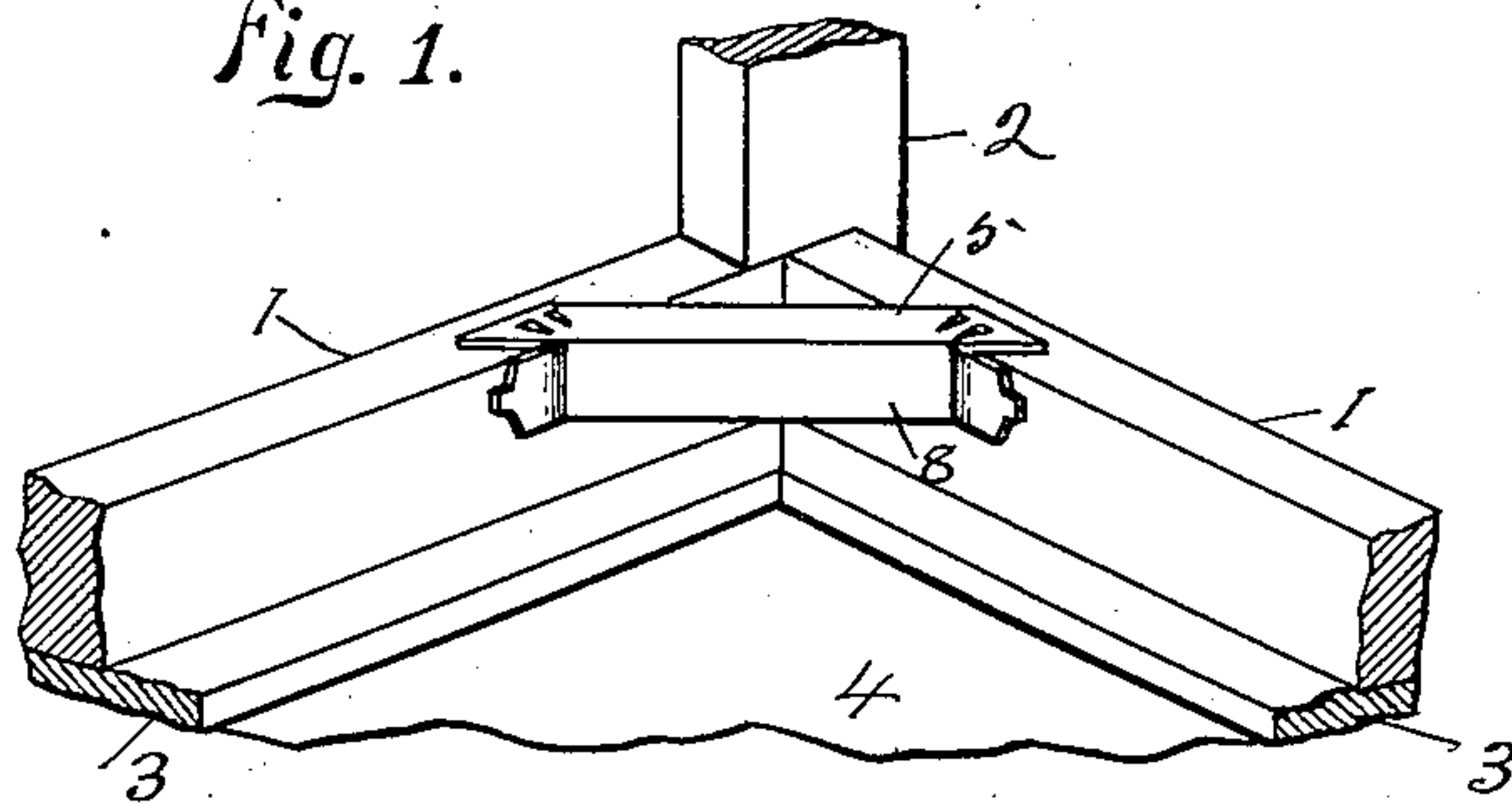


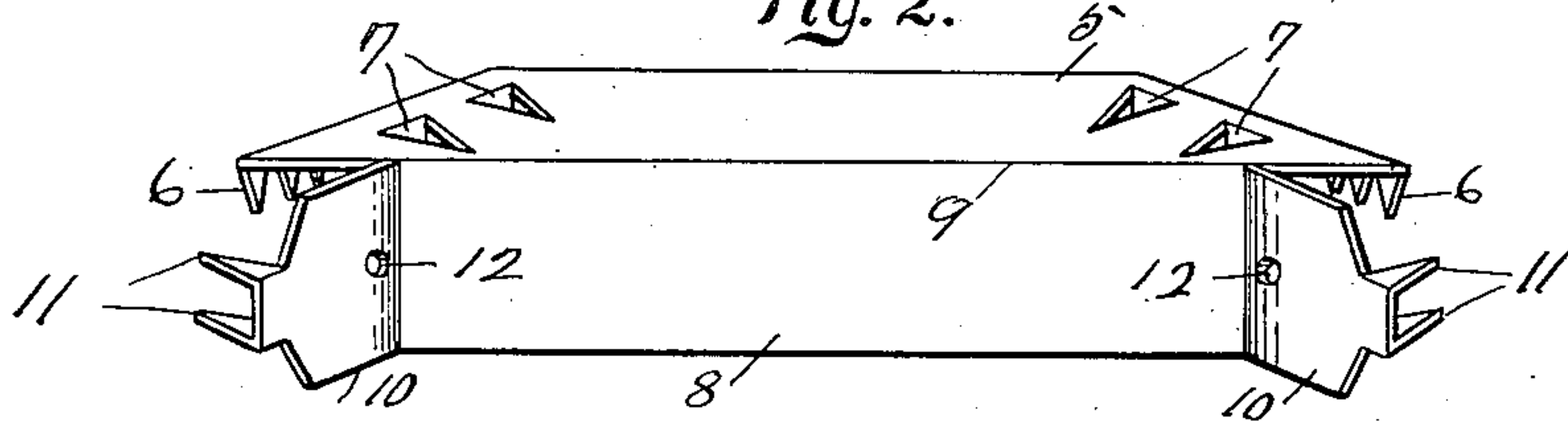
No. 855,777.

PATENTED JUNE 4, 1907.

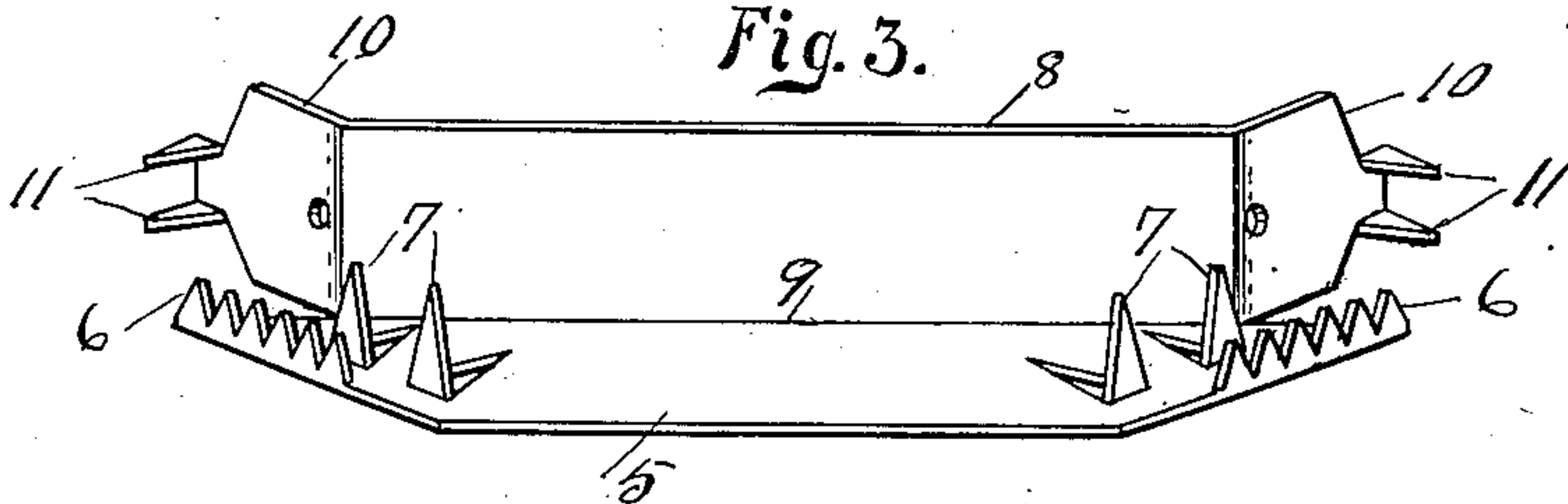
W. P. HEBERGER.  
CORNER BRACE FOR CHAIR SEAT FRAMES.  
APPLICATION FILED NOV. 7, 1906.



*Fig. 2.*



*Fig. 3.*



**WITNESSES:**

S. Milton McFerran  
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William P. Heberger INVENTOR

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*His* ATTORNEYS,



# UNITED STATES PATENT OFFICE.

WILLIAM P. HEBERGER, OF CINCINNATI, OHIO.

## CORNER-BRACE FOR CHAIR-SEAT FRAMES.

No. 855,777.

Specification of Letters Patent.

Patented June 4, 1907.

Application filed November 7, 1906. Serial No. 342,358.

*To all whom it may concern:*

Be it known that I, WILLIAM P. HEBERGER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton, in the State of Ohio, have invented certain new and useful Improvements in Corner-Braces for Chair-Seat Frames; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in corner braces for chair seat frames.

It is well known that in that class of chairs having "box-seats," or seats formed of four seat rails in right-angular relation it is necessary to brace the corners of the seat-frame to secure the necessary strength, rigidity, and durability; that the wooden blocks now universally used for that purpose are secured in position either by glue, nails, or by mitering, and are subject to shrinkage when not thoroughly seasoned, thereby destroying the adhesive power of the glue and loosening the nails, and thus neutralizing their efficiency as a brace; and that even when seasoned wooden blocks swell and shrink by exposure to dampness and long continued dry heat, thereby loosening them and materially counteracting their function and utility as an aid to the strength and rigidity of the chair seat.

The primary purpose, therefore, of my present invention is to provide an improved corner brace for chair seat frames of simple and economical construction requiring neither glue, nails nor mitering, not subject to shrinkage or derangement by variations in atmospheric conditions; so constructed as to secure a material saving of time and labor by the use of the same, and adapted to secure increased strength, rigidity, and durability in the chair seat frame, and to appreciably contribute to the salability of the chairs upon which it is employed.

My invention consists of stamped sheet-metal corner brace bent into angle-iron form with its ends split on the line of fold, and provided upon their inner faces with integral prongs adapted to engage and rigidly brace both laterally and vertically the adjacent right angular sides of the chair-seat frame at its corners.

In the accompanying drawings similar ref-

erence numerals indicate like parts throughout the several views in which

Figure 1 is a fragmentary perspective view of one corner of an inverted chair seat frame having my invention mounted in position thereon, showing the relative arrangement of its coacting parts. Fig. 2 is an enlarged perspective detail of my invention in the position shown in Fig. 1, showing the relative arrangement of the cooperating split ends and the holding prongs thereon. Fig. 3 is a perspective of the same in an inverted position to more clearly show the integral barbs or prongs.

In Fig. 1 is shown the lower face of a pair of meeting seat rails 1 which are arranged in right-angular relation and secured in any proper manner to the chair leg 2. These rails form two adjacent sides of the rectangular chair-seat frame of common form having the surmounted pieces 3 rigidly secured to the upper face of the respective seat rails 1 in any proper manner. To the upper face of these pieces 3 is secured the chair seat 4 of leather, cane, or any other suitable or desired material.

In diagonal relation to the four corners of the chair seat frame, my improved brace arranged as shown in Fig. 1, is formed of one piece of sheet metal, preferably by stamping and has two coacting sides in right angular relation. The horizontal side 5 of the brace has the end thereof formed into an acute angle to correspond with the converging sides of the seat-frame to which they are secured, and has the edges of these ends turned at right-angles thereto and provided upon their inner face with a series of terminal teeth, barbs or prongs 6 of any desired form or dimensions. The side 5 also has one or more integral barbs or prongs 7, preferably two in number, stamped or cut therefrom near its ends and bent into right-angles therewith to cooperate with the teeth 6 in the manner hereafter described. These prongs or barbs 7, triangular in contour, are preferably, but not necessarily of somewhat greater length than the teeth 6, as shown in Fig. 3.

The adjacent vertical and integral side 8 of the brace has its ends severed from the plate 5 on the line of the fold 9 and bent into an acute angle therewith to conform to the relative position of the vertical sides of the rail 1 to which these bent ends 10 are adapted to be secured. The free end of these bent por-



tions 10 is provided upon its inner face with a pair of opposite integral terminal prongs or barbs 11 adapted to holdingly engage the said vertical side of the adjacent seat rail in use.

The manner of employing my improved brace thus described is obvious and briefly stated is as follows: At any proper stage of the manufacture of a chair of the class specified, and after the seat frame has been completed, the operator inverts the chair, places one of my improved angle-iron braces across each corner of the seat frame, as shown in Fig. 1, and by pressure or other proper manner forces the brace home to its diagonal position, with the teeth 6 and 7 of the side 5 inserted into the lower edge of the seat rail 1 and the teeth 11 of the ends 10 of the side 8 embedded in the adjacent vertical sides of the said rails, whereby the four seat rails are rigidly braced both laterally and vertically at each corner of the seat frame.

If it is desired the ends 10 can be further secured in position by inserting a small nail in each of the apertures 12 therein, though it has been found by tests and experience that their use is unnecessary.

It is obvious that by the use of my inven-

tion an economy of labor and time, and a materially increased rigidity and durability of the seat frame is secured; the necessity of employing glue, nails, screws or mitering is entirely obviated; and the deranging and destructive influence of shrinkage incident to the use of wooden corner braces is eliminated.

Having thus described my invention and the manner of employing the same, what I desire to secure by Letters Patent is:

In a chair seat, a corner brace made of sheet metal bent into angle form, and having its opposite ends slit on the line of the fold, one side of the angle being horizontally disposed and having its ends attached to the horizontal portions of the seat rails, the other side of the angle being vertically disposed and having its ends bent out at an angle thereto and secured to the inside vertical sides of the seat rails.

Signed by me at Cincinnati, in the county of Hamilton, and State of Ohio, this 3d day of November, A. D. 1906.

WILLIAM P. HEBERGER.

Witnesses:

JOHN E. FITZPATRICK,  
MARY LOUISE CARROLL.