(No Model.)

J. COOPER.

CHAIR BRACE.

No. 572,409. Patented Dec. 1, 1896.

FIG. 1.

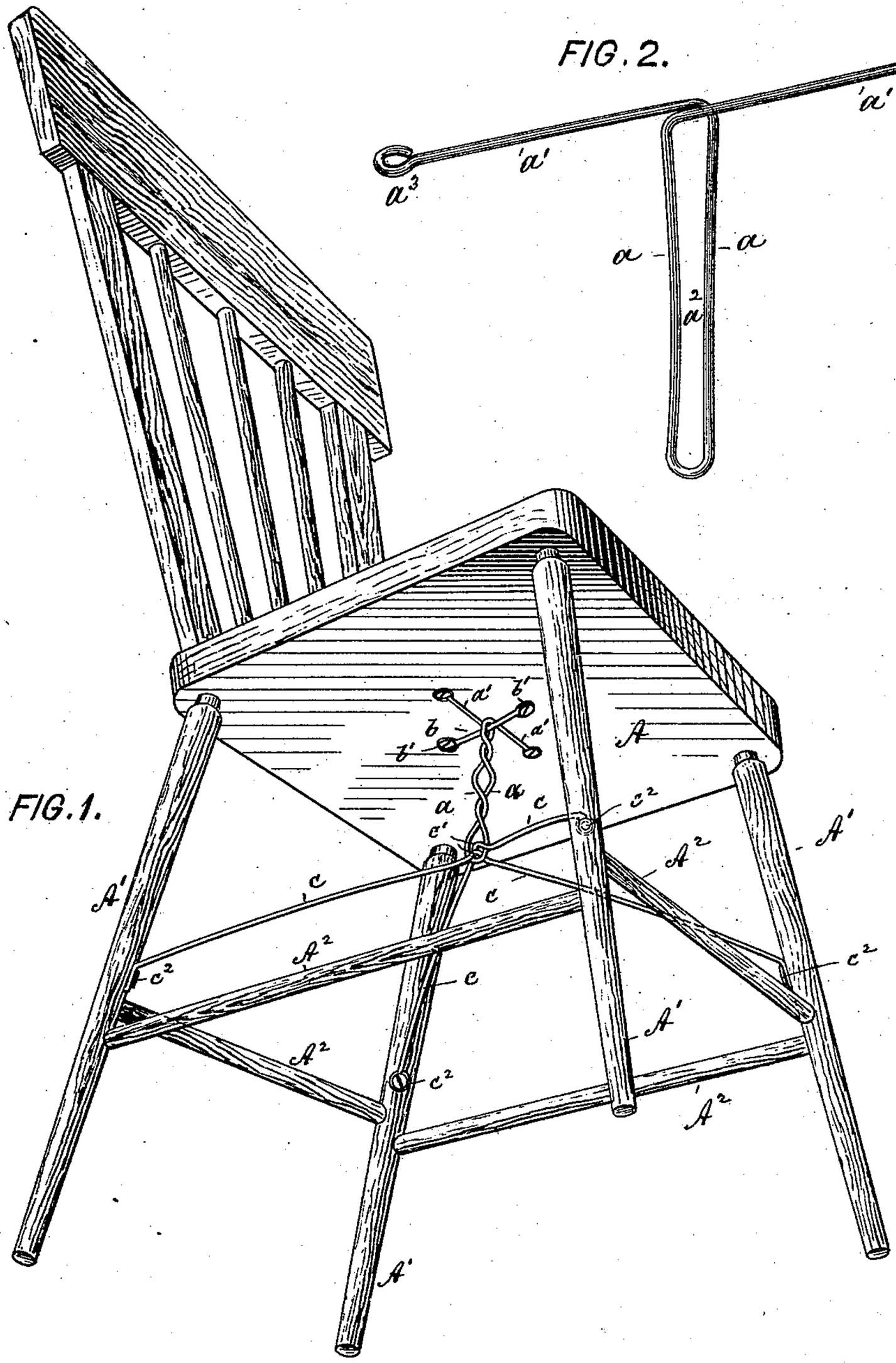

FIG. 2.

Witnesses:
John Becker.
William Schulz.

Inventor:
James Cooper
by his attorneys
Roeder & Briesen

UNITED STATES PATENT OFFICE.

JAMES COOPER, OF NEW YORK, N. Y.

CHAIR-BRACE.

SPECIFICATION forming part of Letters Patent No. 572,409, dated December 1, 1896.

Application filed May 16, 1896. Serial No. 591,778. (No model.)

To all whom it may concern:

Be it known that I, JAMES COOPER, of New York city, New York, have invented an Improved Chair-Brace, of which the following is a specification.

This invention relates to a brace more particularly designed to be attached to chairs already in use, though it may also be attached to new chairs. By means of this brace the chair-legs are drawn tightly against the rounds and are firmly secured to the chair-bottom, so that an intimate union of all the parts is effected and great rigidity of the structure obtained.

In the accompanying drawings, Figure 1 is a perspective view of a chair provided with my improved brace, and Fig. 2 is a detail of the staple before being twisted.

My improved brace consists, essentially, of four parts, a staple a, a cross-bar b, and a pair of stay-rods c c. The staple a when attached to the chair has the form shown in Fig. 2. Its shanks a' are bent inward, so as to cross each other and form an elongated eye a^2, which is closed at both ends. At its free end each shank terminates in a screw-eye a^3.

The cross-bar b is preferably made of extra heavy wire, and also has a screw-eye b' at each of its ends. The stay-rods c are bent centrally to form an obtuse angle and are at their apex provided preferably with a small bulge c'. At their free ends each of the rods c terminates in the screw-eye c^2.

In use the staple a is first screwed to the lower side of the chair seat or frame A, so that it depends centrally therefrom. The cross-bar b is then slipped through the upper end of the loop and is also screwed to the seat A. Next the stay-rods c are slipped through the lower end of the loop, so as to become seated at their bulge c', and the ends of each rod are screwed to diagonally-opposite chair-legs A'. The parts being thus all connected the looped or depending portion of the staple is twisted upon itself, Fig. 1, by means of a small hand-lever or other tool. By this twisting operation the length of the eye a^2 is reduced and the rods c are drawn up at the center, so that they become taut and draw the legs A' against the rounds A^2 and also against the seat A. During the twisting operation the cross-bar b serves as a stop that prevents the bent staple-shanks from straightening out.

My improved brace can be attached to a chair in a very few minutes, and when so attached will have converted an old and loosely-jointed chair into one of great strength and rigidity, which will withstand even a greater amount of rough handling than a chair which is entirely new.

What I claim is—

1. A chair-brace composed of a staple having inwardly-bent shanks to form a closed loop, a cross-bar engaged thereby, and a pair of stay-rods adapted to extend through the loop and to be secured to the chair-legs, substantially as specified.

2. The combination of a chair, with a staple secured to the chair-seat, and having bent shanks and a twisted body, a cross-bar extending through the staple, and a pair of bent stay-rods that engage the staple and are secured to the chair-legs, substantially as specified.

JAMES COOPER.

Witnesses:
F. v. BRIESEN,
WILLIAM SCHULZ.