M. B. LLOYD.

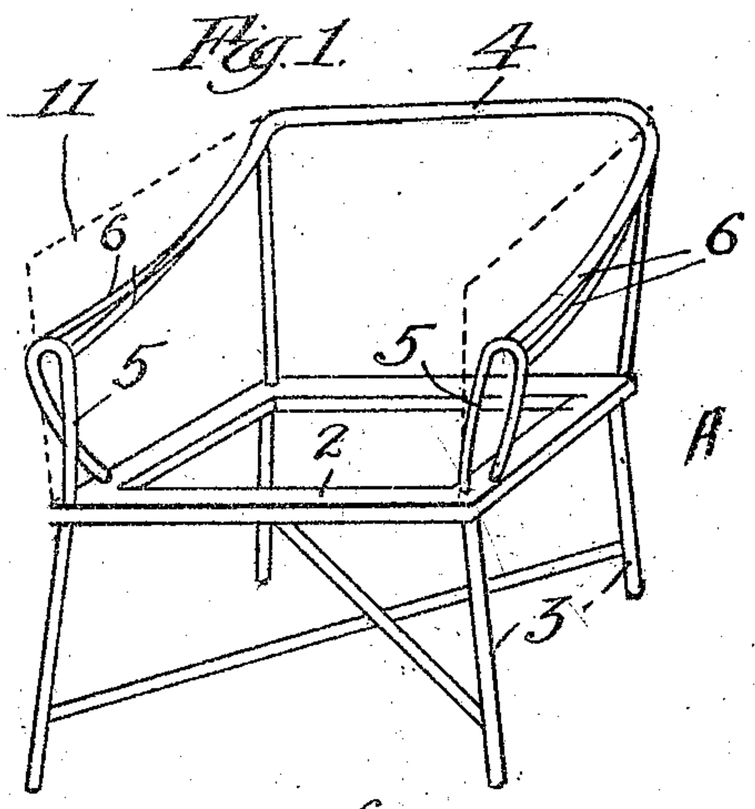
METHOD OF PRODUCING WOVEN REED ARTICLES.

APPLICATION FILED JULY 17, 1917.

1,298,232.

Patented Mar. 25, 1919.

Fig. 1.



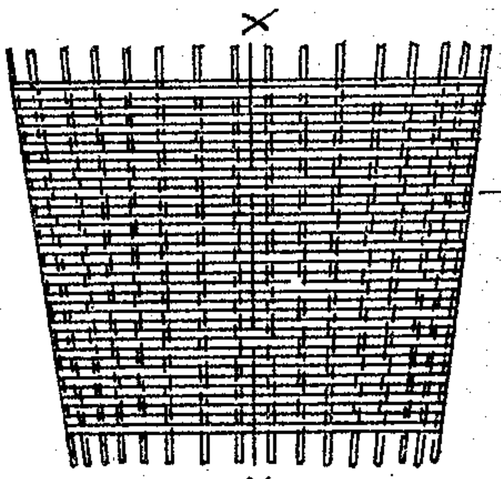


Fig. 2

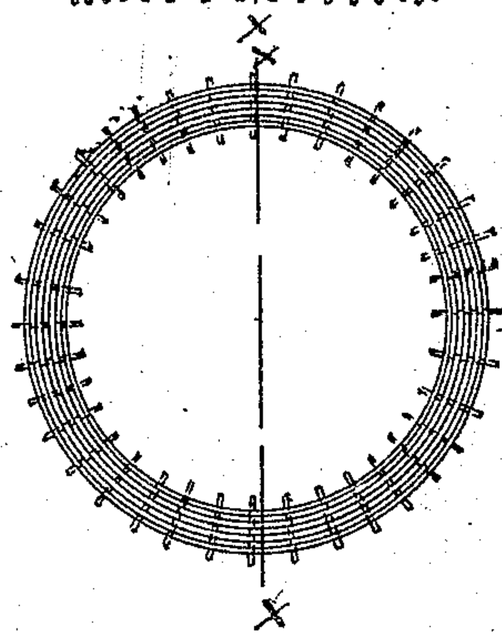


Fig. 3

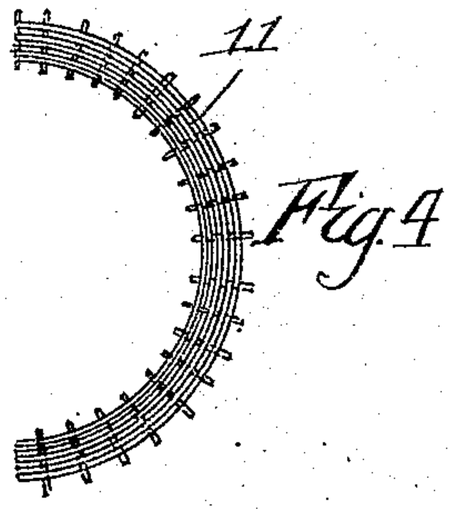


Fig. 4

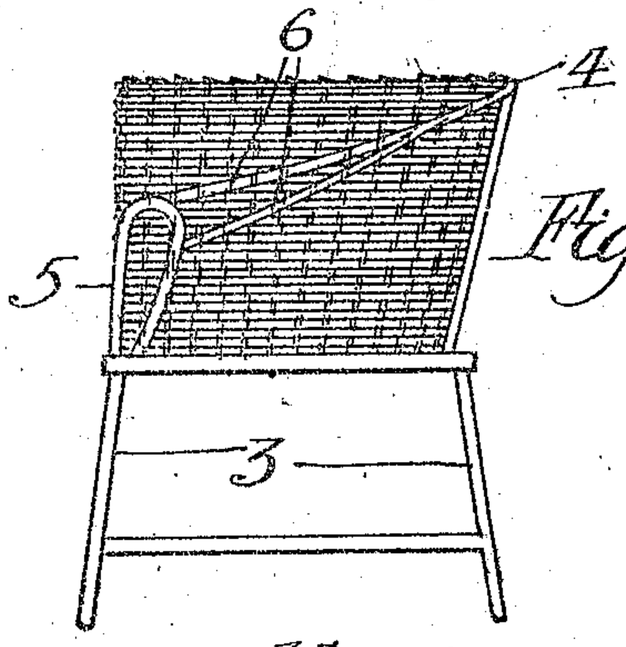


Fig. 5

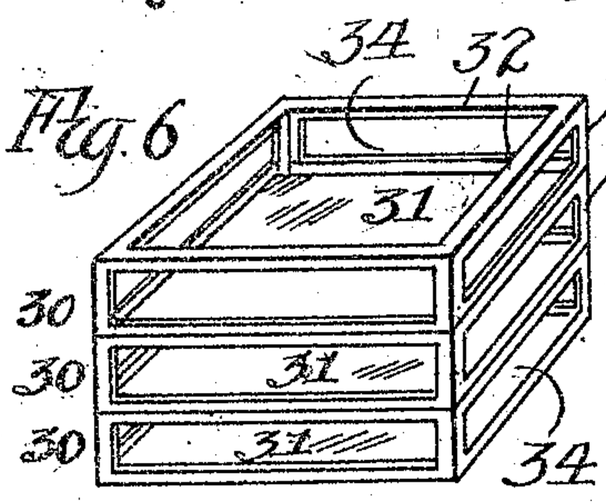
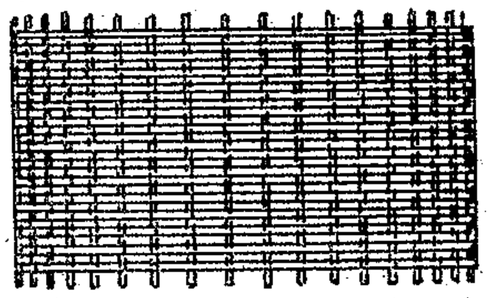


Fig. 6

Fig. 7



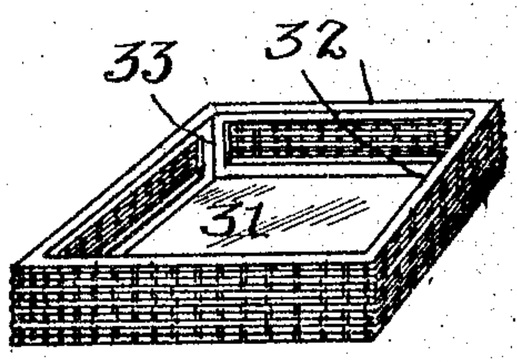


Fig. 10

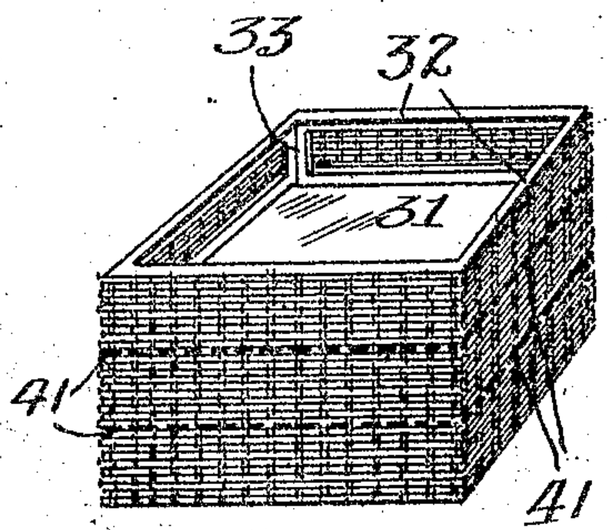


Fig. 9

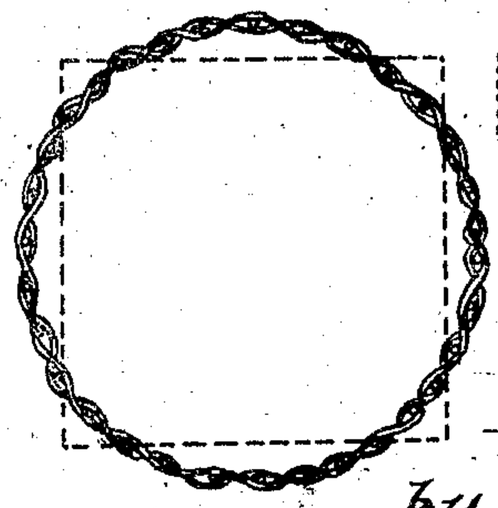


Fig. 8

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METHOD OF PRODUCING WOVEN-REED ARTICLES.

1,298,232. Specification of Letters Patent. Patented Mar. 25, 1919.

Application filed July 17, 1917. Serial No. 181,055.

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, State of 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 and relates more particularly to the production of reed articles having a frame.

Until recent date in the production of such reed 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 secure the woven fabric to the article frame. This novel method of procedure is not here claimed broadly 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 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 steps, acts and sequences 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 two different articles embodying my invention.

In said drawings—

Figure 1 is a perspective view of an arm chair, the top of which is to be covered with reed fabric.

Fig. 2 is a side elevation of a reed fabric for use in producing the article of Fig. 1.

Fig. 3 is a top plan view of the fabric shown in Fig. 2.

Fig. 4 is a plan view of a portion of the fabric of Figs. 2 and 3.

Fig. 5 is a view of the fabric shown in Fig. 4 applied to the chair frame.

Fig. 6 is a perspective view of a plurality of drawers which are to be covered with reed under my method.

Fig. 7 is a side elevation of a reed fabric for use in producing the drawers of Fig. 6.

Fig. 8 is a plan view of the fabric shown in Fig. 7 and

Fig. 9 illustrates the fabric applied to the drawers.

Fig. 10 illustrates the finished single drawer.

As illustrative of the present invention I have chosen to depict the production of two different types of articles. One article is an arm chair upper and the other a drawer. It should be understood that these articles are chosen by way of illustration and not by way of limitation. I shall first describe the production of the chair and then the production of the drawer.

In the production of the chair I produce in any suitable manner, a plurality of chair frames A, of desired size and configuration. One such chair frame is shown in Fig. 1 wherein 2 is the seat, 3 the legs, 4 the member forming the back, 5 the front supports and 6 members connecting front and back members, 4 and 5. I shall not describe the construction of the chair in detail as it forms the subject matter of another application Serial Number 181,053. Suffice it for the present to state that the fabric necessary to form the back and sides of the chair upper is substantially U-shaped. Such a shape is difficult to produce under prior methods because it requires a to and fro movement in the weaving operation, to wit: from one extreme of the U to the other. With my method, the manufacture of articles of this shape as well as of other shapes is greatly simplified and cheapened. Instead of manufacturing a fabric initially of the desired U shape, I first produce a tubular or endless

fabric of necessary or desired configuration and of a size sufficient to cover a plurality of articles and then sever the fabric into parts each of a size to cover a single article. For the production of the chair top or upper illustrated, I produce a tubular fabric 10, having slightly tapering sides as illustrated in Fig. 2 and Fig. 3, and of such size that one half thereof will furnish sufficient fabric for a single chair upper. Then I sever the fabric as along the lines —*x*—*x* of Fig. 2 and Fig. 3, thus producing two U-shaped fabrics, one of which is illustrated in Fig. 4 and marked 11. This divided U-shaped fabric 11 is then placed within the chair frame as indicated by dotted lines in Fig. 1 and by full lines in Fig. 5, and secured thereto in a suitable manner. As a matter of fact in this instance it is placed within the frame and portions folded over the frame, more being folded over the sides than over the back in order to form a proper arm.

Another chair top is completed in the same manner, using the other half of the fabric. By producing an endless fabric, the weaving operation is greatly facilitated inasmuch as the direction of weave is always the same so that the filler strand can be placed in regular convolutions as the stakes and preformed fabric are rotated. It is also possible by operating in this manner to secure a taper on the fabric which could not be secured if a single tubular fabric were produced to complete the chair upper. I am not concerned with the precise method by which the fabric is produced but can recommend as a suitable method the weaving of the fabric around a properly proportioned and sized templet in the manner described in the aforementioned application Serial No. 109,714. Of course, in this instance the templet will be of such size that the fabric produced thereon will be sufficient to cover two chair tops.

In Figs. 6, 7, 8, 9 and 10, I have depicted the manufacture of another article under my method. In this instance it is desirable to provide a reed covering for a drawer, or more accurately for the side portions or faces of the drawer. To this end, instead of operating upon a single article in the hitherto usual manner, I operate upon and produce the fabric for a plurality of articles. Thus, in Fig. 6, 30 represents a plurality of similar drawers which in this instance, are substantially rectangular in form, having a suitable frame composed of a bottom 31, a top frame, 32, and connecting standards, 33. This construction provides a plurality of panels or spaces, 34, to be covered with reed fabric. To provide a fabric for these drawers I produce an endless or tubular fabric, 35 (see Figs. 8 and 7), the perimeter of which is equal to the perimeter of the outer part of the drawer, and the height of which is substantially equal to the combined heights of the drawers when placed in intimate superposed relation, as shown in Fig. 6. The tubular fabric shown in this instance is of circular shape because I find that it is generally much easier to weave the fabric in that form. Having produced the fabric of desired height and size, I apply pressure to it causing it to assume a substantially rectangular shape (see dotted line, Fig. 8) and when so conditioned, I place it over the drawers so that the fabric covers completely all of the side faces of the respective drawers as shown in Fig. 9. The next step is that of securing the fabric permanently to the drawer sides and this may be done in various ways as for example by means of tacks, brads, or other suitable fastening devices which pass through the reed fabric. In this manner a plurality of drawers are covered with reed fabric, but they have now been secured together against removal, whereas in use each drawer is a separate article and should be adapted for independent use. To this end, I sever the fabric completely around its perimeter between the adjacent drawers as indicated at 41 in Fig. 9. I have thus freed the drawers from their dependent condition and have provided a plurality of independent drawers each properly covered with a reed covering permanently and accurately secured to its side faces as desired. I do not here claim in detail this drawer structure or method of producing it inasmuch as this forms the subject matter of another application. The completed drawer is shown in Fig. 10.

It will be noted that both the examples above given are characterized by similar steps and procedure which will be found of great help in the production of many articles of different kinds and of which the examples here given are thought to be sufficiently illustrative. It should be noted also that in both instances the method contemplates the production of a plurality of articles and that a reed fabric is produced of a size and character suitable for covering a plurality of articles and that the fabric is severed to form a plurality of portions each of which is used in covering a single article.

Inasmuch as this disclosure will readily suggest to others skilled in the art to which this appertains, modified methods whereby the substantial benefits of my invention may be attained, I do not wish to be limited to the precise acts, steps or stated sequence thereof, except only as may be necessary by limitations in the hereunto appended claims

I claim:

1. The herein described method of producing woven reed articles which consists in providing a plurality of article frames, providing a tubular reed fabric of a size sufficient to cover a plurality of said frames, and

in using a part of said fabric for one frame and a part for another frame so that at least one part and one frame shall have an inclosing relation affected by the contour of the part.

2. The herein described method of producing woven reed articles which consists in providing a plurality of article frames, providing a tubular reed fabric of a size sufficient to cover a plurality of frames, severing the fabric to form a plurality of parts, and in using said parts to cover different article frames so that at least one part and one frame shall have an inclosing relation affected by the contour of the part.

3. The herein described method of producing woven reed articles which consists in providing a plurality of article frames, providing an endless or tubular reed fabric of a size sufficient to cover a plurality of said frames and in using U-shaped portions of said fabric for different article frames.

4. The herein described method of producing woven reed articles which consists in providing a plurality of article frames, providing an endless or tubular reed fabric of a size sufficient to cover a plurality of said frames, severing the fabric to form a plurality of U-shaped fabrics and in using said fabrics to cover different frames.

5. The method of producing woven reed articles having a tapering reed fabric which consists in providing a plurality of article frames, providing an endless or tubular reed fabric of tapering form and of a size sufficient to cover a plurality of said frames, and in using part of said fabric for one frame and part for another frame so that at least one part and one frame shall have an inclosing relation affected by the contour of the part.

6. The method of producing woven reed articles which consists in providing two article frames, providing an endless or tubular reed fabric of a size sufficient to cover both frames, severing the fabric to produce two U-shaped fabrics, and in securing one U-shaped fabric to each frame.

7. The method of producing woven reed articles having a tapering reed fabric which consists in providing two article frames, providing an endless or tubular reed fabric of tapered form and of a size sufficient to cover both frames, severing the fabric to produce two U-shaped fabrics, and in securing one U-shaped fabric to each 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.