

Daniel E. Teal.

Impt. in Chairs.

PATENTED JUL 19 1870

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Fig. 1.

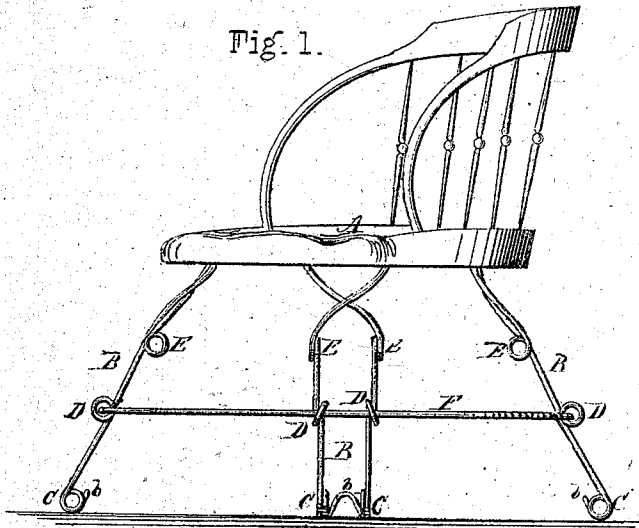
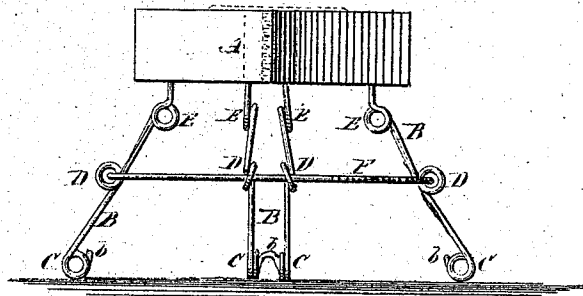


Fig. 2.



Witnesses.

Abel Mende
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Attys.

United States Patent Office.

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

Letters Patent No. 103,515, dated July 19, 1870.

IMPROVEMENT IN THE CONSTRUCTION OF CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same

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 do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a side elevation of a chair, provided with my improved legs, and

Figure 2 is a like view of a stool for a swivel-chair, showing a modification in the form of the legs at their points of attachment to the seat.

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

The object of my invention is to provide chair-legs that shall be sufficiently elastic to insure a bearing for each upon the floor, regardless of any ordinary unevenness of the same; and

It consists principally in a chair-leg constructed of metal rods or wire, and provided with two or more spiral coils, having their axis placed at or near a right angle to a line passing radially from the center of the seat, as is hereinafter set forth.

It also consists in a ring or hoop, formed of suitable wire or metal rod, placed around and connected with the legs between their lower ends and the seat, as is hereinafter shown.

In the annexed drawing—

A represents the seat of an ordinary chair, which rests upon and is supported by the legs B, constructed of wire in the following manner:

The wire is bent nearly together at its center, in the form shown at *b*, after which each half is bent spirally one and one-half times, so as to form two coils, *c*, the axes of which are coincident, while their inner faces are parallel with and at a short distance from each other. From the coils *C* the wires extend upward midway to the chair-seat, where, by a single turn of each, two other coils, *D*, are formed upon the opposite or outside of the leg from the first coil *C*.

A third set of coils, *E*, is formed upon the inner side of the leg near the seat *A*, after which the ends of the wire pass directly upward into the same, as in fig. 2, or are crossed and enter said seat diagonally, as shown in fig. 1.

Passing horizontally around the legs *B*, and through the central coils *D*, is a metal ring or hoop, *F*, which confines said legs at their center, and prevents, at that point, any radial movement of the same.

As thus constructed and applied, downward pressure upon the seat will cause the lower ends of the legs to spring outward, and their upper ends to spring slightly inward, until each has a firm bearing upon the floor, after which any increase of said pressure will cause said legs to further change their original shape, until such pressure is equalized by their increased tension.

By varying the size of the wire and the number of the spiral coils, any degree of rigidity or elasticity may be obtained for the legs, so as to adapt them to the weight to be sustained.

The advantages possessed by this construction of the legs are, that being elastic, each leg is sure to find a bearing upon the floor, while the same property renders the chair more easy and comfortable to the occupant.

Having thus fully set forth the nature and merits of my invention,

What I claim as new, is—

A chair-leg constructed of parallel metal rods or wire, each provided with two or more spiral coils, substantially as shown and for the purpose specified.

Also, in combination with chair-legs constructed of wire, as described, a circular metal ring or hoop for confining the same in position radially, substantially as and for the purpose set forth.

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.