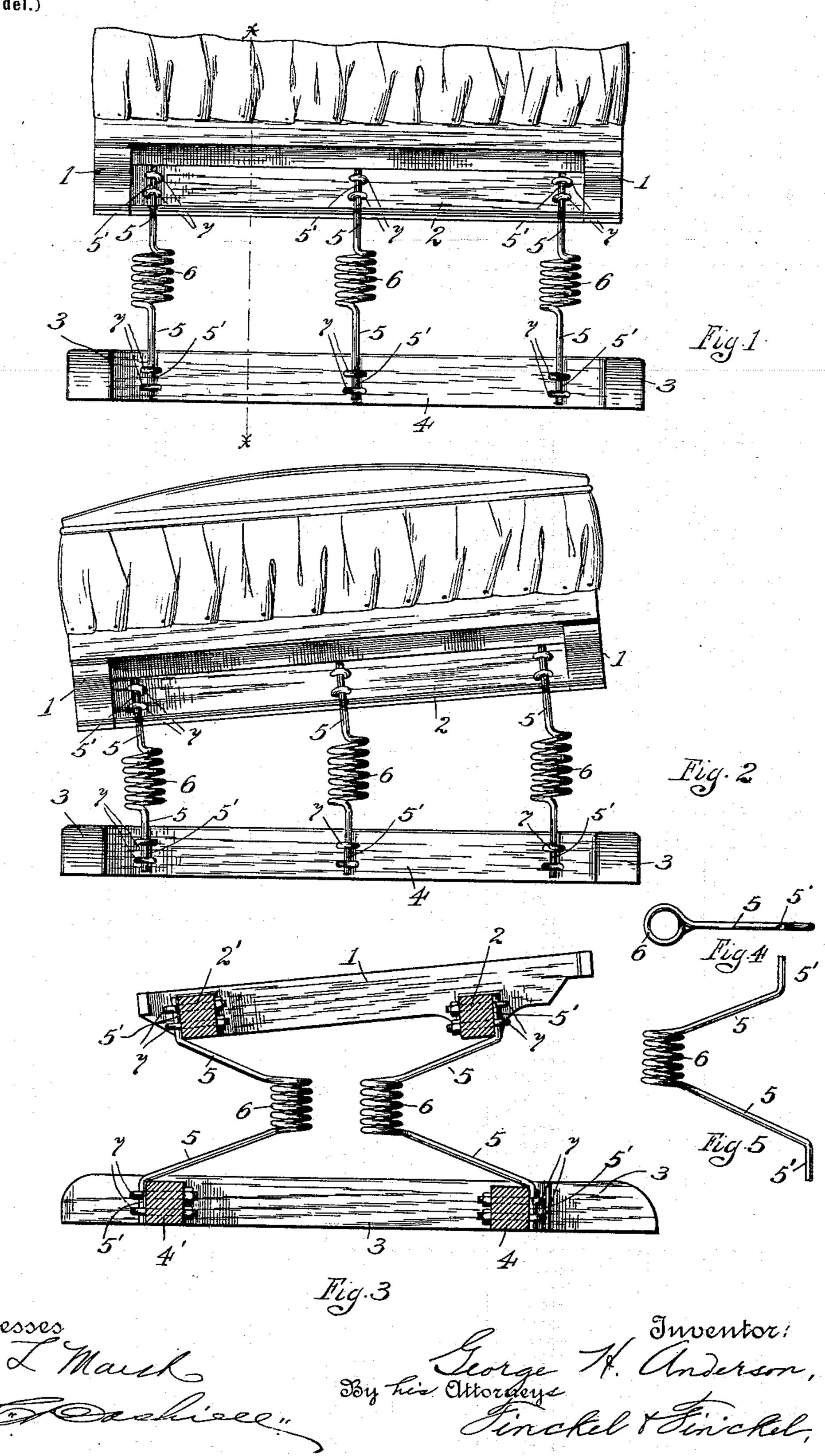
G. H. ANDERSON. ROCKING CHAIR SPRING.

(Application filed May 10, 1898.)

(No Model.)



United States Patent Office.

GEORGE H. ANDERSON, OF COLUMBUS, OHIO, ASSIGNOR TO THE HULSE-ANDERSON COMPANY, OF SAME PLACE.

ROCKING-CHAIR SPRING.

SPECIFICATION forming part of Letters Patent No. 612,224, dated October 11, 1898.

Application filed May 10, 1898. Serial No. 680,279. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. ANDERSON, a citizen of the Dominion of Canada, residing at Columbus, in the county of Franklin and 5 State of Ohio, have invented certain new and useful Improvements in Rocking-Chair Springs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of my invention is to make an improved rocking-chair of the kind shown in the patent granted to Edwin M. Hulse November 2, 1897, numbered 593,068, and assigned to the company of which I am a member; and my invention consists in an improved form of spring employed in such chair.

It has been found by experience that the form of spring shown in the patent referred to will occasionally break, and more especially at the sharp bend or apex in the spring, when the chair is rocked sidewise, and this is due, no doubt, to the rigidity or stiffness of the metal at that point, as well as to inherent defects in the metal occasioned in bending the same to form the spring.

In the accompanying drawings I have illustrated my improved spring, in which—

Figure 1 is a front view in elevation of the lower portion of a chair having my rocking springs, the back and arms and a portion of the seat being omitted. Fig. 2 is a similar view illustrating the position of the seat and the effects on the springs when the chair is rocked sidewise. Fig. 3 is a vertical sectional view of the seat-frame and base, taken on a plane indicated by the line x x, Fig. 1; and Figs. 4 and 5 are top and side views, respectively, of the spring alone.

1 designates the seat-frame, which has front and rear cross-pieces 2 and 2', substantially

as in the patent referred to.

3 designates the base, which has horizontal front and rear cross pieces or bars 4 and 4', substantially as in the patent hereinbefore referred to.

The spring in the present instance is preferably made of a steel wire or rod bent in a. 50 general way to the form of a V, the supporting-arms 5 having at their outer ends short

portions 5', bent outward at the proper angle to fit and be secured against vertical faces of cross-bars 2 2' and 4 and 4', and at the apex of the spring one or more coils 6, standing, 55 preferably, in a plane or planes substantially at right angles to a plane passing through the

supporting-arms.

The springs herein described are arranged and attached in substantially the same way 60 as those shown in the patent of Hulse, referred to; but instead of an ordinary headed bolt I shall use a bolt having a hook 7 to grip the ends of the spring when placed against the cross-pieces, the threaded portion of said 65 bolt being passed through the cross-piece and secured with a nut, as clearly indicated in the drawings.

It will be observed that with my spring all stiffness or rigidity at the apex of the spring 70 is avoided and liability of its breakage done away with, and at the same time greater flexibility and ease of motion given to seat in rock-

ing.

What I claim, and desire to secure by Let- 75

ters Patent, is—

1. A spring for rocking-chairs and the like consisting of a wire or rod bent to form supporting-arms 5 standing with respect to each other like the arms of a V, and a coil 6 at the 80 junction of said arms, the loop or rings of which coil lie in planes substantially at right angles to the plane passing through the supporting-arms, substantially as described.

2. A chair having a seat-frame and a base, 85 and springs secured to said seat-frame and base each of which consists of a wire or rod bent to form supporting-arms 5 standing with respect to each other like the arms of a V, and a coil 6 at the junction of said arms, the 90 loop or rings of which lie in planes substantially at right angles to the plane passing through the supporting-arms, whereby the seat may be rocked freely in all directions, substantially as described.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

GEO. H. ANDERSON.

Witnesses:
GEORGE W. ALFRED,
GEORGE M. FINCKEL.