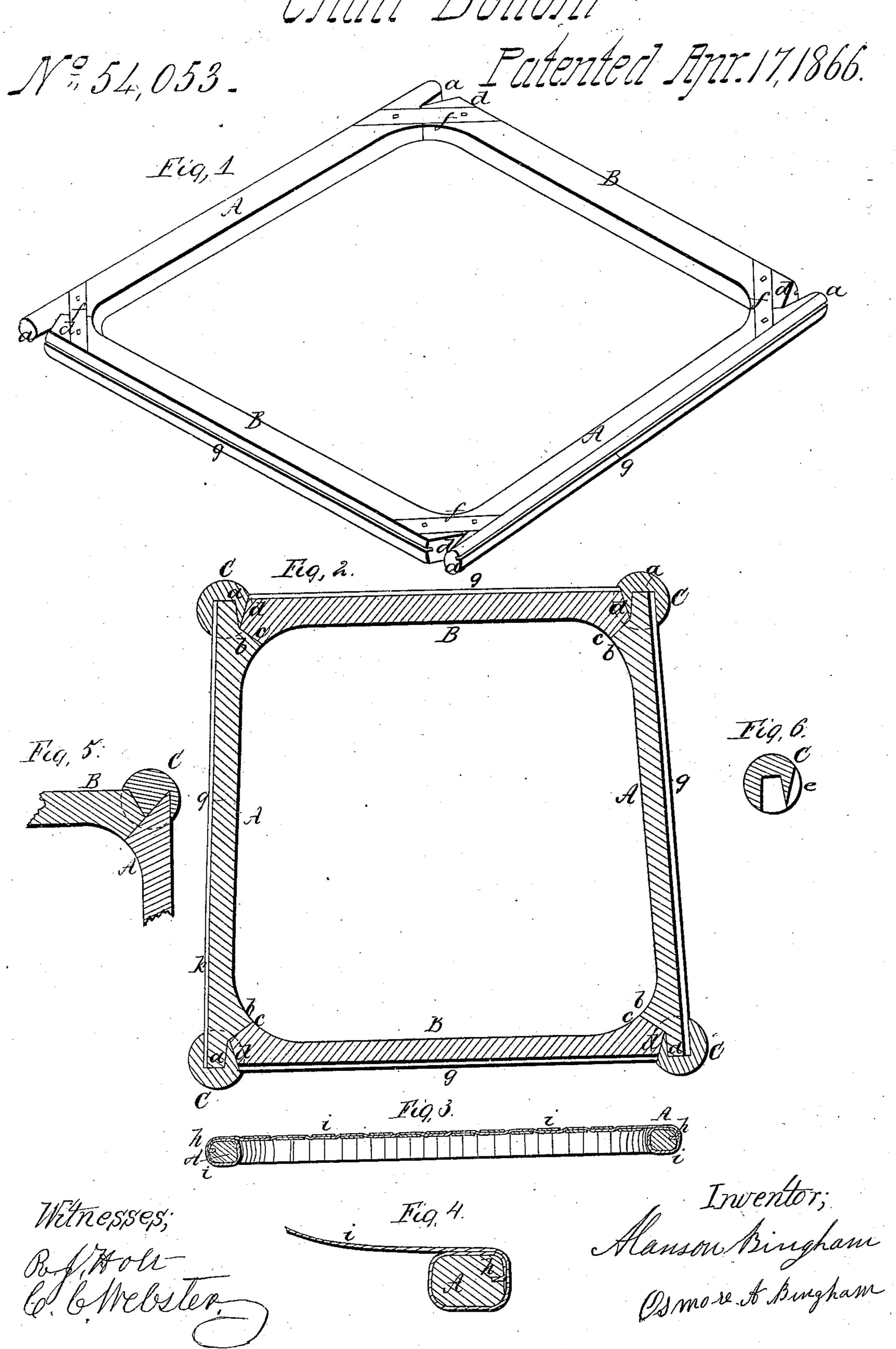
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## United States Patent Office.

ALANSON BINGHAM, OF KEENE, NEW HAMPSHIRE, AND OSMORE A. BING-HAM, OF GARDNER, ASSIGNORS TO THEMSELVES AND DANIEL W. WILL-LOUGHBY, OF FITCHBURG, MASSACHUSETTS.

## IMPROVEMENT IN THE CONSTRUCTION OF CHAIRS.

Specification forming part of Letters Patent No. 54,053, dated April 17, 1866.

To all whom it may concern:

Be it known that we, Alanson Bingham, of Keene, in the county of Cheshire and State of New Hampshire, and Osmore A. Bingham, of Gardner, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Chairs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view of our improved frame of the seat of a chair. Fig. 2 is a horizontal section through our improved frame and the upper portions of the posts of a chair to which the frame is secured. Fig. 3 is a cross-section through the frame with our improved seat secured thereto. Fig. 4 is an enlarged section representing the manner of attaching the seat to its frame; Figs. 5 and 6,

details to be referred to. The frames of the seats of oak, ash, or flagbottom chairs have heretofore been formed of circular sticks or rounds, which were fitted into holes made in the upright portions or posts of the chairs, and after being thus secured the frame was inclosed on all sides by a double thickness of material which was to form the seat, the material being cut into strips and woven or braided around and across the top and bottom of the frame from side to side. When so constructed such chairs could not be readily taken to pieces or knocked down, and consequently, when they were required to be transported, the expanse of freight considerably increased the cost of the chair.

The object of our invention is so to construct the frame of the seat that it may readily be detached from the posts of the chair; and our invention consists in forming a notch in each corner of the frame, so as to leave a projection, each post being provided with one or more gains or mortises to receive the corner so formed; and our invention furthermore consists in an improved construction of the seat of the chair, to be hereinafter described.

To enable others skilled in the art to understand and use our invention, we will proceed to describe the manner in which we have carried it out.

In Figs. 1 and 2 of the said drawings is represented the frame of the seat, composed of two longitudinal pieces, A, and two transverse pieces, B. The ends a of the pieces A are rounded off, as shown, and fit into holes formed in the posts C of the chair. Each piece A is enlarged and provided with a shoulder, b, at each end, against which is snugly fitted the beveled end c, formed on an enlarged portion at each extremity of the transverse pieces B, which are beveled at d, so as to fit into gains or mortises c, Fig. 6, formed in the inside of the upper portion of each rout C.

the upper portion of each post C.

The piece B forming the back of the frame is somewhat shorter than the piece B which forms the front of the frame, and the four pieces A and B are securely tied or strapped together by cross-pieces f, Fig. 1. Extending longitudinally along the center of the outside of the pieces A B are formed grooves g, into which are laid the ends of the material forming the seat of the chair, the method of weaving which will now be described. The end h of a strip, i, of ash or other suitable material is entered within the groove g of the longitudinal piece A at a short distance (as at k, Fig. 2) from the front piece B of the frame. The strip i is then brought over the top, underneath, and again over the top of the piece A, and across to the outside of the opposite longitudinal piece A, and over the top and underneath this piece, after which it is cut off of a sufficient length to reach into the groove g, the end cut off being guided underneath the upper portion of the strip i into the groove g, where it is locked securely in place by pushing the strip i by hand up to the front transverse piece B. The remainder of the strips i are put on and pressed up to each other in like manner, the operation of sliding them along the inclined pieces A of the frame drawing them tightly as required. The strips composing the filling are now entered within the groove g of one of the transverse pieces B, and these strips are run alternately over and under every two contiguous strips composing the warp.

The seat may, if preferred, be composed of flag, laid on as above described.

Instead of the ends a of the longitudinal

pieces A being formed as shown in Figs. 1 and 2, they may be beveled, so as to form notches of the shape represented in Fig. 5, in which case the posts C must be provided with suitable gains or mortises to receive them.

By means of the improvements herein described the frame may be set up and the seat be woven thereon before the frame is secured to the posts of the chair, and in this condition the several pieces forming the chair may be compactly stowed for transportation, which, together with the fact of the saving of the material forming the seat and the time and labor required in placing it upon the frame by weaving it of but a single thickness, enables us to furnish the chair at a considerably less cost than has heretofore been found practicable.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The frame of the seat of a chair composed of pieces A B, the ends of which are united and formed substantially as described, in combination with the posts C, each of which is provided with one or more gains or mortises, substantially as and for the purpose set forth.

2. The seat of a chair composed of the frame A B, covered with a single thickness of flag or strips of oak or ash, substantially as and for

the purpose described.

ALANSON BINGHAM. OSMORE A. BINGHAM.

Witnesses:

R. J. Holt, C. C. Webster.