, and a lever pivoted to said stem, having one end bearing on the spider or support and its other end connected to said spring, substantially as set forth.

2. The combination of a chair-base, a hollow screw-stem supported thereon, a spider or support pivoted to said stem, a seat carried by said spider or support, an extensible spring within said hollow stem, having its lower end fixed to the stem, and a lever having one end connected to the spring and operated by the movement of the chair-seat, substantially as described.

3. The combination of a chair-base, a hollow screw-stem supported thereon, a spider or support pivoted to said stem, a seat carried by said spider or support, a lever pivoted to said stem and having at one end an anti-friction roller bearing against said spider or support, and an adjustable and extensible spring within the hollow stem connected to the other end of said lever and adapted to operate substantially as set forth.

4. The combination of a chair-base, a hollow screw-stem supported thereon, a spider or support pivoted to said stem, a seat carried by said spider or support, a spring within the hollow screw-stem, a lever having one end connected to the spring and operated by the

movement of the chair-seat, a screw-rod secured to the lower end of said spring and projecting below the screw-stem, and a nut for adjusting said rod, and consequently the tension of the spring, substantially as set forth.

5. The combination of the chair-base, a screw-stem mounted thereon, an extensible spring connected to said stem, a seat, a spider supporting the seat and pivoted to the stem, a set-screw mounted on the stem and stopping the spider in one direction, and a lever pivoted to the stem, bearing under the spider at one end and connected to the spring at the other, and adapted to come in contact with the spider and stop it in the other direction, substantially as set forth.

6. The combination of the chair-base, a screw-stem mounted thereon, an extensible spring connected to said stem, a seat, a spider supporting the seat and pivoted to the stem, a set-screw mounted on the stem and stopping the spider in one direction, a lever pivoted to the stem, bearing under the spider at one end and connected to the spring at the other, and a strap on the spider, wherewith the spring end of the lever comes in contact to deaden the blow in the other direction of movement of the spider, substantially as set forth.

7. The combination of base 1, screw-stem 4, having arm 19, set-screw 20 in said arm, spider 14, pivoted to stem 4 and adapted to be stopped by set-screw 20, extensible spring 5, connected to stem 4, lever 12, pivoted to stem 4, connected to said spring at one end and supporting the spider at its other, and strap 21 on the spider, with which the spring end of said lever is adapted to contact, substantially as set forth.

8. The combination of base 1, screw-stem 4, set-screw 20 thereon, spider 14, pivoted to stem 4, adapted to be stopped by set-screw 20, and having notches 22, extensible spring 5, connected to stem 4, lever 12, pivoted to stem 4, connected to said spring at one end and supporting the spider at its other, and strap 21 in notches 22 on the spider, with which the spring end of the lever is adapted to contact, substantially as set forth.

CHARLES H. TYLER.

In presence of—
GEO. H. KNIGHT,
EDW. S. KNIGHT.