### JAMES P. CHAMBERLIN.

## Improvement in Bed and Seat Springs.

No. 114,923.

Patented May 16, 1871.

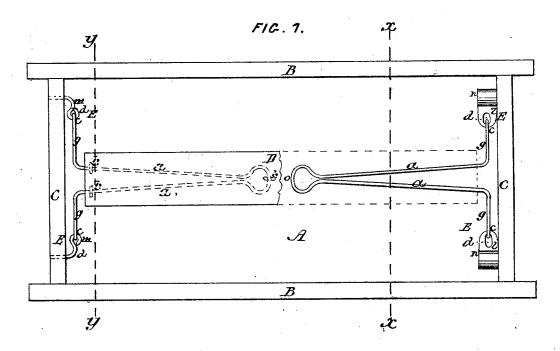
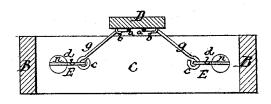
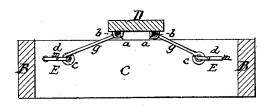


FIG.2.



F/C.3.



Albert M. Brown. Edwin M. Brown.

INVENTOR.

# United States Patent Office.

### JAMES P. CHAMBERLIN, OF NORTH ABINGTON, MASSACHUSETTS.

Letters Patent No. 114,923, dated May 16, 1871.

#### IMPROVEMENT IN BED AND SEAT-SPRINGS.

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

To all persons to whom these presents shall come:

Be it known that I, JAMES P. CHAMBERLIN, of North Abington, in the county of Plymouth and State of Massachusetts, have invented a certain new and useful improved Bed and Seat-Spring; and that the following is a full and exact description of the same, reference being had to the accompanying drawing.

The present invention relates to that class of bed and seat-springs arranged for an elastic action by torsion of the wire from which the springs are made;

The invention consists in a novel formation of spring, securing many important advantages.

In the accompanying drawing my improved bed and

seat-spring is illustrated—

Figure 1 being a plan or top view of the same as applied to a slat and connected to a frame, with the slat shown as transversely broken off at one end;

Figures 2 and 3, vertical transverse sections, res-

pectively, in plane of lines x x and y y.

A in the drawing represents a frame made of parallel side rails B, joined together at or near each end by

cross-pieces C.

D, a slat arranged lengthwise to frame A, to the end pieces C of which it is connected, by and through the wires a fastened by staples b, to the under side of the slat, and hung by their eyes c to loops d of the end pieces C, to frame A.

The wires a on under side of slat can be each continuous from end to end or separated at o, both formed of a similar shape, and, such as shown in the drawing, terminating with arms g at the ends of the slat that project at right angles to the length of the wire on the slat, vertically inclining to the slat and extending outward therefrom beyond each edge.

By these arms, g, the slat is hung to the frame A, as before described, forming a hinge, E, as it were, the leaf n of which, attached to the frame at the one end of frame, is shown as made of leather l, or other flexible material, and at the other end of a wire eye, m, swiveled in the cross-piece C.

The wires a on under side of slat are fastened thereto by staples, and, as before described, said staples being located one at the extreme ends of each wire, and the other at or near the ends of slat and at or about the angle of wire.

With wires applied to the slat, and hung to the frame A, as described, pressure on the slat causes a twisting or torsion of the wires, imparting thereby elasticity and spring to the slat, the yielding hinge to the frame allowing the slat to move down and up from such pressure.

Although in the drawing only one slat is shown, springs such as described may be as well applied to a series (more or less in number) of slats, according as the special purpose for which the slats are to be used

may require.

As the wire springs are extended under and along the length of the slat it secures a more perfect and direct movement of the slat up and down, enabling tying-bands for the slats to be dispensed with, and the slats are susceptible of a transverse rock, adapting them for use in the construction of seats, where a rock to the slats is desirable.

The wire springs also serve to stiffen the slats, preventing them from springing down from end to end, while at the same time they have all necessary elasticity and spring.

The arrangement of springs described is also cheap to manufacture, and easily and readily made.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent, is-

Wire springs a, formed substantially as herein described and shown in the drawing, in combination with a slat or slats, D, when connected thereto and to a suitable frame for action, substantially as described, for the purpose specified.

The above specification of my improved bed and seat-spring signed by me this 10th day of March, A. D. 1871.

J. P. CHAMBERLIN.

Witnesses:

EDWIN W. BROWN, ALBERT W. BROWN.