

No. 640,132.

Patented Dec. 26, 1899.

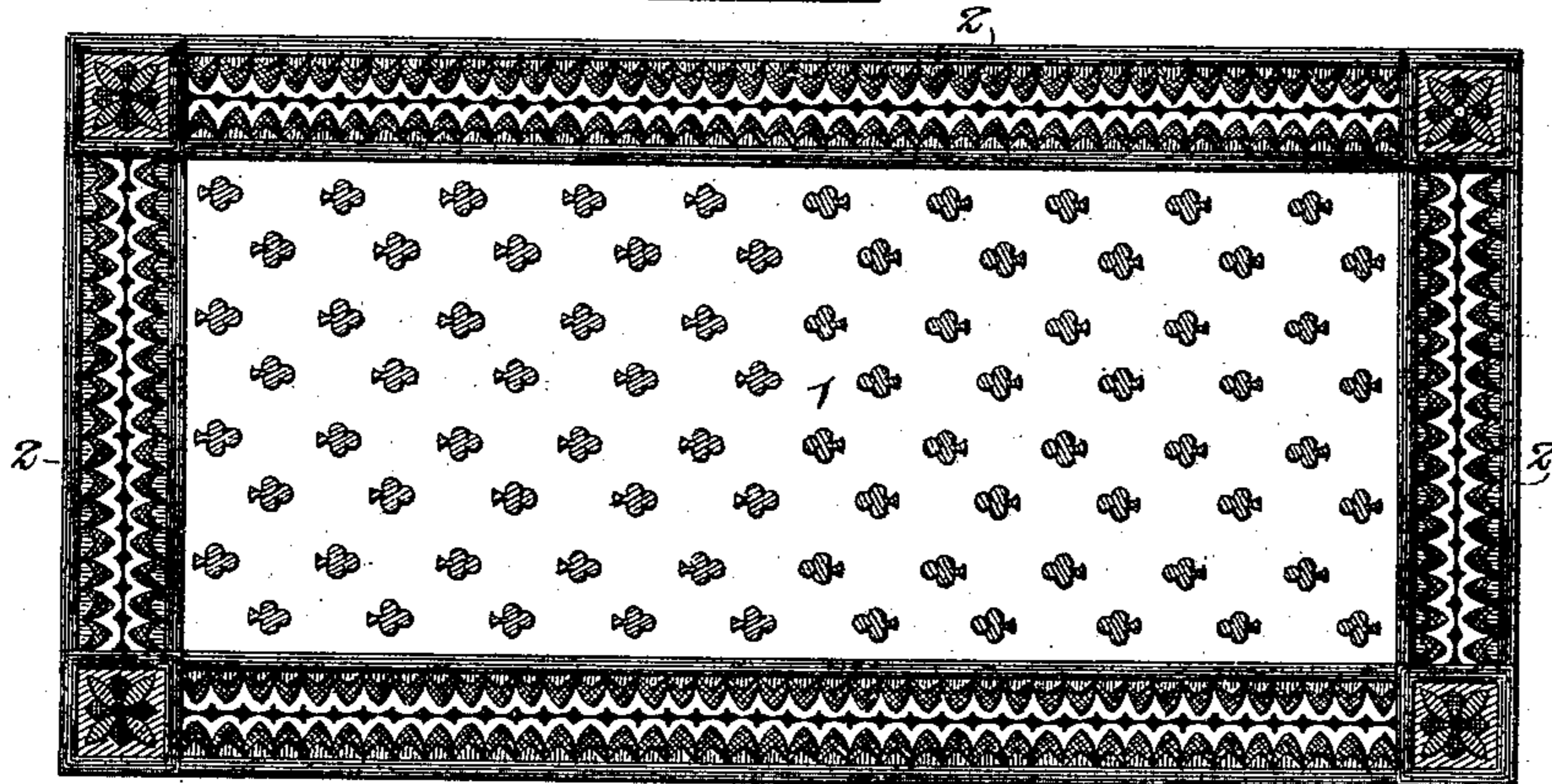
H. HARDWICK.

WOVEN RUG.

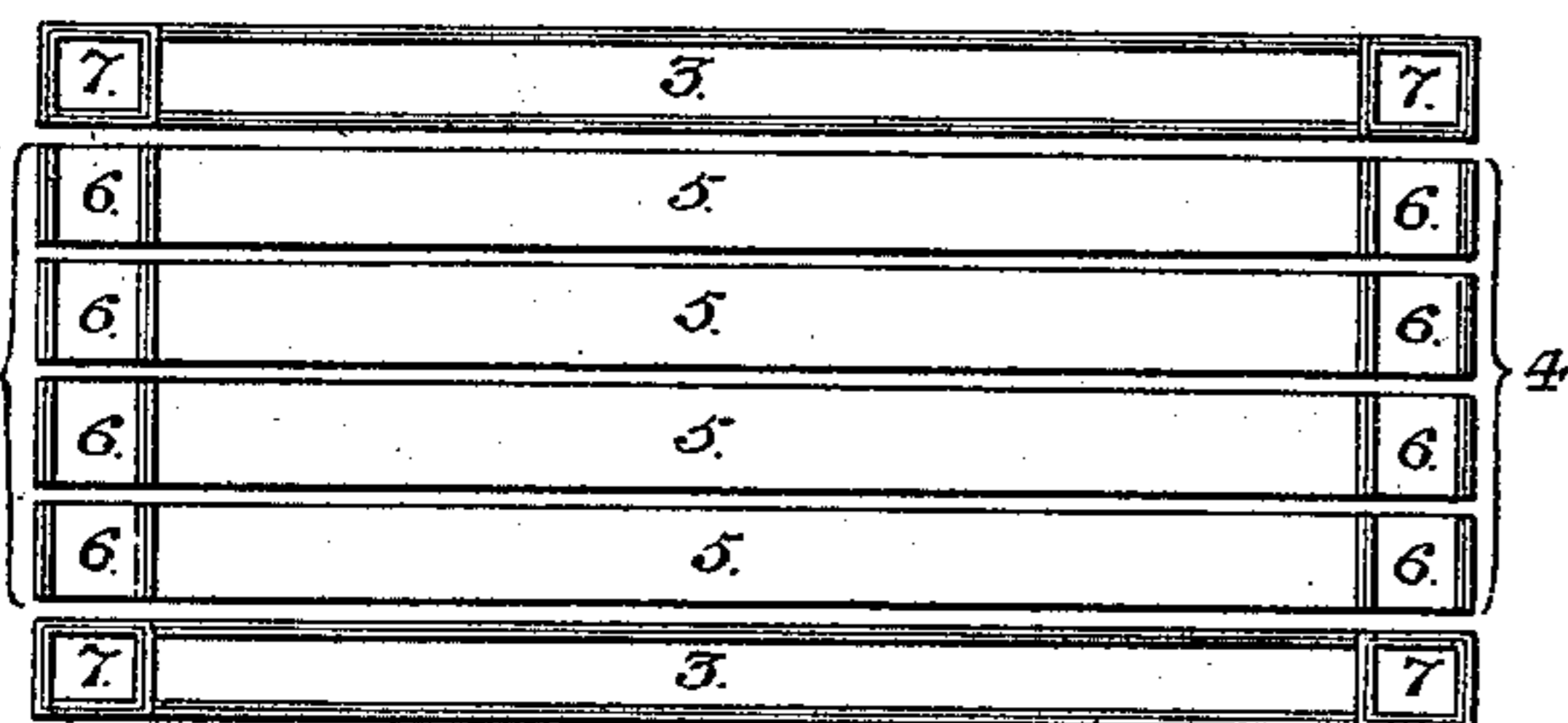
(Application filed Oct. 7, 1898.)

(No Model.)

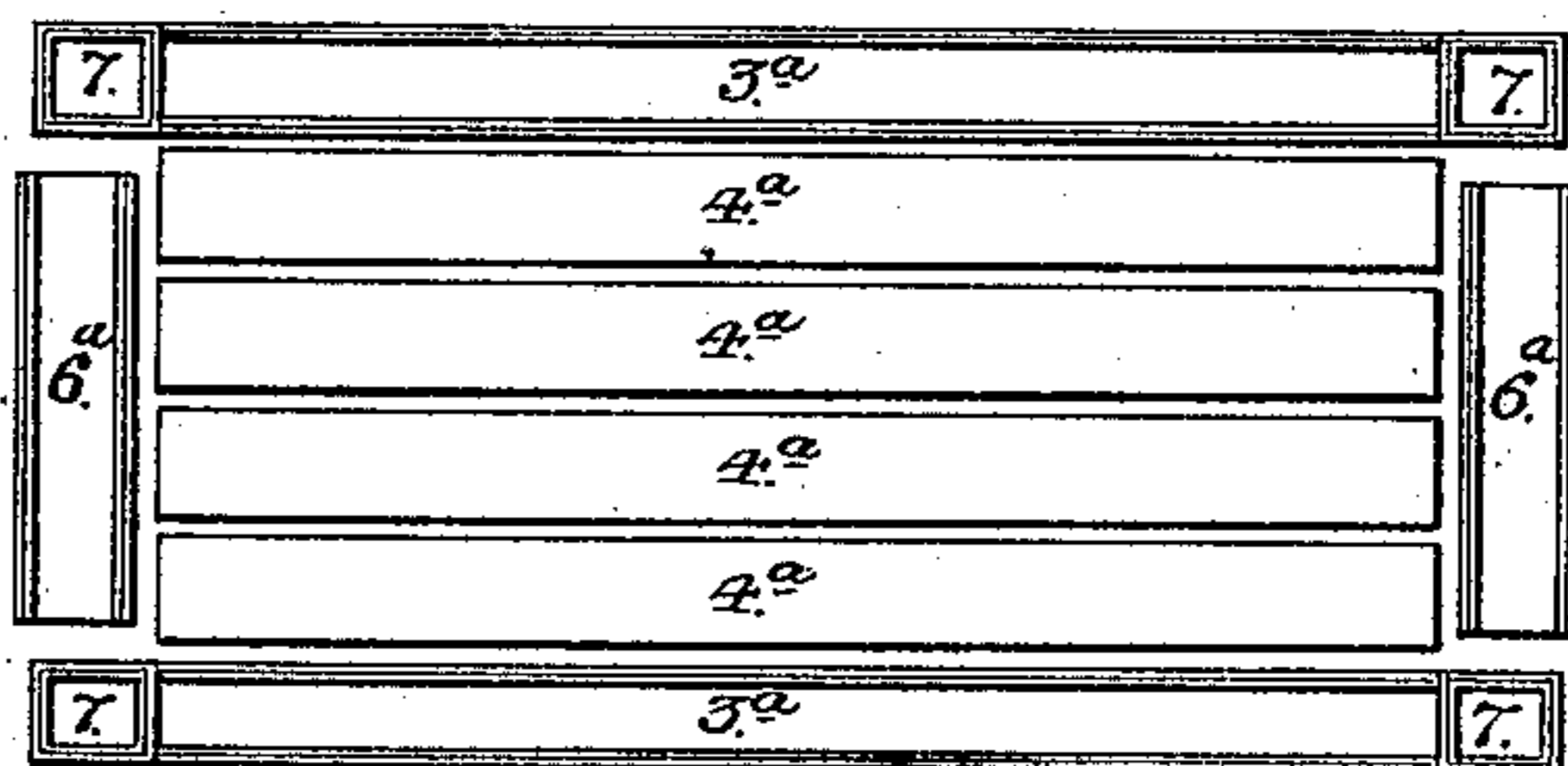
*Fig. 1.*



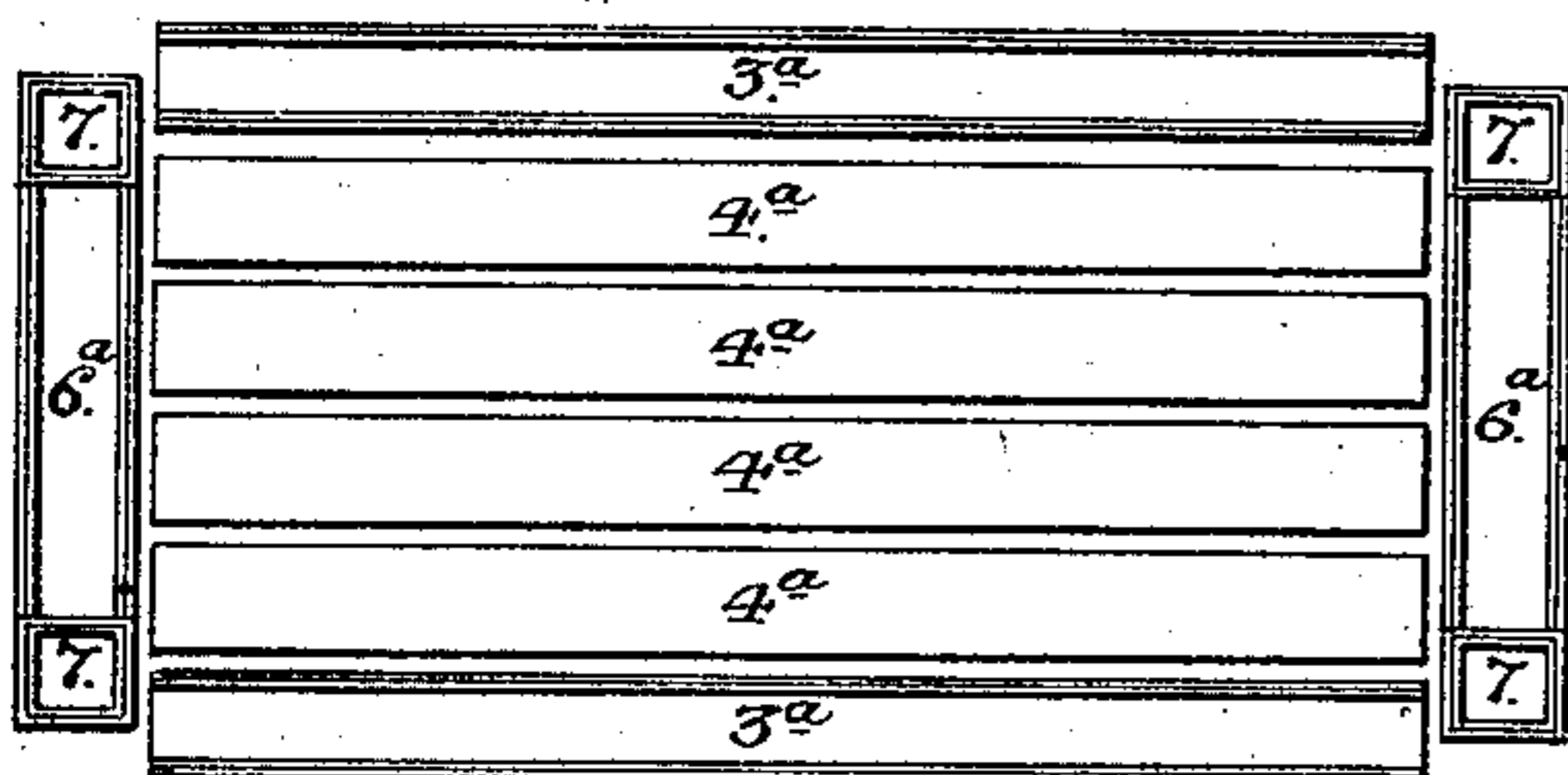
*Fig. 2.*



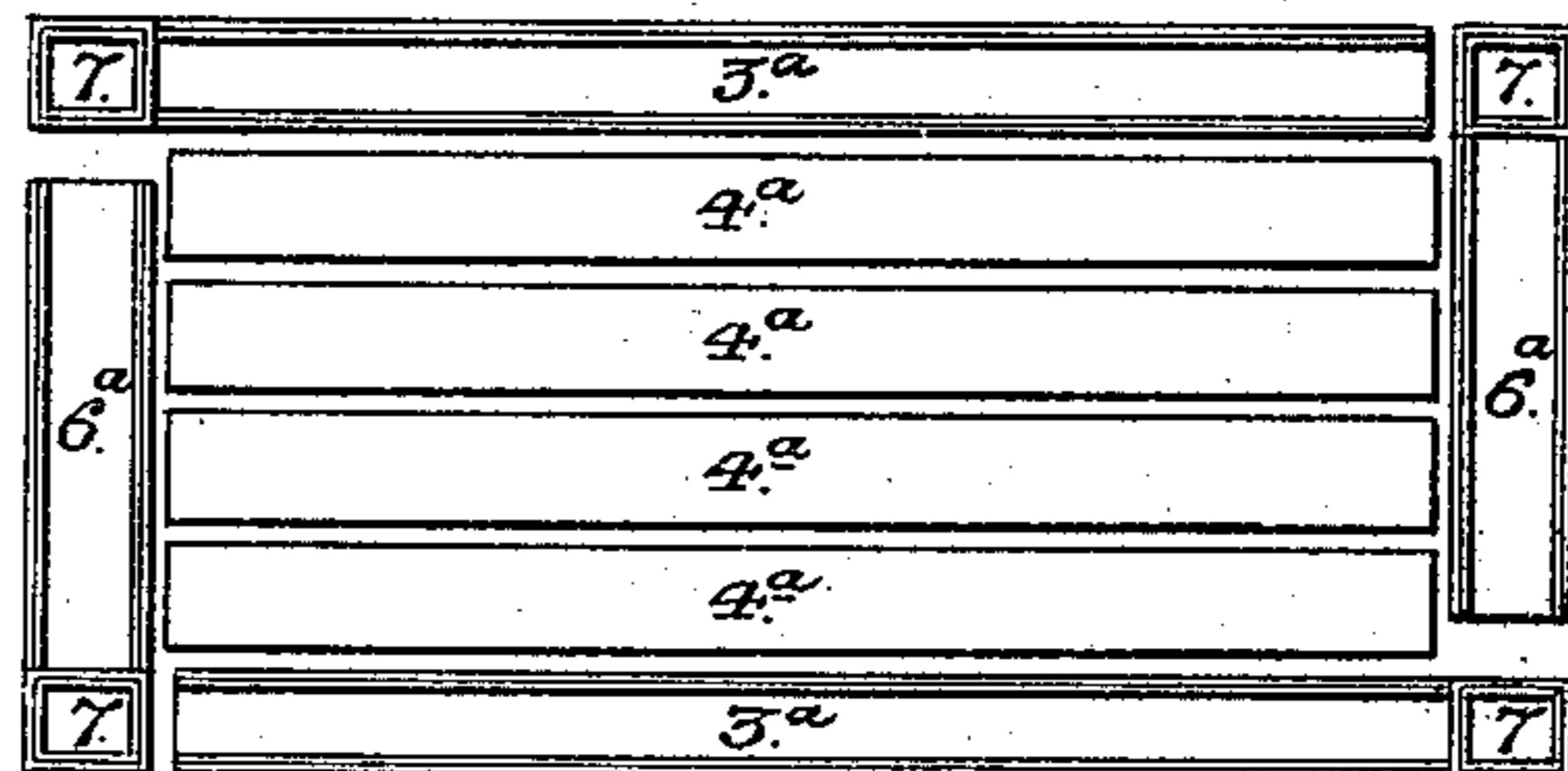
*Fig. 3.*



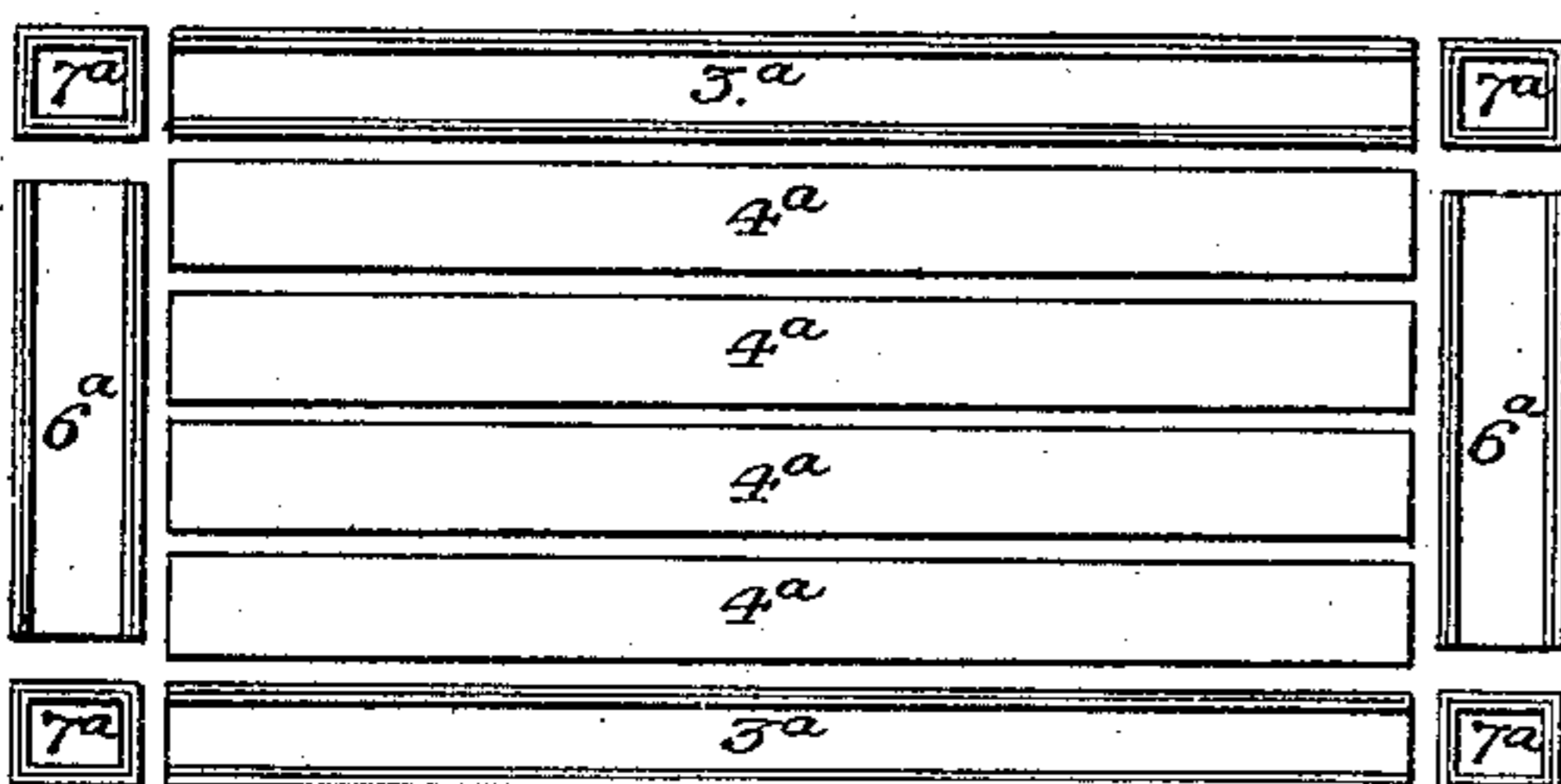
*Fig. 4.*



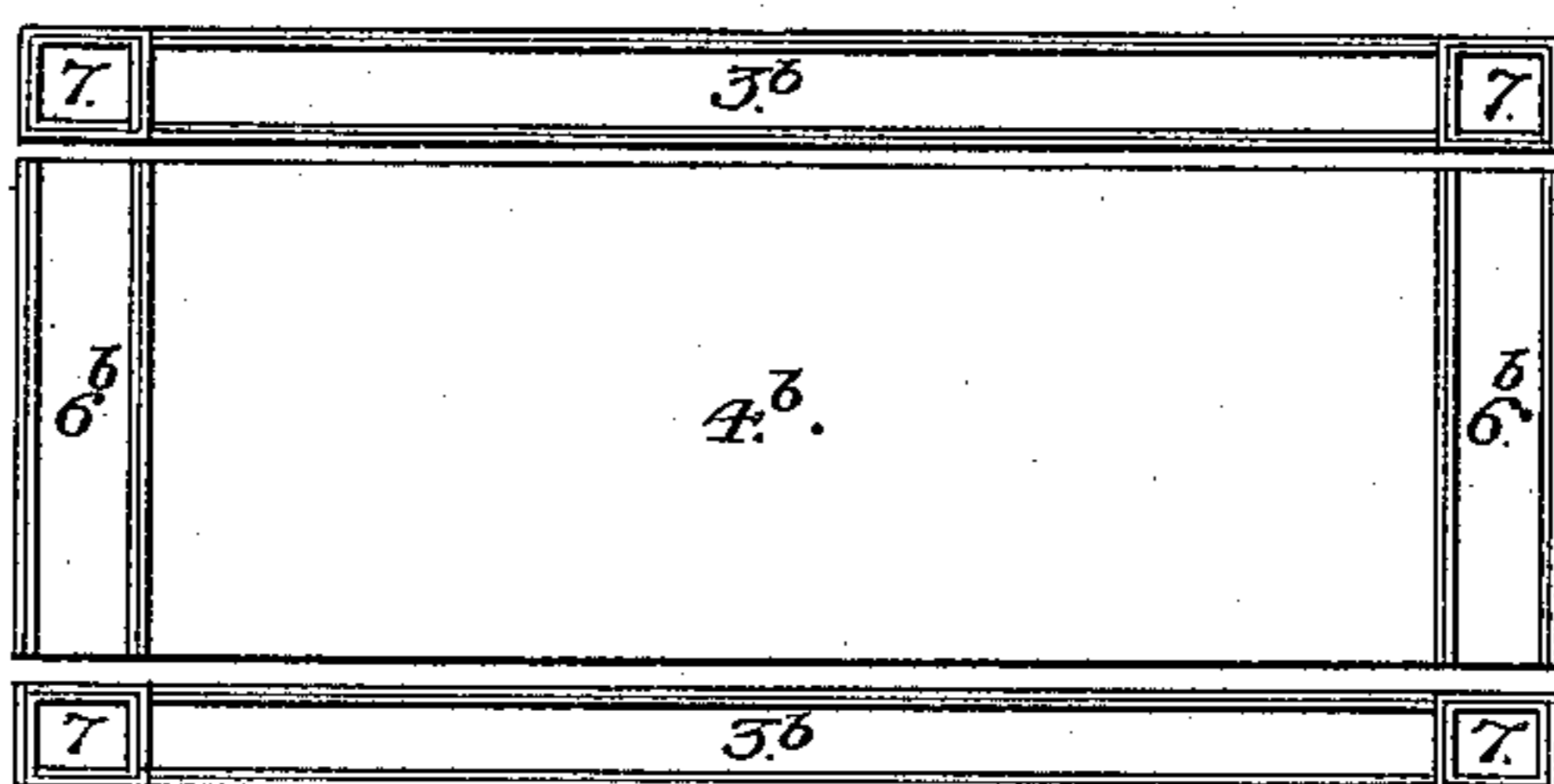
*Fig. 5.*



*Fig. 6.*

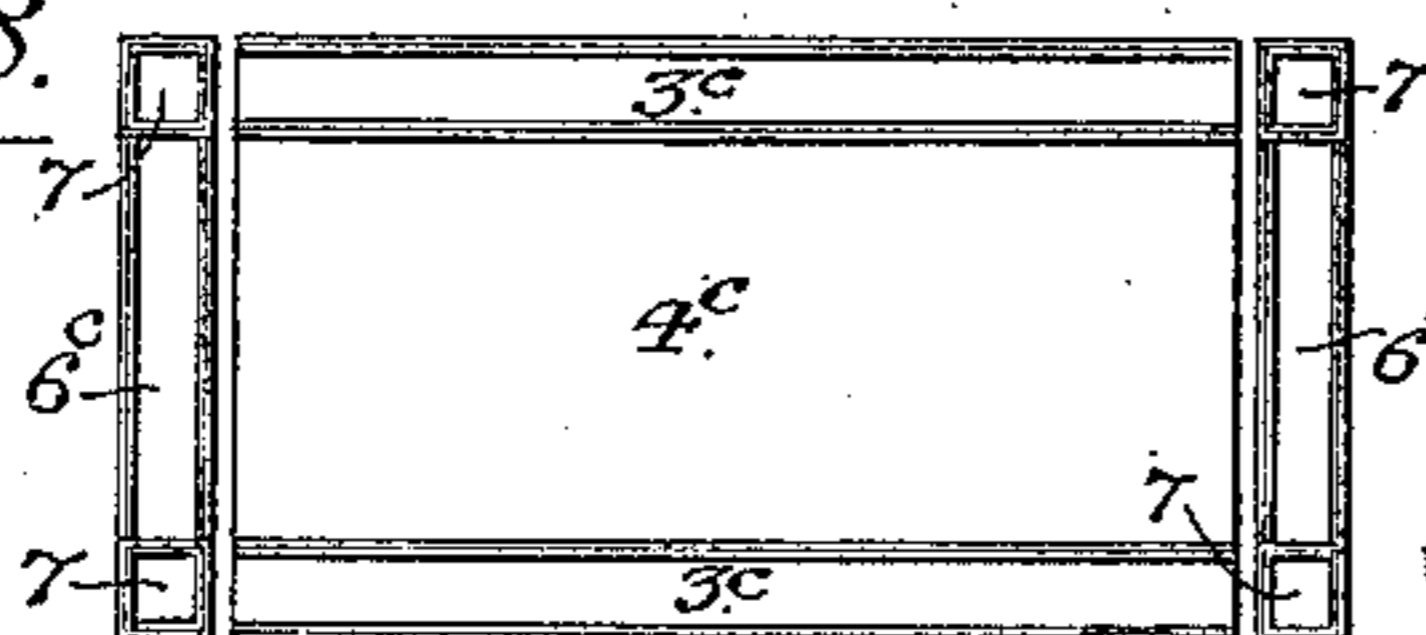


*Fig. 7.*



Witnesses: *Fig. 8.*

*Louis M. Whithead.*  
*Charles De Cou.*



*Fig. 9.*



*Inventor:*

*Harry Hardwick.*  
*by his Attorneys:*

*W. S. & W. S.*

# UNITED STATES PATENT OFFICE.

HARRY HARDWICK, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO  
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## WOVEN RUG.

SPECIFICATION forming part of Letters Patent No. 640,132, dated December 26, 1899.

Application filed October 7, 1898. Serial No. 692,918. (No specimens.)

*To all whom it may concern:*

Be it known that I, HARRY HARDWICK, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain  
5 Improvements in Woven Rugs and Like Fabrics, of which the following is a specification.

My invention relates to the manufacture of rugs, table-covers, curtains, and like articles comprising a centerpiece with border, the object of my invention being to so weave the  
10 pieces of which such articles are made as to obtain the desired contrast of centerpiece and border without that waste of yarn in the centerpiece which results from the present  
15 method of weaving. This object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 represents a rug made in accordance with my invention. Fig. 2 is a diagram  
20 illustrating the ordinary method of making such rugs. Figs. 3, 4, 5, 6, 7, and 8 are similar views illustrating my improved method of making the rug, and Fig. 9 is an enlarged  
25 view of part of one of the strips of which the rug is composed.

The rug shown in Fig. 1 comprises a center-piece 1 of simple pattern and coloring, and a  
30 border 2 of much more elaborate character both as regards pattern and coloring.

If the rug is composed of pile fabric, one or two colors of pile-forming warp may be sufficient for the centerpiece, but a much greater number are necessary for the border, as many  
35 as eight or more different colors in the border being sometimes required. An ordinary rug of this character is composed of longitudinal side strips 3, having a border-pattern woven thereon, and intermediate strips 4, each of  
40 which has a central portion 5, woven with the desired pattern for the centerpiece of the rug, and end portions 6, woven with a border-pattern, so that when the selvage edges of the strips are sewed together a rug having the de-  
45 sired centerpiece and border will be produced. The objection to this method of weaving is the waste of pile-warps involved in weaving the strips 4, each of said strips having sets of  
50 threads as are necessary for the elaborate pat-

tern and coloring of the border; but as most of these warps are unused in the central portion of the strip they are buried out of sight at the back of the fabric, thus causing a high percentage of waste of expensive yarn.

In carrying out my invention therefore I  
55 discard the usual plan of weaving a border-pattern at each end of each of the center strips 4, and instead weave center strips 4<sup>a</sup>, each having a center pattern throughout, and use four  
60 border-strips—that is to say, two longitudinal border-strips 3<sup>a</sup> and two transverse border-strips 6<sup>a</sup>, the latter being either of a length equal to the full width of the rug, as shown  
65 in Fig. 4, or of a length only sufficient to fit between the longitudinal borders-strips, as in Fig. 3. When the transverse strips 6<sup>a</sup> are of  
70 the full width of the rug, they are woven at the ends with the pattern for the corner-pieces 7 of the border, and when the longitudinal strips are of the full length of the rug they  
75 are woven with the corner-piece patterns 7 at the ends. By this means the center strips 4<sup>a</sup> need only have as many pile-forming warps as are necessary for the simple pattern and col-  
80 oring of the centerpiece of the rug, the greater number of warps necessary for the more elaborate pattern and coloring of the bordering being confined wholly to the border-strips, so  
85 that there is no waste of the yarn, as in the ordinary method of weaving. When this method of weaving is adopted, the warps in the transverse border-strips will run at a right  
90 angle to those in the longitudinal border-strips. Hence in sewing the strips together to form the rug the inner selvage edges of the  
95 transverse border-strips will have to be united to the warp ends of the longitudinal strips if the rug is made as shown in Fig. 4, while if the rug is made as shown in Fig. 3 selvages  
100 of the transverse strips 6<sup>a</sup> will be united to warp ends of the central strips 4<sup>a</sup>, and the warp ends of said transverse strips 6<sup>a</sup> will be united to selvages of the longitudinal strips 3<sup>a</sup>, and in order to facilitate this union the  
warp ends at each end of each of the woven strips are preferably interwoven with wefts, so as to form a short heading 8, as shown in Fig. 9, whereby the proper joining together of the strips can be more readily effected.

Another method of carrying out my invention is that represented in Fig. 5. In this case instead of weaving corner-patterns at the opposite ends of two border-strips, as shown in Figs. 3 and 4, each border-strip has a corner-pattern at one end and overlaps at one corner of the rug the border-strip which is at right angles thereto, and still another method of carrying out my invention is that represented in Fig. 6, in which case the corner-patterns are woven in separate pieces 7<sup>a</sup>, the inner edges of which are united to the ends of the border-strips in making up the rug.

In weaving an ingrain fabric in accordance with my invention the center of the rug may, as shown in Fig. 7, be woven in one piece, as at 4<sup>b</sup>, instead of in strips and may have border-strips woven at each end of the same, as shown at 6<sup>b</sup>, this being permissible without waste in the case of an ingrain fabric, because in such fabric the pattern is formed by the weft-threads instead of by the warps. In this case, however, the longitudinal border-strips 3<sup>b</sup> will preferably be woven with the wefts running in a direction at right angles to those in the central strip 4<sup>b</sup>, so that the pattern in the strips 3<sup>b</sup> will be produced under the same conditions and with the same facility as in weaving the end borders 6<sup>b</sup>. It will be evident that in a fabric of this character, as well as in a pile fabric, the border portions can be woven with three or more patterning-threads in a set, while the center portion can be woven with one or two threads in a set, thus saving waste of threads which must otherwise be hidden and useless.

In weaving pile fabrics also the longitudinal borders 3<sup>c</sup> may be woven in one piece with the centerpiece 4<sup>c</sup>, as shown in Fig. 8, where the loom is wide enough to permit it, a greater number of pile-wraps being used in the borders than in the center and the transverse borders 6<sup>c</sup> being separately woven.

The term "edges of the rug" as used in the claims means simply the sides or ends of the rug, the term "edges" being employed in order to avoid the use of alternative language in the claims.

"Pattern-forming threads" as used in this specification is a generic term, meaning in the case of a pile fabric the pile-warps and in the case of an ingrain fabric the wefts.

It will be manifest that the main object of my invention would be attained even if the centerpiece of the rug had throughout a limited portion of its extent as many pattern-forming threads as the borders—for instance, it might have a central medallion or other figure in which the larger number of threads would be used, but throughout the greater portion of its extent would only have one, two, or three pattern-forming threads, and such construction is therefore considered within the scope of my claims.

Each of the different constructions which I have described is distinct from that class of

made-up rugs or carpets in which a center-piece composed of ordinary strips of carpeting is combined with a border composed of bordering-strips joined by a miter-joint at the corners of the carpet or rug, for although in the latter case the longitudinal border-strips have pattern-forming threads running at a right angle to those in the transverse border-strips there are no corner-patterns and no attempt at a harmonious pattern extending throughout the border is possible, the patterns of the border-strips being cut across diagonally and abutting against each other at the miter-joints in the corners, whereas in all forms of my improved rug the seams are parallel with the edges of the rug. Hence designed corner-pieces are provided for and a complete border with harmonious pattern results.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. A woven rug or the like having a center-piece and border-strips united by seams parallel throughout with the edges of the rug, the centerpiece having a less number of pattern-forming threads than the border-strips, substantially as specified.

2. A woven rug or the like having a center-piece and border-strips united by seams parallel throughout with the edges of the rug, the centerpiece having a less number of pattern-forming threads than the border-strips, and the pattern-forming threads in the longitudinal portions of the border being at right angles to those in the transverse portions of the same, substantially as specified.

3. A woven rug or the like having a center-piece and border-strips united by seams parallel throughout with the edges of the rug, the centerpiece having a less number of pattern-forming threads than the border-strips, the pattern-forming threads in the longitudinal portions of the border being at right angles to those in the transverse portions of the same, and the border having at the corners, patterns distinct from those in the remaining portions of the border, substantially as specified.

4. A woven rug or the like having a center-piece and border-strips united by seams parallel throughout with the edges of the rug, the centerpiece having a less number of pattern-forming threads than the border-strips, the pattern-forming threads in the longitudinal portions of the border being at right angles to those in the transverse portions of the same, and the border-strips having corner-pieces woven at the ends of the same, substantially as specified.

5. A woven rug or the like having a center-piece and independent longitudinal and transverse border-strips united by seams parallel throughout with the edges of the rug, the centerpiece having a less number of pattern-forming threads than the border-strips, and the pattern-forming threads in the longitu-

nal border-strips being at right angles to those in the transverse border-strips, substantially as specified.

5 6. A woven rug or the like having a center-piece and border-strips united by seams formed by joining a selvage edge of one strip to a warp-end heading on the adjoining strip, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HARRY HARDWICK.

Witnesses:

F. E. BECHTOLD,  
JOS. H. KLEIN.