

A. P. JOHNSON.

MACHINES FOR SHAPING WOODEN CHAIR SEATS.

No. 178,157.

Patented May 30, 1876.

Fig: 1.

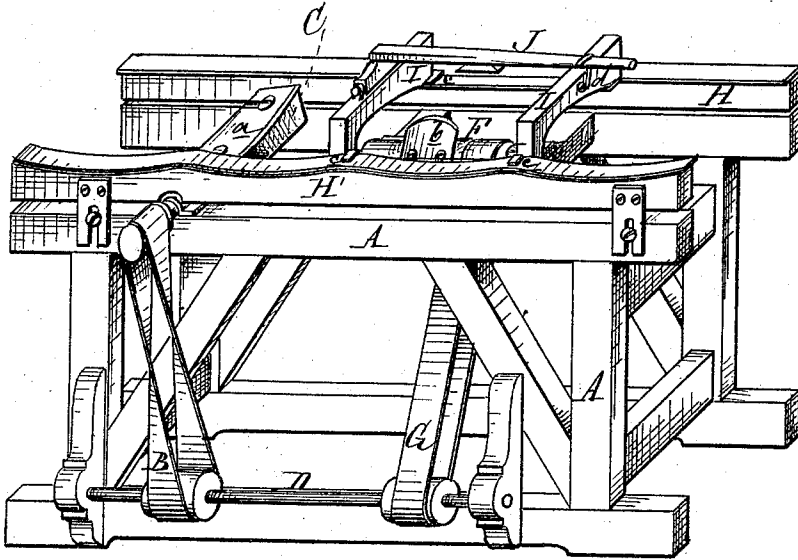
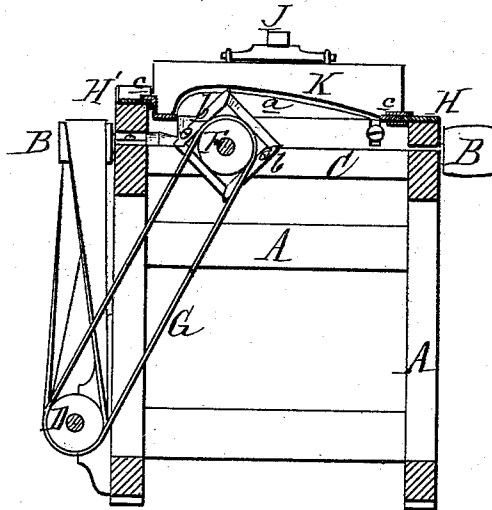


Fig: 2.



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ANDREW P. JOHNSON, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN MACHINES FOR SHAPING WOODEN CHAIR-SEATS.

Specification forming part of Letters Patent No. **178,157**, dated May 30, 1876; application filed October 25, 1875.

To all whom it may concern:

Be it known that I, ANDREW P. JOHNSON, of Chicago, in the county of Cook and State of Illinois, have invented an Improvement in Machines for Shaping Wooden Chair-Seats, of which the following is a specification:

The nature of my invention relates to an improvement in machines for shaping wooden chair-seats; and consists, mainly, in two cutter-heads journaled horizontally in a frame, but at right angles with each other, and in a carriage in which the seat-blank is clamped, which carriage moves in ways at the sides of the frame, one way being straight and the other one curved, so as to present the face of the seat to the knives at the proper time to have them remove the material where needed to give the seat its proper shape.

Figure 1 is a perspective view of the machine. Fig. 2 is a cross-section at *x x*.

In the drawing; A represents the main frame, across which is journaled an arbor, B, carrying a cutter-head, C, fitted with curved knives *a*, adapted to hollow out the seat of a wooden chair when passed transversely over them.

D is a counter-shaft journaled along one side of the lower part of the frame, and is driven by a quarter-turn belt, from a pulley on the arbor B.

F is a cutter-head, whose arbor is longitudinally journaled in the frame, and driven by a belt, G, from the counter-shaft. It carries a pair of knives, *b*. The purpose of this cutter-head is to deepen the concave and shape the

rim around the depression at the back part of the seat. In certain styles of seats such cutter-head may not be needed, when its driving-belt may be thrown off the pulley.

H is a straight metal-flanged way at one side of the frame. H' is a way of similar construction at the other side of the frame; but its upper surface and flange are curved, as shown. The way H' is adjustable as to elevation with relation to the cutter-heads.

I is an open-frame carriage, having guide-clips *c* at each corner, which embrace and slide on the flanges of the ways H H', the latter of which causes one side to rise and lower as it passes over the cutter-heads, in order to have the latter remove the required amount of material from the face of the blank K, Fig. 2, to shape the seat.

The front and rear edges of the seat-blank rest upon the sides of the carriage, and the former is clamped therein by a wooden lever, J, pivoted to one end of the carriage, and locked down by a hook, *d*, at the other.

What I claim as my invention is—

In a machine for shaping chair-seats, the combination, with the frame A, of the curved adjustable guideway H', the straight guideway H, parallel with the guideway H', the cutter-heads C F, journaled at right angles to each other, and the carriage I, all substantially as described and shown.

ANDREW P. JOHNSON.

Witnesses:

WM. H. LOTZ,

WM. G. HOFFMANN.