

No. 627,681

Patented June 27, 1899.

F. C. BROOKS.
SECTIONAL WOOD COLUMN.

(Application filed Mar. 24, 1899.)

(No Model.)

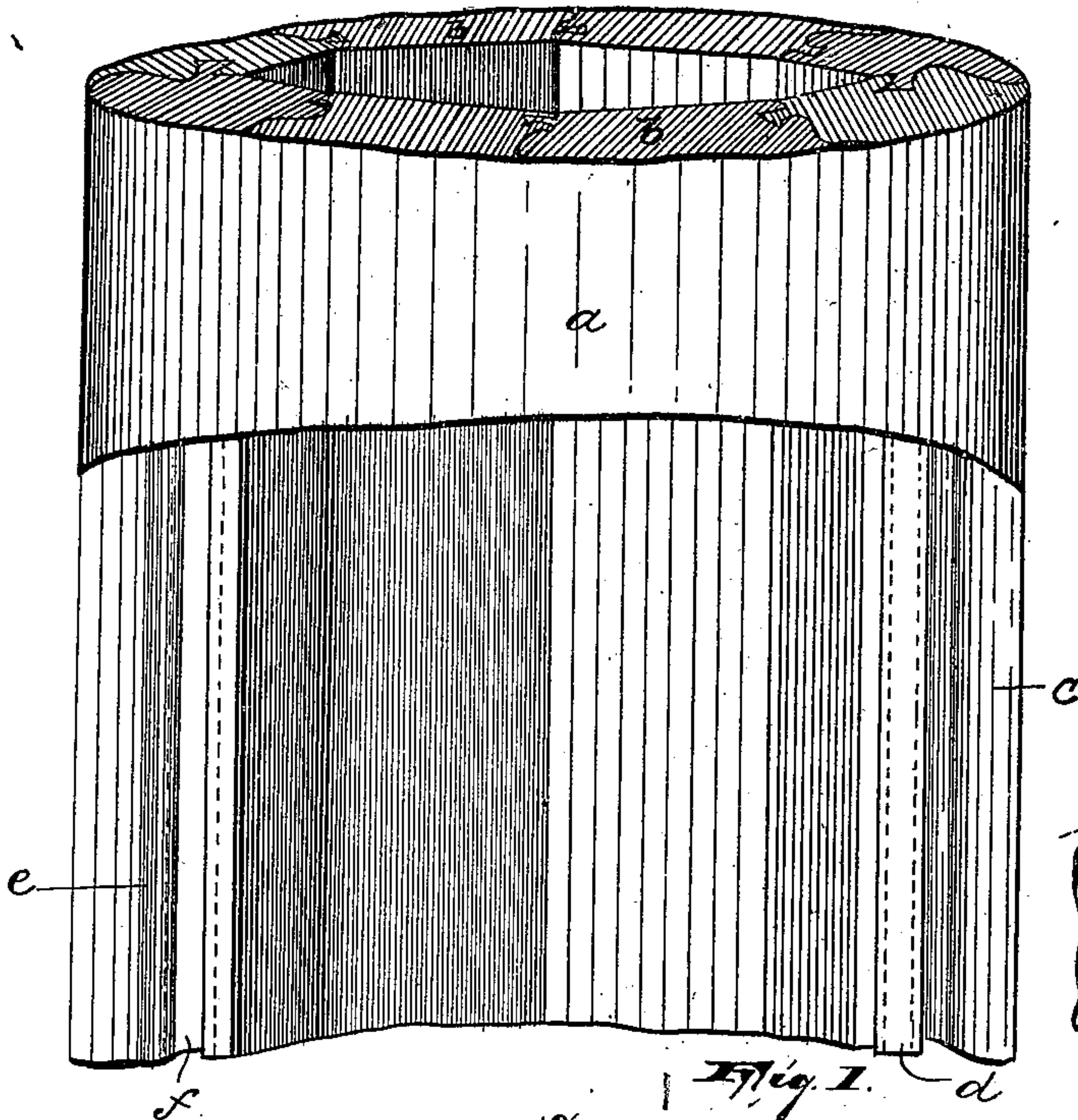


Fig. 1.

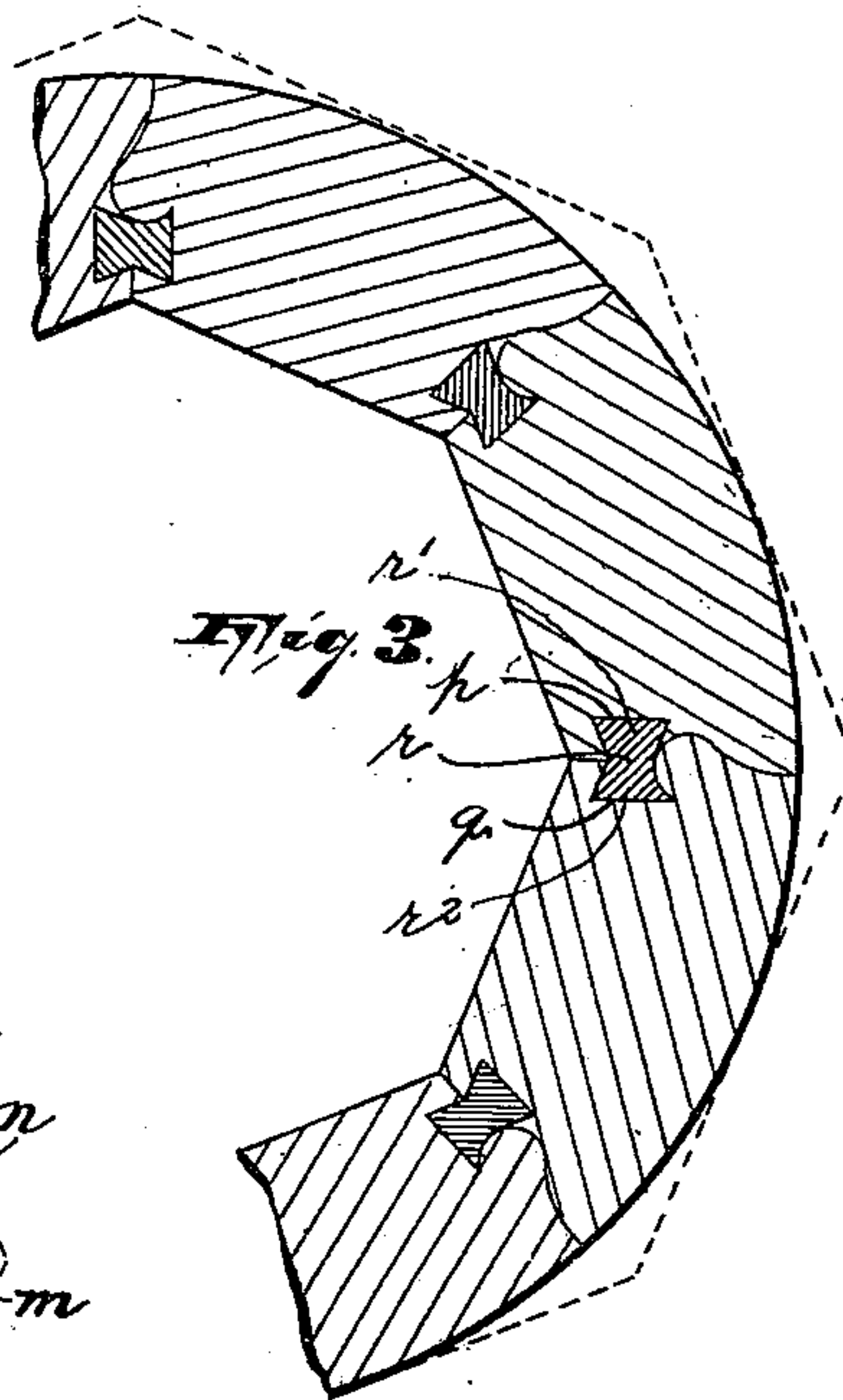


Fig. 3.

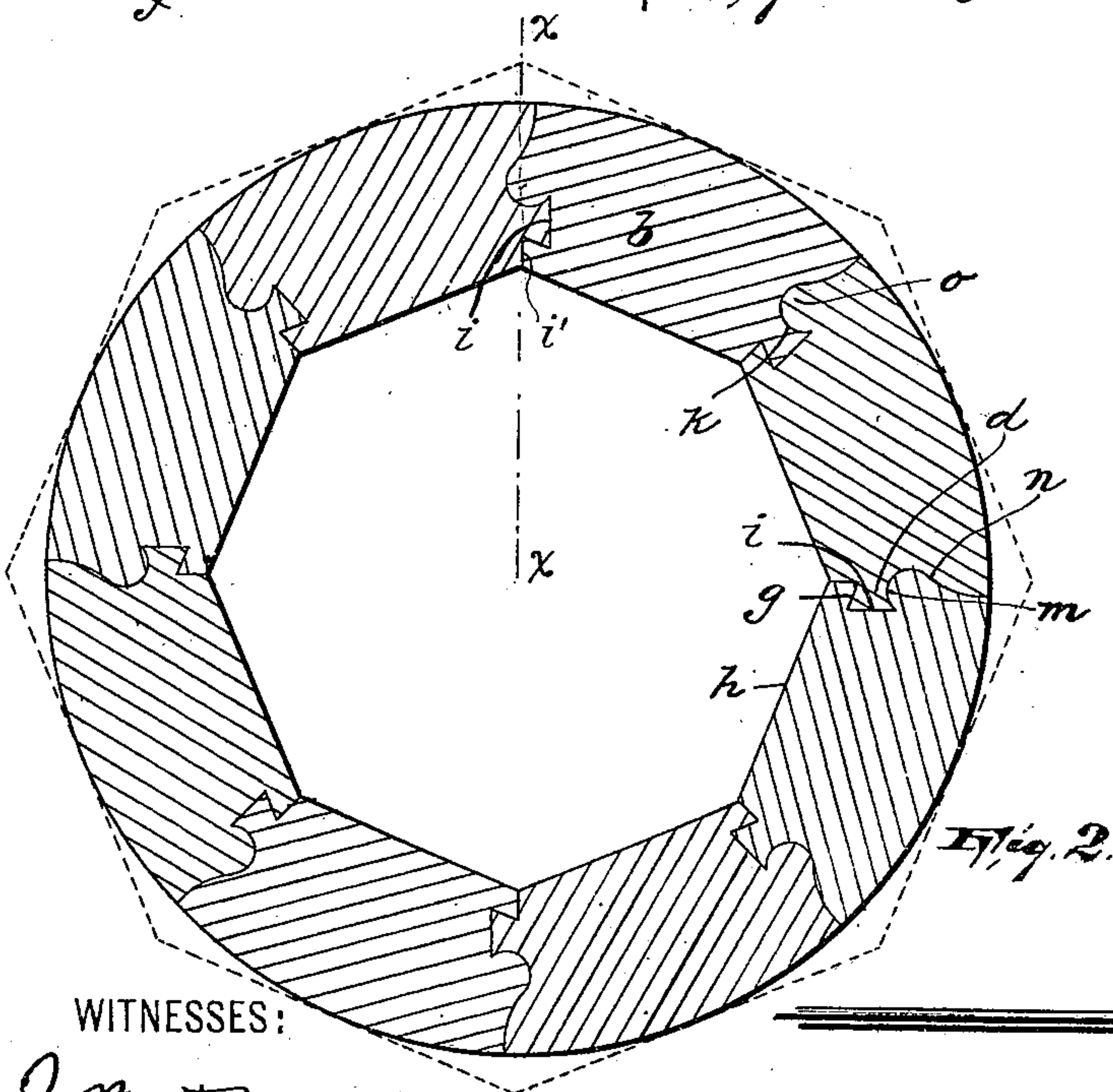


Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

FRED C. BROOKS, OF PATERSON, NEW JERSEY.

SECTIONAL WOOD COLUMN.

SPECIFICATION forming part of Letters Patent No. 627,681, dated June 27, 1899.

Application filed March 24, 1899. Serial No. 710,281. (No model.)

To all whom it may concern:

Be it known that I, FRED C. BROOKS, a citizen of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Sectional Wood Columns; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to the class of wood columns which comprise series of circumferentially-arranged strips, and it constitutes an improvement upon the subject-matter of Letters Patent No. 623,272, issued to me April 18, 1899. In this patented structure just referred to tongue-and-grooved connections of substantially dovetailed form are provided between the flat or plane adjoining faces of the several sections of the column, and with the object of making the connections between the sections as yielding as possible, so that the latter can be readily assembled without affecting a non-uniform strain or a non-uniform relative arrangement of said sections, I have placed these tongue-and-grooved connections as far from the exterior of the completed column as is possible without weakening its construction.

The object of my present invention is to so form the several sections of the column that they will not only be held together in the same manner and for the same purposes as the sections in my patented structure, but that the shape of that portion of each of their adjoining faces extending from the tongue-and-grooved connection outwardly will be such that the glue employed for holding the sections together will not only have an extended surface to act upon at this point, but will not be so readily forced out from between the sections in building up the column as where the adjoining faces of the latter are perfectly plane—for instance, in my patented structure.

My invention is fully illustrated in the accompanying drawings, wherein—

Figure 1 is a view of a portion of my improved column, the same being shown in side

elevation and with parts of several of its component strips or sections removed. Fig. 2 is a horizontal sectional view of my improved column, and Fig. 3 is a horizontal sectional view of a portion of a column constructed upon the principles of my invention and showing a modified form thereof.

In said drawings the column *a* is shown as consisting of a series of strips or sections *b*, each of which has upon one of its faces, as *c*, a tongue *d* and in the other of its faces, as *e*, a groove *f*, corresponding in shape to the tongue *d*. It should be remarked that each tongue and groove is disposed as near to the inner face of the sections as the strength of the material will safely permit. Said tongue has its inner face *g* disposed substantially parallel to the inner face *h* of the strip or section, while the face *i* of said tongue is arranged substantially parallel to a radial line that extends from the center of the column through the base of said tongue, as the line *xx*.

It should be remarked that that portion *v* of each of the adjoining surfaces of any two sections which is disposed between the tongue or groove and the inner edge of said section is a plane extending radially in the completed column.

The outer face *k* of each tongue is curved inwardly, and the adjoining surface *m* of each groove is correspondingly curved. From the base of the tongue-and-grooved connection thus formed outwardly the adjoining surfaces of the sections present in cross-section a compound-curved line *n*. In other words, from the outer edge of each tongue to the outer edge of the section the surface is a compound-curved one. Of course from the groove in each section outwardly the included portion of the surface of the section is of similar form.

It will be observed, in view of the foregoing description, that besides the tongue *d* each section, in effect, has upon its face which includes the groove another tongue *o*, which coacts with the tongue *d* of the next adjoining section.

As hereinbefore stated, by curving the portion of the surface between the groove or tongue of each section and its exterior edge I not only get an extended surface for the glue or other adhesive to act upon, but I overcome the possibility of squeezing or forcing

out any except the smallest portion of said glue.

In the modified form of my invention (shown in Fig. 3) each section is formed upon one of its faces with a dovetailed groove *p*, and upon the other of its faces with a groove *q*, which is similar in shape to the groove of the construction already described. The sections are held together in this instance by intermediate strips *r*, constituting compound and separable tongues, one portion of which, *r'*, is of dovetailed form and fits the groove *p*, and the other portion of which, *r''*, has a shape corresponding to the shape of the tongue heretofore described and fits the groove *q*. In other respects each section is shaped the same as the sections of the columns, as hereinbefore described.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A composite wood column consisting of a plurality of circumferentially-arranged

strips or sections having contacting adjoining faces, and tongue-and-grooved connections disposed in proximity to the inner edges of said faces, said faces from the connections outwardly being curved, substantially as described.

2. A composite wood column consisting of a plurality of circumferentially-arranged strips or sections having contacting adjoining faces, and coacting tongue-and-grooved connections disposed in proximity to the inner edges of said faces, said faces from the inner connections outwardly being curved and including the surfaces of the other tongue-and-grooved connections, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of March, 1899.

FRED C. BROOKS.

Witnesses:

JOHN W. STEWARD,
ALFRED GARTNER.