

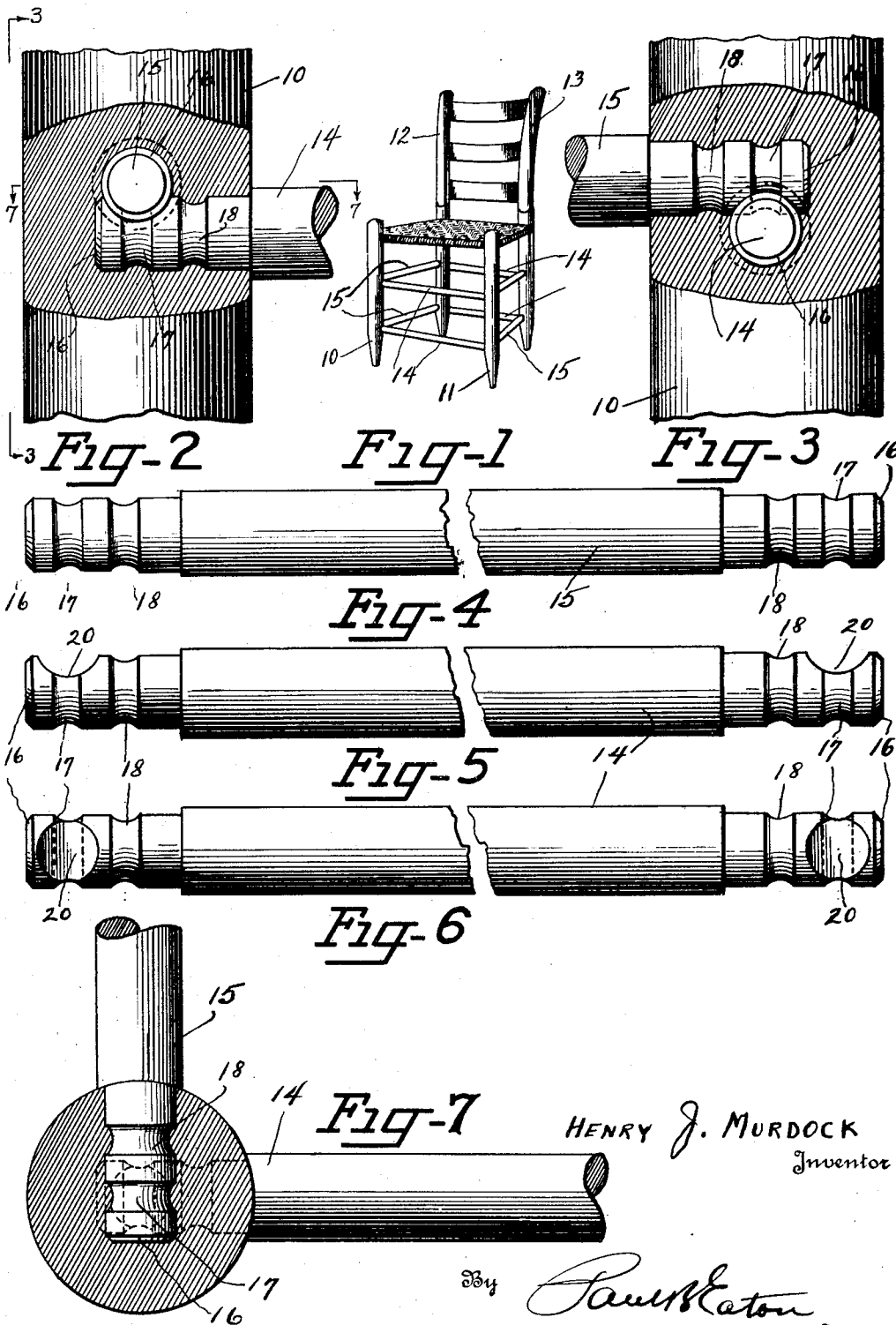
July 7, 1931.

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1,813,072

INTERLOCKING STRETCHER JOINT IN FURNITURE

Filed June 22, 1929



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INTERLOCKING STRETCHER JOINT IN FURNITURE

Application filed June 22, 1929. Serial No. 372,958.

This invention relates to a new and useful improvement in chairs and other articles of furniture, in which means are provided for securing the rounds or stretchers in the chair post without the use of any glue or other adhesive in such a manner that they will remain permanently in position without allowing the chair to become loose at the joints.

An object of my invention is to provide an improved process for forming the joint members of chairs and other wooden articles in such a manner as to make a permanent joint.

Heretofore in manufacturing chairs and other articles of wooden furniture it has been necessary to have the wood of both the leg or post and the rounds in a perfectly dry condition, but in my invention it is better to have the post or legs of the chair in a half-seasoned condition, so that when the rounds are driven into the chair that the post will conform to the rounds and in drying in such position will make a permanent joint.

Another object of my invention is to provide a chair or other articles of furniture in which the rounds and posts are secured together without the use of glue in a permanent manner by means of having the rounds interlocked with each other and to be gripped by the post at the point where the rounds penetrate the post.

Some of the objects of my invention having been stated other objects will appear as the description proceeds when taken in connection with the accompanying drawings, in which—

Figure 1 is a perspective view of a chair with which my method of construction is adapted to be used;

Figure 2 is an enlarged detail view looking from the front of the left hand front chair post in Figure 1;

Figure 3 is a view looking from along the line 3—3 in Figure 2 which is looking from the left hand side of the front chair post;

Figure 4 is a view of one of the rounds which extend between the front posts or between the back posts;

Figure 5 is a view of one of the rounds which extend between one front post and

one back post after the same has been installed;

Figure 6 is a top plan view of Figure 4; Figure 7 is a cross-sectional view taken along the line 7—7 in Figure 2.

Referring more particularly to the drawings the numeral 10 indicates one of the front posts of a chair while the numeral 11 indicates the other front post, and the rear posts are indicated by the reference characters 12 and 13. The rounds extending between the two front posts are indicated by the reference character 14, while the rounds extending between the two back posts are identical to the rounds extending between the two front posts and therefore bear the same reference characters.

The rounds which extend from the front post to the rear post are indicated by the reference character 15, all of these rounds being identical.

In the construction of a chair according to my method I first manufacture the rounds such as 15 which is shown in Figure 4 and turn the ends of the rounds in a peculiar formation by having the ends thereof smaller than the rest of the round with the sloping surface 16 and with the plurality of grooves 17 and 18 cut therein, and then I bore the hole into the two front posts 10 and 11 and drive these rounds into the post, said post being in a half-seasoned condition so that the back pressure of the wood will fill the grooves 17 and 18 as is shown in Figures 2 and 3. After the two front posts have been put together in this manner, I then join the two rear posts 12 and 13 in the same manner and this being done, then the chair is assembled by boring the hole from the rear of the two front posts, and from the front of the two rear posts, said hole in the post penetrating the ends of the rounds 14 and cutting therefrom the arc-shaped cavity 20, and then the side rounds 15 are driven into position, said side rounds also having the grooves 17 and 18 therein into which half-seasoned wood of the post will be forced to form a firm joint, and the rounds 15 penetrating the arc-shaped cavity 20 will cause an interlocking of the front and rear rounds, and this together with the

back pressure of the wood of the chair post filling the cavities 17 and 18 will cause a permanent joint which will not work loose after years of use.

5 It is thus seen that I have provided a chair structure, which structure is adapted to be used in any article of wooden furniture, which provides means for interlocking the portions of the furniture and assembling the
10 same in such a manner that there is a tight fit and an interlocking fit which can not work loose by use.

In the drawings and specification I have set forth a preferred embodiment of my invention, and although specific terms are employed they are used in a generic and descriptive sense, and not for purposes of limitation, the scope of the invention being set forth in the appended claims.

20 I claim:

1. That process of making wood joints which comprises boring a hole in a wooden member, forming a second wooden member with peripheral grooves therein, forcing the
25 second wooden member into the said hole, boring another hole in the first wooden member transversely to the direction of the first hole, and cutting while boring the said hole an arc-shaped cavity out of the edge of the
30 second wooden member and forcing into the said second hole a third wooden member similar in construction to the second wooden member.

2. That process of forming a wood joint
35 in a chair which comprises boring a hole in a chair post, forming radial grooves in a round, forcing the round into the said hole in the post, boring another hole transversely to the first hole and cutting through the edge
40 portion the already inserted round, and forcing a second round into the second hole, said second round being similar to the first round.

3. That process of making wood joints
45 which consist in forming one member with a plurality of radial grooves therein, boring a hole in another member, forcing the first member into the hole in the second member, boring a hole in the second member transversely to the first member in such a way as
50 to cut an arc-shaped cavity in the side of the already inserted member, and then forcing a third member into the said second hole.

4. That process of forming a joint in a
55 chair which comprises boring a hole partially through a chair post, forming grooves in a round, forcing said round in said hole, boring a second hole in said post transversely to the first hole in such a manner as to cut away
60 an arc-shaped cavity in the already inserted round, and forcing a second round into the said second hole.

In testimony whereof I affix my signature.