

J. E. Teal,

Chair.

No. 105,517.

Patented July 12, 1870.

Fig. 1.

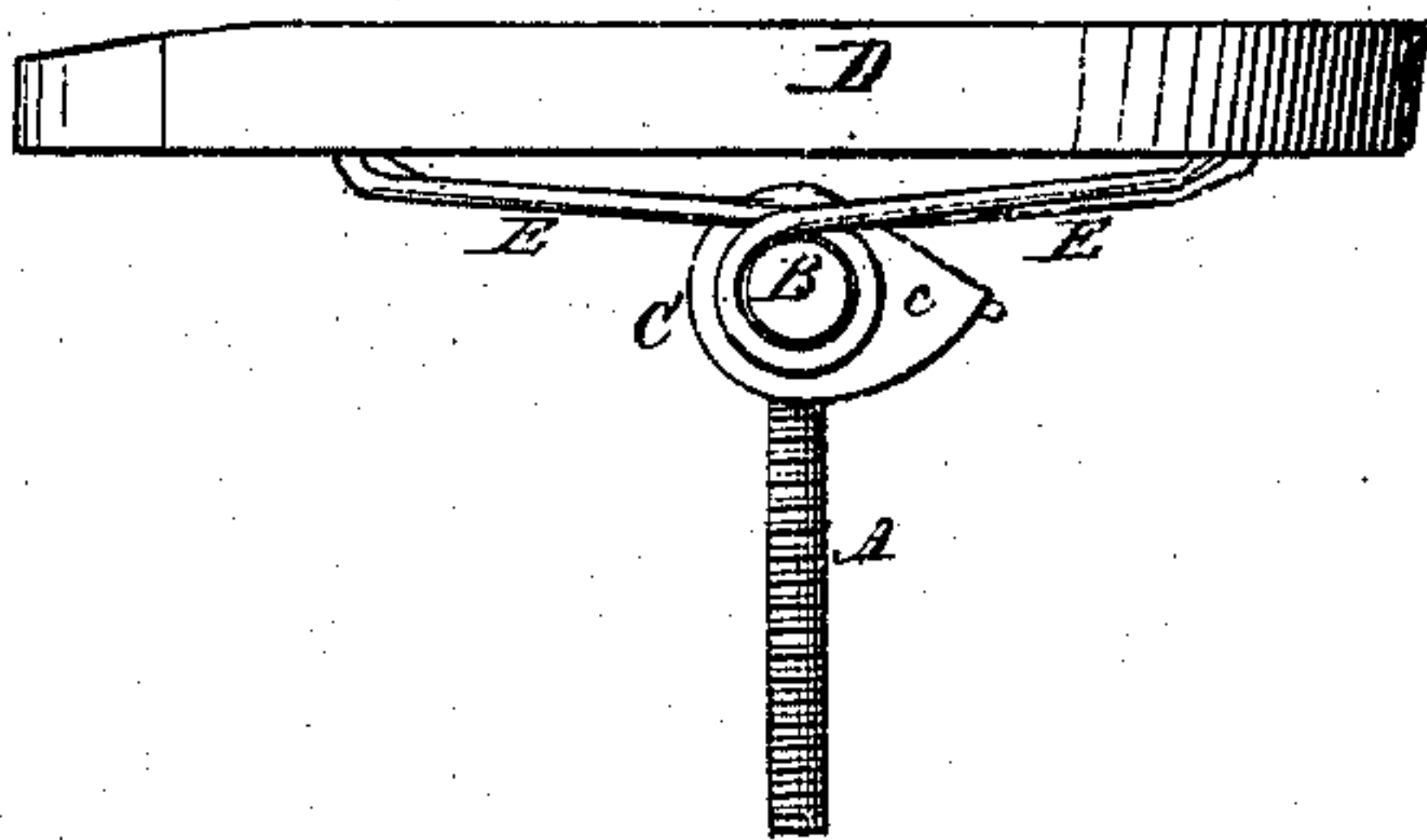


Fig. 2.

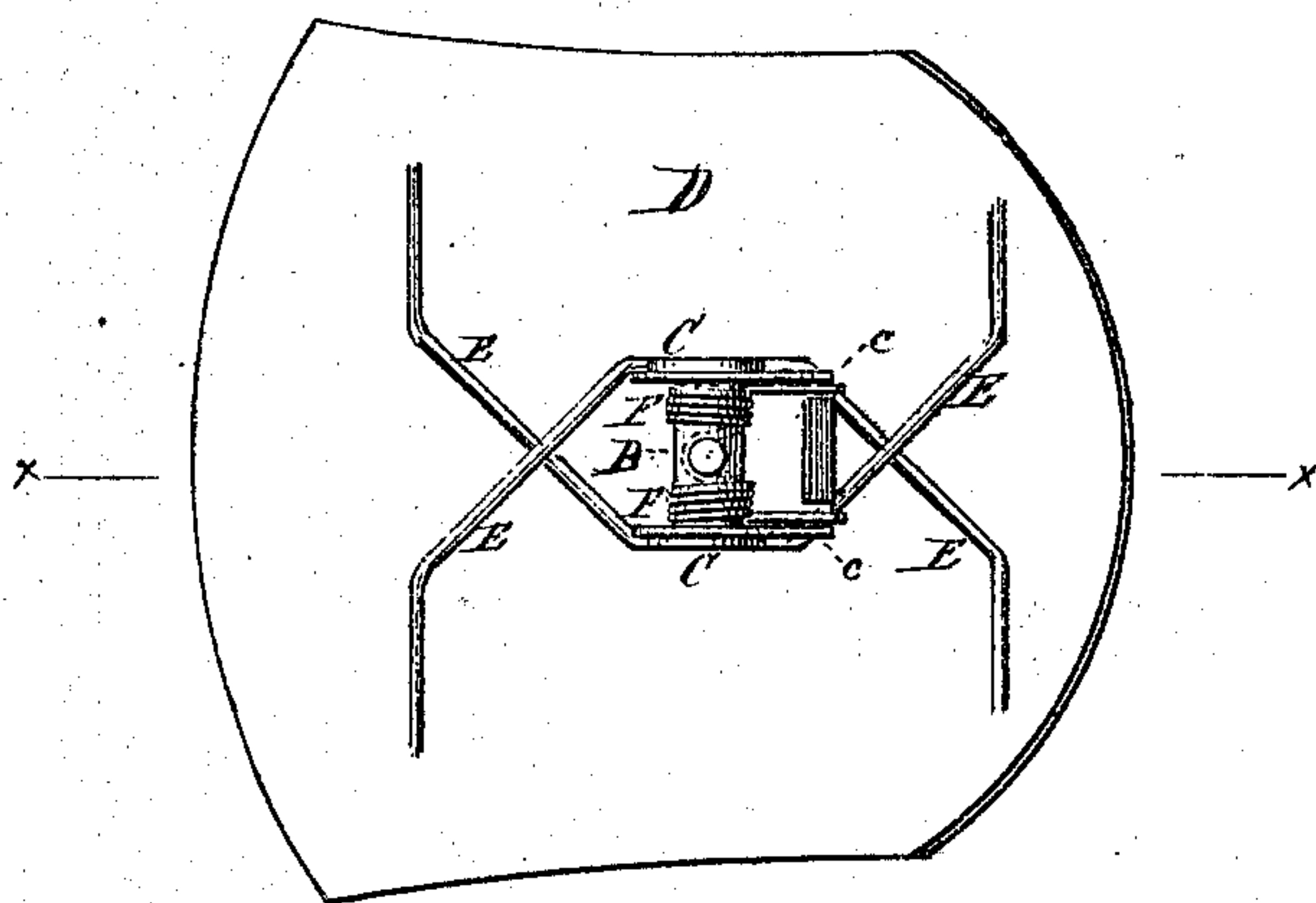
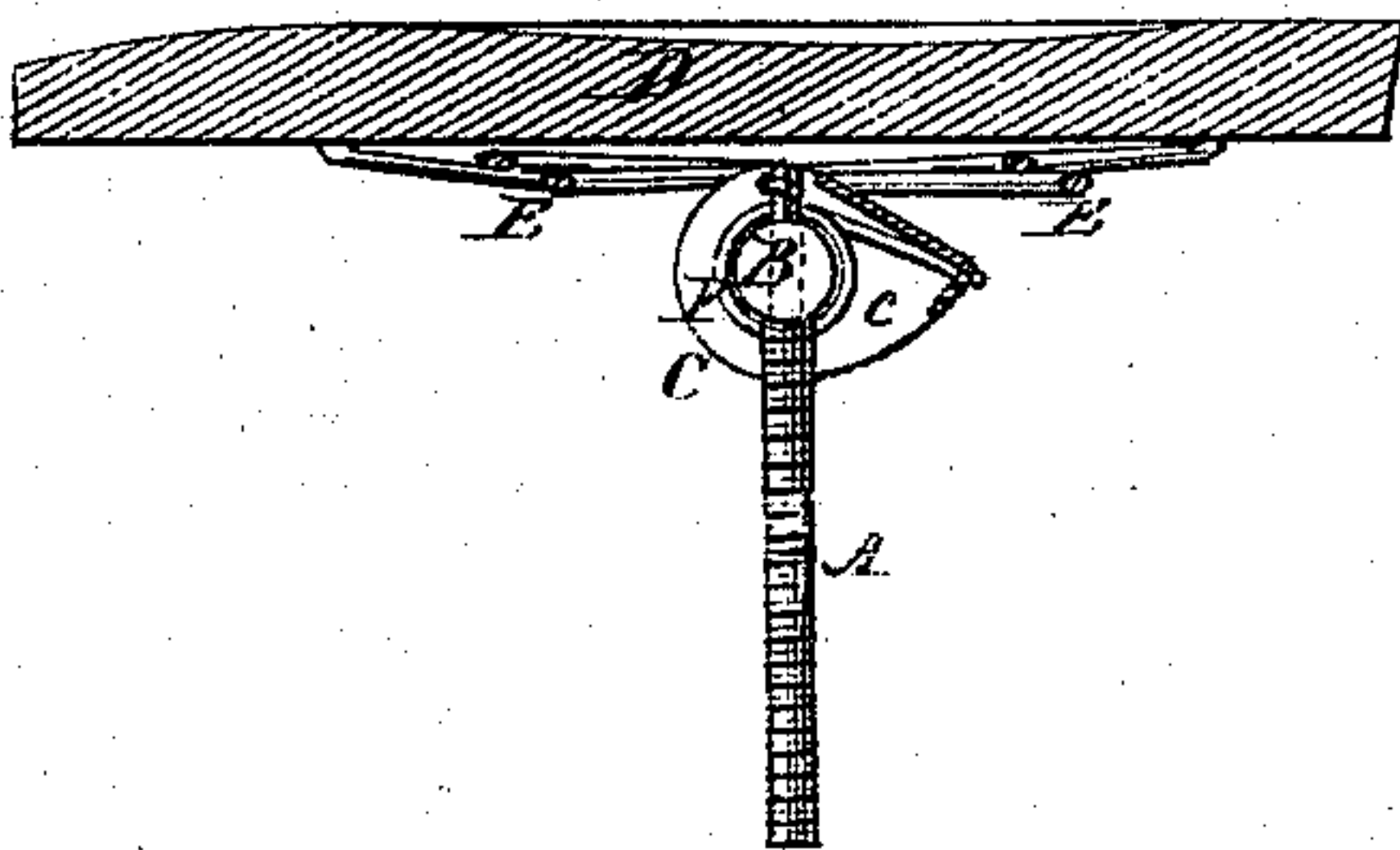


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

DANIEL E. TEAL, OF NEW LISBON, NEW YORK.

IMPROVEMENT IN THE CONSTRUCTION OF CHAIRS.

Specification forming part of Letters Patent No. **105,517**, dated July 19, 1870.

To all whom it may concern:

Be it known that I, DANIEL E. TEAL, of New Lisbon, in the county of Otsego, and in the State of New York, have invented certain new and useful Improvements in Chairs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side elevation of a chair-seat, showing the means employed for pivoting thereto the screw. Fig. 2 is a plan view of the lower side of the same, and Fig. 3 is a cross-section on the line *xx* of Fig. 2.

Letters of like name and kind refer to like parts in each of the figures.

My invention is an improvement in tilting swivel-chairs; and it consists in the means employed for pivoting the seat to or upon the upper end of the screw, and for holding said seat in a horizontal position, except when purposely tilted backward, as is hereinafter shown.

In the annexed drawings, A represents a screw having its upper end secured to or within the center longitudinally of a short roller, B, which is placed at a right angle to said screw and serves as a pivot upon which it swings. The ends of the roller B rest in bearings C, formed within a plate of sheet metal, *c*, having its ends bent inward in parallel lines, as shown in Fig. 2, and being secured to or upon the lower side of a chair-seat, D, by means of two rods, E, one of which is coiled once around the outside of the opening within each bearing, and soldered or otherwise attached thereto, and from thence, extending inward and across, has its ends embedded within said chair-bottom. The screw A extends above the roller B sufficiently to bring it into engagement with the edge of the plate *c* and prevent the seat from tilting forward beyond a horizontal line without interfering in the least with its free motion to the rear. In order to cause the seat to return to position when tilted rear-

ward, two spiral springs, F, formed of one piece of wire, are coiled around the ends of the roller B, their inner or connected ends passing forward around the end of the screw, while their outer ends, extending rearward, rest within suitable notches formed in the lower edge of the plate *c*, as shown in Figs. 2 and 3, by which means an elastic upward pressure is exerted upon the rear side of the seat sufficient to always hold the same in position, except when purposely moved therefrom. Although this construction of the bearings and the means employed for attaching the same to the seat are believed to be most desirable, other equivalent devices might be employed for effecting the same object without departing from the spirit of my invention.

The especial advantages possessed by these devices are simplicity of construction coupled with a comparatively small cost.

Having thus fully set forth the nature and merits of my invention, what I claim as new is—

1. The devices employed for pivoting the seat D to or upon the screw A, consisting of the roller B, resting within the bearings C, attached to the lower side of said seat by means of the rods E, substantially as and for the purpose shown.

2. The combination of the forward edge of the plate *c* with the upper end of the screw A and the roller B, substantially as shown, and for the purpose specified.

3. In combination with the screw A, the roller B, and the plate *c*, the spiral springs F, constructed and arranged to operate substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of June, 1870.

DANIEL E. TEAL.

Witnesses:

GEO. S. PRINDLE,
EDM. F. BROWN.