

No. 711,161.

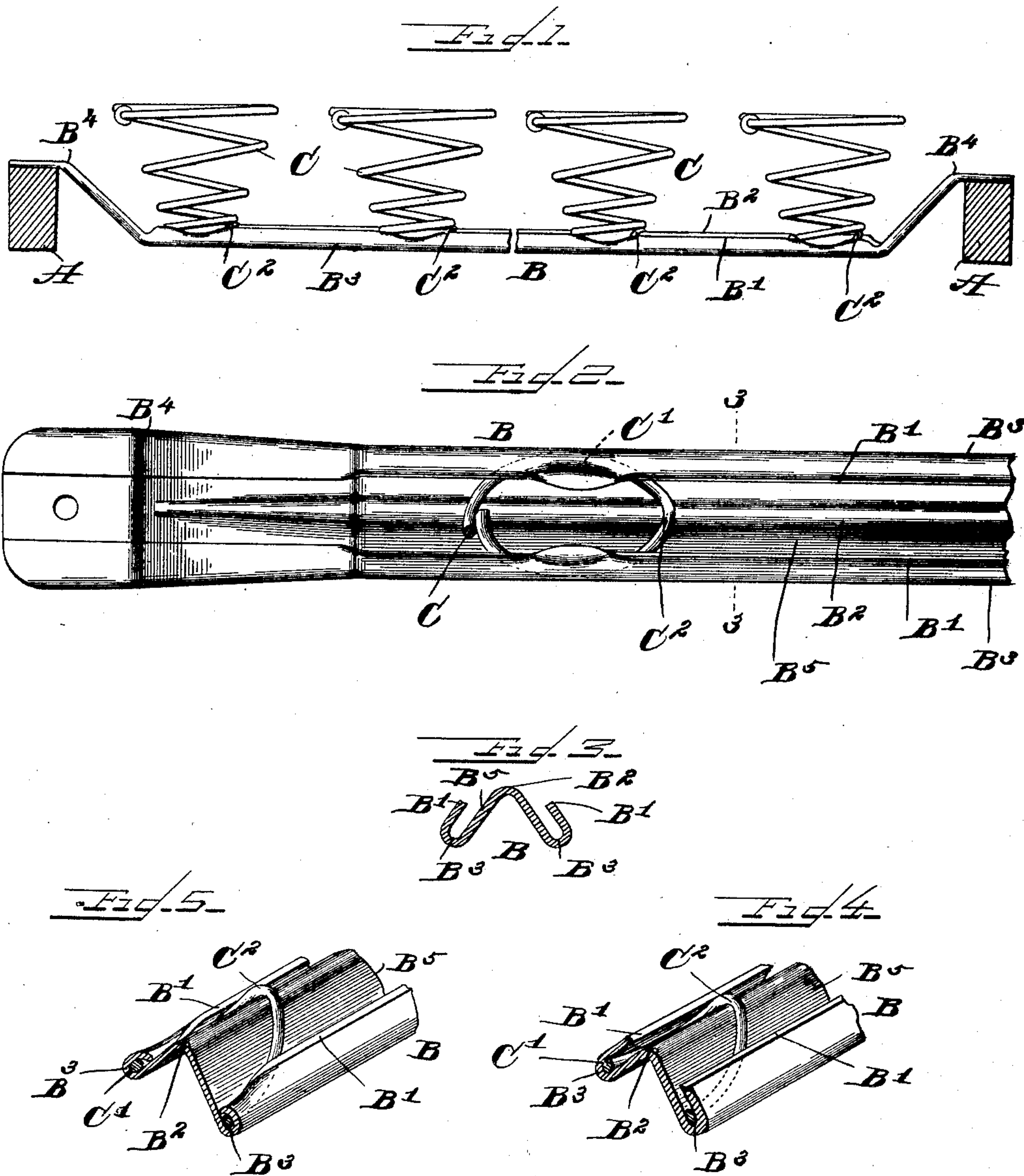
Patented Oct. 14, 1902.

E. A. HOEFER.

SPRING SEAT.

(Application filed July 18, 1902.)

(No Model.)



Witnesses—

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UNITED STATES PATENT OFFICE.

EMIL A. HOEFER, OF FREEPORT, ILLINOIS, ASSIGNOR TO HIMSELF, F. W. HOEFER, AND A. G. HOEFER, OF FREEPORT, ILLINOIS.

SPRING-SEAT.

SPECIFICATION forming part of Letters Patent No. 711,161, dated October 14, 1902.

Application filed July 18, 1902. Serial No. 116,122. (No model.)

To all whom it may concern:

Be it known that I, EMIL A. HOEFER, a citizen of the United States of America, residing at Freeport, in the county of Stephenson and State of Illinois, have invented certain new and useful Improvements in Spring-Seats, of which the following is a specification.

My invention relates to spring-seats wherein spiral springs are seated in and supported by metallic cross-pieces which are secured to rectangular frames formed, preferably, of wood. Its object is to provide cross-pieces which furnish a maximum of resistance to a bending strain with a minimum amount of metal and which affords seats into which springs may be readily placed and secured and which are simple in construction and comparatively inexpensive to manufacture.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 is a view of a seat-frame in section with a cross-piece attached thereto and a set of springs inserted and secured thereinto. Fig. 2 is a top plan view of one end of a cross-piece, full size. Fig. 3 is a section at the dotted line 3 3 in Fig. 2 of a part there shown. Fig. 4 is a sectional detail of a cross-piece and a spring inserted therein. Fig. 5 is a like view of the same with the edges of the cross-piece bent down over the lower terminal coil of the spring, against the body thereof.

Like letters of reference indicate corresponding parts throughout the several views.

A is a seat-frame, usually of wood and rectangular in form.

B is a metallic cross-piece of angular form in cross-section and having its edges B' turned upward toward its apex B^2 to form with the body thereof trough-like stirrups B^3 and also having its ends flattened and extended upward and outward to form hangers B^4 thereon whereby to secure it to its seat-frame A.

C is a spiral spring having its lower terminal coil C' bent upward at its middle C^2 , so as to substantially coincide with the outer angular surface B^5 of the cross-piece B, and inserted into and secured in said trough-like stirrups B^3 by bending the edges B' of the cross-piece B down over the lower terminal coil C' of the spring C, against the body of

such cross-piece, and seated astride of the apex B^2 of the cross-piece B.

Cross-pieces for spring-seats fashioned as described above offer great resistance to any bending strain and at the same time afford seats into which springs may be readily inserted and secured without weakening the same by perforating them to admit the lower end portions of their springs therethrough, as is usually done in spring-seats.

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

1. As a new article of manufacture, a metallic cross-piece, of angular form—in cross-section—and having its edges turned upward, toward its apex, to form—with the body thereof—trough-like stirrups, and spiral springs, having each of their lower terminal coils inserted into and secured in such trough-like stirrups and seated astride of the apex of the cross-piece, substantially as shown and described.

2. As a new article of manufacture, a metallic cross-piece, of angular form—in cross-section—and having its edges turned upward, toward its apex, to form—with the body thereof—continuous trough-like stirrups, and spiral springs having the lower terminal coil of each of them bent upward, at its middle, so as to substantially coincide with the outer angular surface of the cross-piece, and inserted into and secured in such trough-like stirrups, and seated astride of the apex of said cross-piece, substantially as shown and described.

3. As a new article of manufacture, a metallic cross-piece of angular form—in cross-section—having its edges turned upward, toward its apex, to form—with the body thereof—trough-like stirrups, and also having its ends flattened and extended upward and outward to form hangers thereon, and spiral springs having the lower terminal coil of each of them bent upward at its middle, so as to substantially coincide with the outer angular surface of the cross-piece, and inserted into and secured in said trough-like stirrups, and seated astride of the apex of the cross-piece, substantially as shown and described.

4. In a spring-seat, in combination, a seat-frame, metallic cross-pieces, of angular form—

in cross-section—and having their edges
turned upward, toward their apices, to form—
with the bodies thereof—trough-like stirrups,
and spiral springs, having each of their lower
5 terminal coils inserted into and secured in
such trough-like stirrups and seated astride
of the apices of the cross-pieces, substantially
as shown and described.

In testimony whereof I have signed my
name to this specification in the presence of 10
two subscribing witnesses.

EMIL A. HOEFER.

Witnesses:

FREDERICK W. HOEFER,
CORA E. HOEFER.