M. B. LLOYD.

METHOD OF PRODUCING WOVEN REED ARTICLES.

APPLICATION FILED JULY 17, 1917.

1,298,230.

Patented Mar. 25, 1919.

Fig. 1

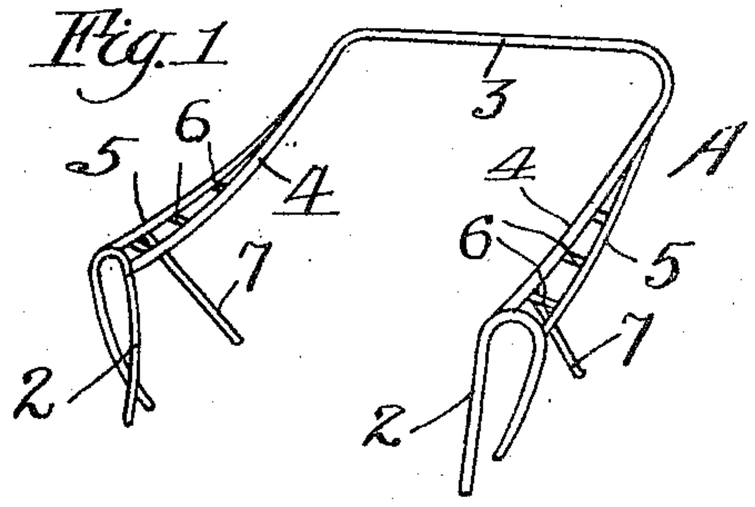

Fig. 3

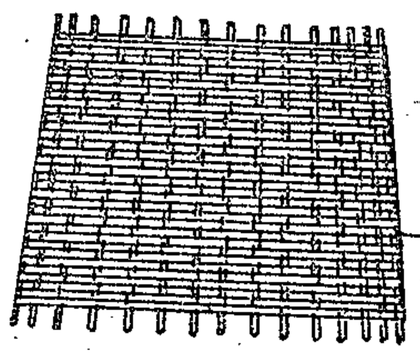

Fig. 2

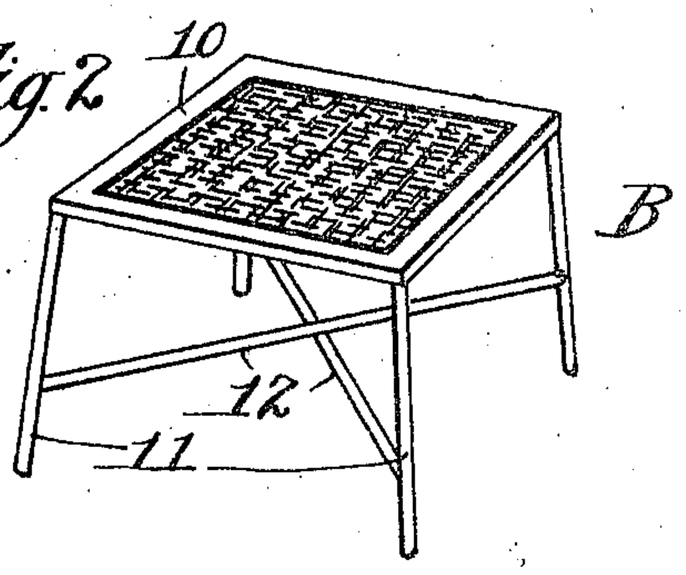

Fig. 4

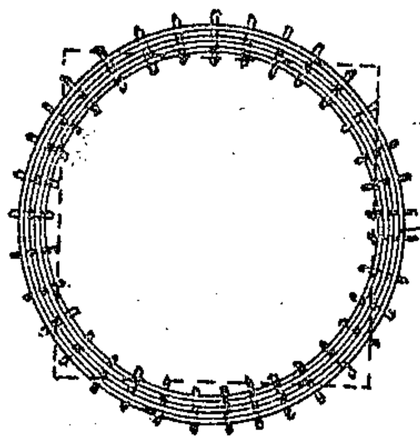

Fig. 5

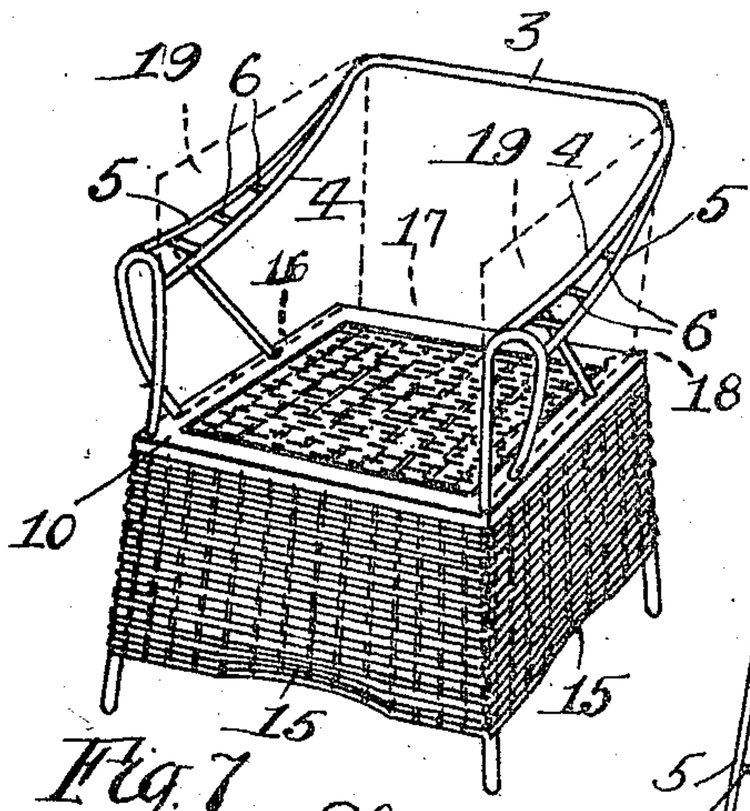

Fig. 7

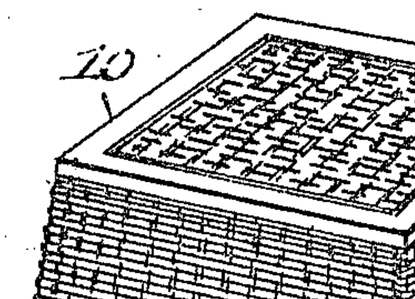

Fig. 6

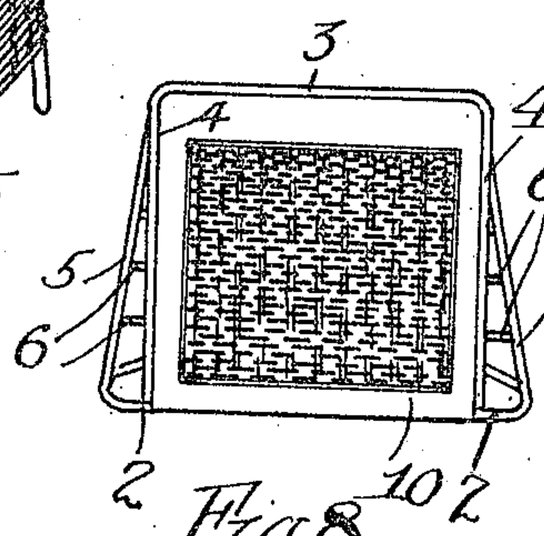

Fig. 8

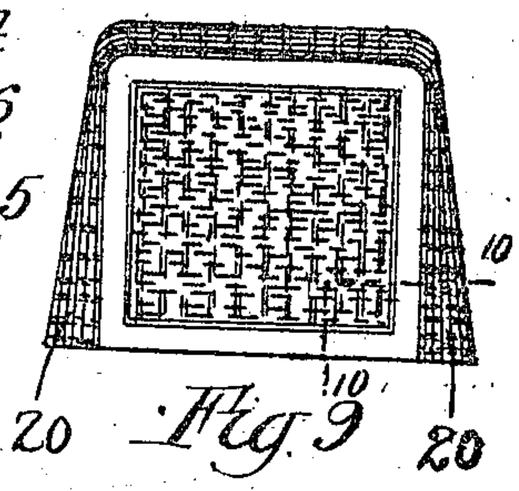

Fig. 9

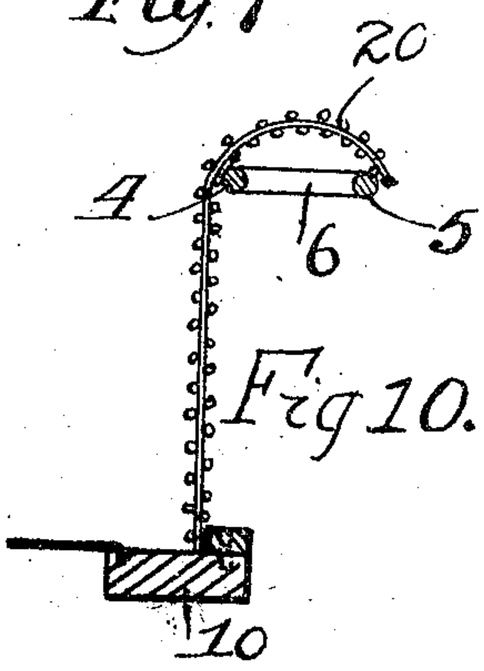

Fig 10.

Inventor
Marshall B Lloyd
by Arthur W. Nelson
Atty.

UNITED STATES PATENT OFFICE.

MARSHALL B. LLOYD, OF MENOMINEE, MICHIGAN.

METHOD OF PRODUCING WOVEN-REED ARTICLES.

1,298,230. Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed July 17, 1917. Serial No. 181,053.

To all whom it may concern:

Be it known that I, MARSHALL B. LLOYD, a citizen of the United States, and a resident of Menominee, Michigan, have invented a certain new, useful, and Improved Method of Producing Woven-Reed Articles, of which the following is a specification.

My invention relates generally to the production of reed articles but relates more particularly to the production of reed articles having a frame, such for example as an article of furniture.

Until recent date, in the production of such articles as have a supporting frame, it has been the universal practice to weave the reed fabric directly upon and thereby secure it to the article frame. Applicant proceeds upon an entirely new principle and weaves the fabric independent of the frame, in a manner convenient for the weaving operation and then secures the woven fabric to the article frame. This novel method is not claimed broadly here since it is the subject of other applications of which applicant's application Serial No. 109,714 is an example and by reference to which a thorough understanding of the method of operating and the advantages to be gained will be better understood. Suffice it here to state that by this method freedom of action is secured which greatly simplifies, cheapens, and often improves reed articles.

The general object of the present invention is to further simplify, cheapen and facilitate the manufacture of certain reed articles under the method before referred to.

Further objects of the invention are to eliminate waste; to provide a method wherewith articles of difficult shape can be produced rapidly even by unskilled workers, and generally to reduce the hitherto highly individualistic weaving of each reed fabric upon each article frame, to a factory method of weaving and assembling in the most convenient or acceptable manner.

My invention consists generally in the the steps, acts and sequence thereof whereby the above named objects, together with others which will appear hereinafter, are attainable and my invention will be more readily understood by reference to the drawings which illustrate steps in the production of an article under the present invention.

In said drawings:

Figure 1 is a perspective view of the upper portion of a chair frame.

Fig. 2 is a perspective view of the lower portion of a chair frame.

Fig. 3 is a side elevation of a reed fabric for use in covering the bottom portion of the chair frame.

Fig. 4 is a top view of the fabric of Fig. 3.

Fig. 5 is a plan view of the reed fabric for use in covering the upper portion of the chair frame.

Fig. 6 is a perspective view illustrating the fabric applied to the lower portion of the chair frame.

Fig. 7 is a perspective view illustrating the chair upper in position.

Fig. 8 is a top plan view of the chair before fabric is applied.

Fig. 9 is a top plan view of the chair after fabric is applied; and

Fig. 10 is an enlarged detail sectional view substantially on the line 10—10 of Fig. 9.

I have chosen for the purpose of illustrating the present invention, the manufacture of an arm chair because it is representative of a class of articles that can be made advantageously under the present invention.

In the said drawings, A represents a chair upper which comprises in this instance, fronts or standards 2, a rear portion 3, having forwardly extending portions 4, members 5, extending between the rear portion 3, and standards 2, cross braces 6, and diagonal braces 7. This structure is typical of an arm chair upper and is cited by way of illustration and not by way of limitation. B. represents the chair bottom which in this instance comprises a seat support 10, legs 11 and cross braces 12 extending between and rigidly bracing the legs. The legs 11, it will be noted extend slightly outwardly of the seat in the usual manner for the purpose of making a more stable structure. I produce the chair frame upper and bottom separately for a purpose shortly to be described. It is desirable in this instance to provide a reed fabric covering around the legs and to this end I provide a tubular reed fabric 13, of proper size, see Figs. 3 and 4. This fabric is preferably produced or woven upon a suitable templet or weaving form in the manner illustrated in the application before

referred to. Of course, it will be understood that the fabric is properly tapered to the end that it will properly encompass the diverging chair legs 11. As the fabric can be most conveniently produced in circular tubular shape, I produce it in this form and then apply pressure thereto causing it to assume the generally rectangular form shown by dotted lines in Fig. 4. In this condition it can be readily placed over the chair bottom starting the large end of the fabric over the seat first moving it downwardly until it has found its proper place firmly and tightly engaging the chair legs. When in this condition it can be readily secured by means of tacks, brads or other suitable fastening devices. The chair bottom so completed is illustrated in Fig. 6. For the sake of appearance and to accommodate the limbs of the user I may turn or fold in portions of the fabric as indicated at 15, Figs. 6 and 7.

After the bottom has been thus completed, I place the upper frame member upon and secure it to the chair bottom as illustrated in Fig. 7. For the purpose of covering the chair upper I provide a U-shaped fabric 14, see Fig. 5. This fabric may be produced in any suitable way but I prefer to produce it in the manner illustrated and described in my co-pending application. The projecting stake ends 15′, may be conveniently laid down before applying the fabric to the frame. The U-shaped fabric is placed within the frame upper as illustrated by dotted lines in Fig. 7 at which time the bottom portions 16, 17 and 18 may be secured to the chair seat support 10. It will be noted in this condition that substantially triangular portions 19, extend above the adjacent frame members, 4 and 5. These portions I roll or form over the members 4 and 5 forming the arm rests 20, (see Figs. 9 and 10). The fabric is secured to the frame members by suitable fastening devices such as tacks, braces or the like. In order to secure the fabric upper more permanently, and also to enhance the appearance, I also prefer to secure a strip 21, to the chair seat support around the outside of the fabric and to which the fabric can be secured. This construction is best shown in Fig. 10.

Proceeding as above outlined, chairs of pleasing appearance and of durable construction, can be produced rapidly, assembled easily by unskilled labor and at low cost. Rocking chairs, settees and many other articles can be produced advantageously by this method.

Inasmuch as this complete disclosure will readily suggest to others modified methods whereby the substantial objects of my invention may be attained, I do not wish to be limited to the precise steps above enumerated nor to the exact sequence thereof, except only as may be necessary by limitations in the hereunto appended claims.

I claim:

1. The herein described method of producing reed articles, which consists in providing two frame members, one thereof being of tapering form, inserting the tapering frame member small end first into a tapering tubular reed fabric, and then securing the other frame member to the small end of the tapering frame member.

2. The method of producing reed-work chairs or the like which consists in providing a frame the upper portion of which comprises a pair of spaced front members or standards, a back portion, and connections between the back portion and standards constituting arms, in providing a U-shaped reed fabric woven in curved form and of greater width, in part at least, than the height of the said frame, mounting the U-shaped fabric within the said frame and folding the higher portions of the fabric over the arm portions of the frame.

In testimony thereof I have hereunto set my hand, this 22nd day of June, 1917, in the presence of two subscribing witnesses.

MARSHALL B. LLOYD.

Witnesses:

EARLE LINDSTRUM,

CECIL J. BELONGY.