E. J. SMITH.
Chair.

No. 198,421. Patented Dec. 18, 1877.

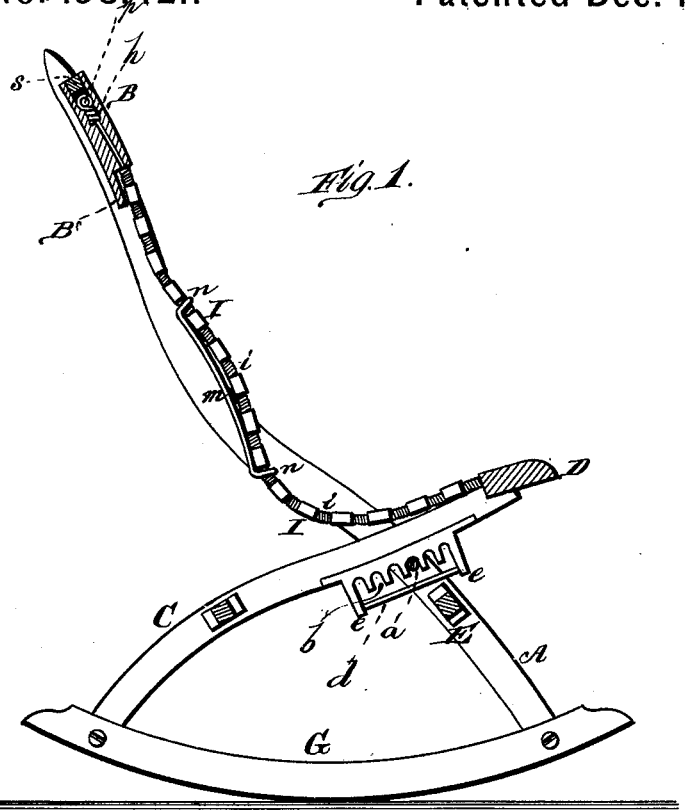

Fig. 1.

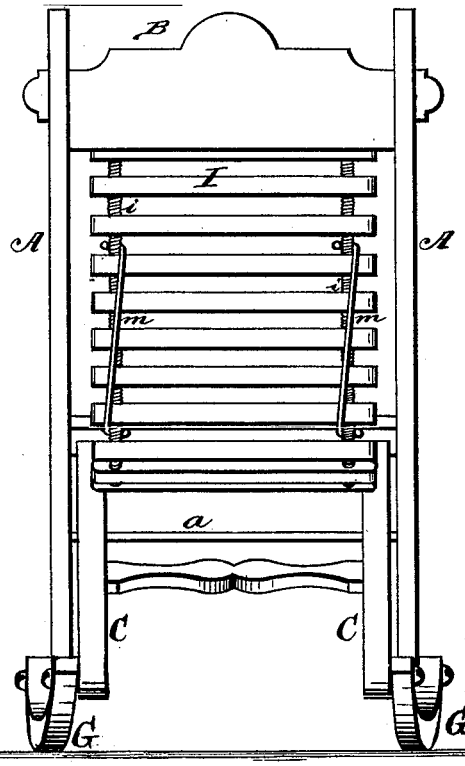

Fig. 2.

WITNESSES
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ELDRIDGE J. SMITH, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN CHAIRS.

Specification forming part of Letters Patent No. **198,421**, dated December 18, 1877; application filed November 24, 1877.

To all whom it may concern:

Be it known that I, ELDRIDGE J. SMITH, of Washington, in the county of Washington and District of Columbia, have invented a new and valuable Improvement in Chairs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a longitudinal vertical section of my chair, and Fig. 2 is a rear view of the same.

The nature of my invention relates to rocking-chairs; and it consists in a novel construction of the upper cross-slat of the back, and in hooked and curved rods attached to the wires of the flexible back, as hereinafter set forth and claimed.

The annexed drawings, to which reference is made, fully illustrate my invention.

A A represent the front legs of the chair, extended to form the side pieces of the back, and connected at their upper ends by a head-piece, B. C C are the rear legs extended forward, and their front ends connected by a cross-bar, D. The lower ends of the legs A A and C C are pivoted to the rockers G G at or near their ends, and the front legs A A are connected by a round or cross-bar, E, below the point of crossing of the legs.

To the under sides of the legs C C are attached rack-bars *b b*, to lock upon a rod, *a*, which connects the legs A A, as shown. By means of these rack-bars the legs can be adjusted to set the back of the chair at different angles, and yet hold the parts firmly at any point desired.

To prevent the parts from becoming entirely disconnected, each rack-bar *b* is provided with lugs *e e* at the ends, and these lugs connected by a rod, *d*, which runs below the rod *a*.

It is very evident that the rack-bars may be arranged in slots in the legs as well as on the outside of them, and the rod *a* then pass through the slots.

Other means for adjusting the parts may also be used without departing from the spirit of my invention, the essence of this feature of which is the pivoting of the legs to the rockers, and the adjustment of the legs at the points of their crossing.

The back and seat of my chair are composed of a series of slats, I I, strung upon wires *h h*, which are fastened in the head-piece B and cross-bar D, and the slats separated by short spiral springs *i*, or other devices, placed on the wires *h*, between the slats, the whole thus forming a flexible seat and back which adjust themselves to the person seated in the chair.

At the proper point of the back I employ a rod, *m*, upon each wire *h*, such rod having a hook, *n*, at each end, and is of such length that when hooked on the wires *h h*, as shown, the slats inclosed within them will be bulged forward, and form a rigid portion to fit in the back of the person seated in the chair. The hooked rods *m m* can be easily adjusted up and down, or removed altogether, as occasion may demand.

In the construction of my chair, the rods *d* are secured in the lugs *e* by drilling holes in the inner ends of said lugs, nearly, but not quite, through the same, and then springing the rod into the same, whereby it is held securely in place, and cannot slide in either direction.

The head-piece B is, along its lower edge, formed with a flange, B′, extending downward, so that the wires *h*, or the first slat or slats I, will rest thereon. This is important in preventing the fabric composing the seat and back from being bent at too acute an angle, thereby endangering the breaking of the wire, and subjecting the occupant of the chair to inconvenience by the head coming in contact with the sharp edge that would be otherwise formed by the lower corner of the head-piece B.

The upper ends of the wires *h* are secured to the head-piece B by means of a short metallic cross-piece, *p*, sunk into a mortise in the head-piece, the wire being twisted so as to form a loop through which said metallic cross-piece is passed. The mortise in the upper edge of the head-piece B is then filled or closed by a wooden piece, *s*, glued or otherwise fastened therein, to conceal the metallic cross-piece *p* and the loop of the wire.

I do not, in this case, claim the fabric of

which the back and seat are formed, as that is shown in another application of mine now pending. Neither do I claim a flexible chair-back stiffened and curved by means of metallic plates fitted in pockets.

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

1. In a chair having a flexible back formed of wires and slats, as described, the curved and hooked rods *m m*, attached to the wires, substantially as and for the purpose specified.

2. In a chair having a flexible back, the head-piece B, formed with the flange B′ at its lower edge, and mortises in the top for fastening suspending-wires from cross-pieces *p*, sunk in said mortises, substantially as herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ELDRIDGE J. SMITH.

Witnesses:
JOHN F. BLACKMAR,
JAMES J. SHEEHY.