

W. E. JACOBS.
Wheels for Wheelbarrows.

No. 143,511.

Patented Oct. 7, 1873.

Fig. 4.



Fig. 1.

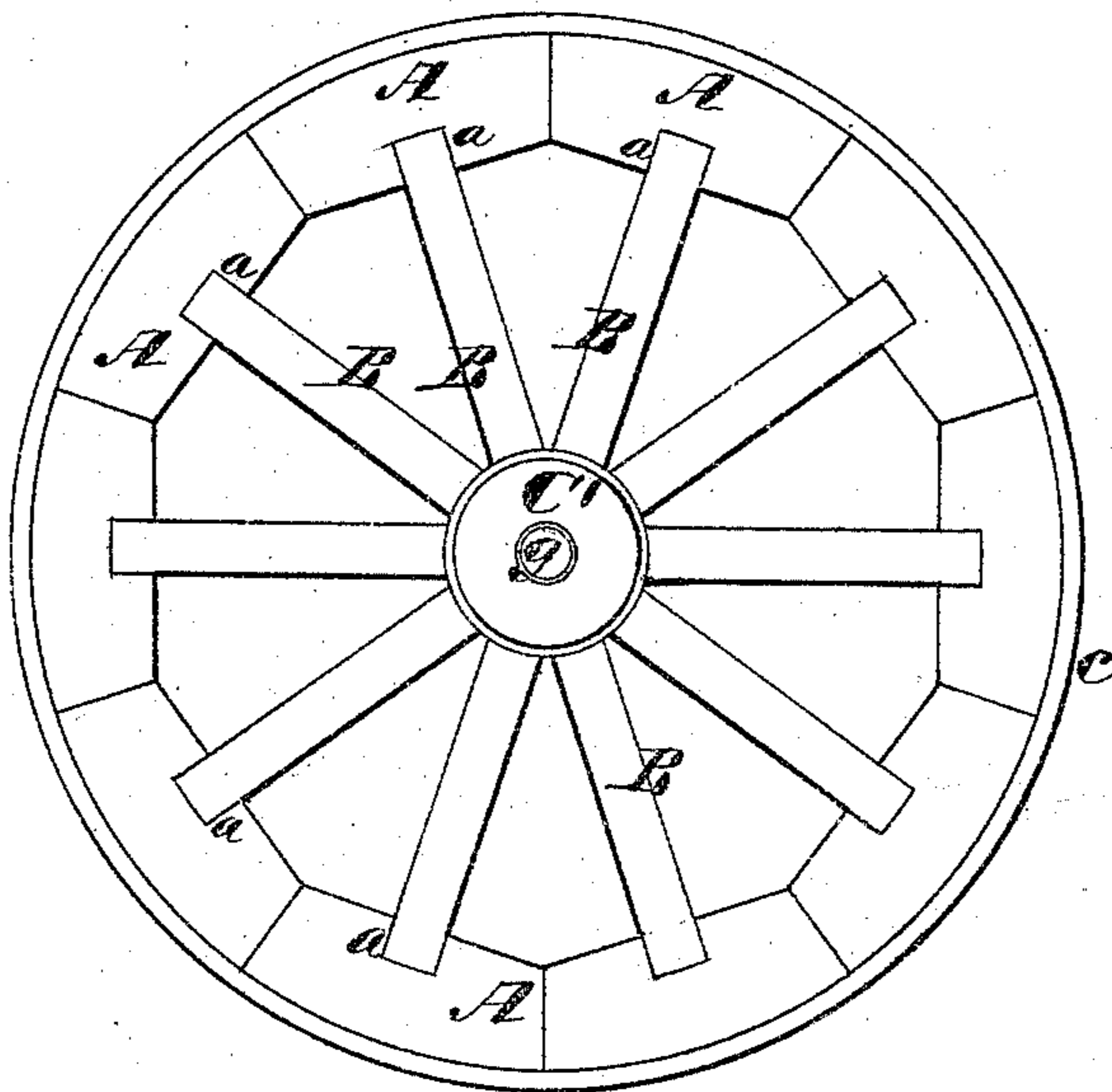


Fig. 2.

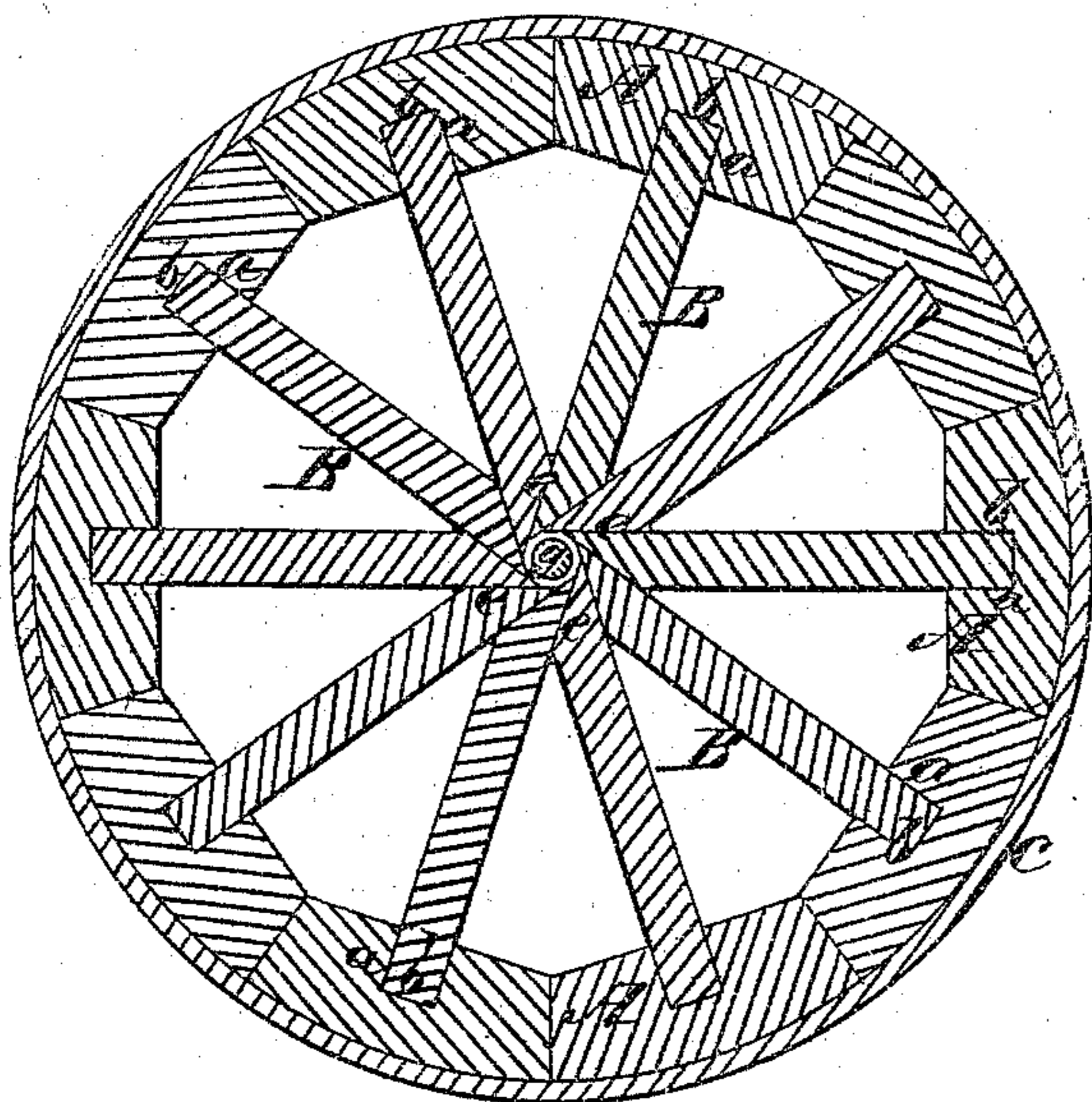
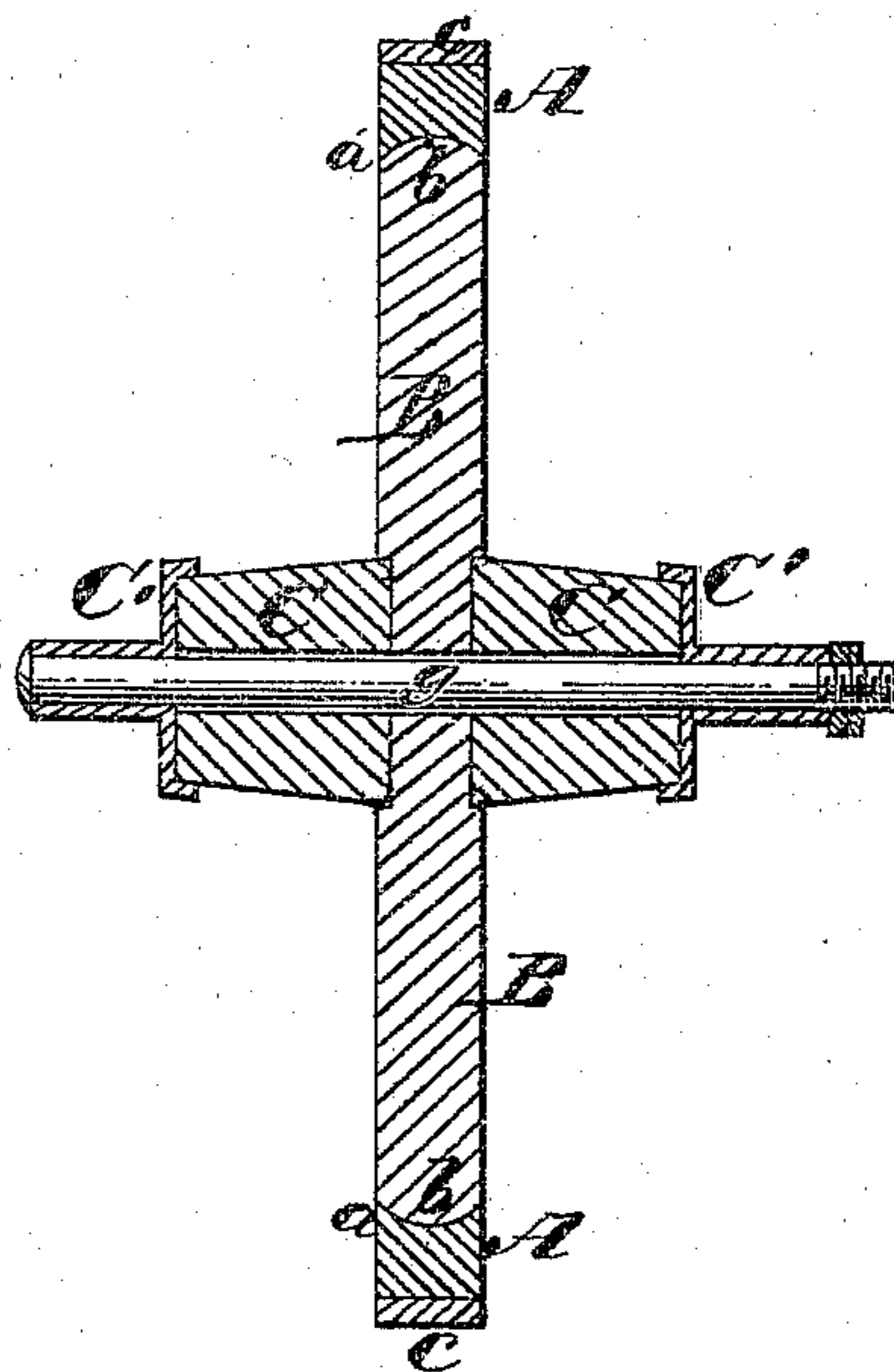


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM E. JACOBS, OF COLUMBUS, OHIO.

IMPROVEMENT IN WHEELS FOR WHEELBARROWS.

Specification forming part of Letters Patent No. **143,511**, dated October 7, 1873; application filed July 5, 1873.

To all whom it may concern:

Be it known that I, WILLIAM E. JACOBS, of Columbus, in the county of Franklin and State of Ohio, have invented a new and Improved Wheelbarrow-Wheel; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a view of one side of my improved wheel. Fig. 2 is a section taken centrally through the wheel in the plane of the face thereof. Fig. 3 is a section taken diametrically through the wheel. Fig. 4 is a diagram, showing the manner of drafting the sections to form the fellies.

Similar letters of reference indicate corresponding parts in the several figures.

This invention has for its object the construction of wheelbarrow-wheels in a very simple, and at the same time a very cheap and substantial manner, as will be hereinafter explained.

The following description of my invention will enable others skilled in the art to understand it.

In the accompanying drawings, A A represent the felly sections of my improved wheel; B B, the spokes of the wheel; C C, the hub sections; C' C', the caps for these sections; and *g*, the rod or bolt by which the hub sections and caps are confined to the spokes. The tire *c* is made and applied to the wheel in the usual well-known manner.

I take a piece of stuff of the required width and thickness to form the fellies A, and, after finding the diameter of the wheel required and the number of spokes which it is to contain, I divide a circle representing the diameter into as many segments as there are spokes, taking the radius of the circle for the bevel, at the ends of the segments. These lines are marked off upon the stuff, and it is sawed up accordingly.

The diagram, Fig. 4, represents the manner of marking off the stuff, as above described. This can be very readily done, and it leaves the grain of the wood lengthwise to each segment, the inner edge of which is straight, as shown in Figs. 1 and 2.

The inner straight edge of each one of the segments A thus formed is grooved or notched transversely at the middle of its length, as indicated at *a*, and, by means of a suitable tool, the bottom of each notch *a* is scored out so as to leave it concave, as shown in Fig. 3, the deepest portion being in the center or in the middle of the thickness of the segment. The outer ends of the spokes B are rounded or convexed, as at *b*, so as to fit snugly into the notches *a* in the segments A, which prevents any lateral displacement of the spokes at their junction with the fellies. The inner ends of all the spokes B are beveled or cut obliquely, as shown at *e*, Fig. 2, so that they will be snugly in contact when arranged about a center, as shown in Fig. 2. The spokes are therefore merely straight pieces of stuff, rounded at their outer ends and beveled at their inner ends, to do which requires very little labor or expense. The inner or largest ends of the hub sections are recessed into the spokes, as shown in Fig. 3, which positively holds them in place with respect to the center of the wheel. The hub sections C C are centrally bored out, and are confined rigidly in their places on opposite sides of the spokes B, when the latter are all arranged, as shown in Fig. 2, by means of two tubular caps, C' C', and a bolt, *g*, which latter passes through the caps, through the hub sections, and between the inner ends of all the spokes, and receives a nut on one end.

It will be seen that I form segments composing the fellies and also the spokes of the wheel out of straight stuff, which can be readily sawed out the proper shapes, as described.

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

1. A wheel, the outer ends of the spokes B of which are rounded, as at *b*, and are of the width of the fellies, and fitted into notches *a*, which are scored out, as described.
2. The hub sections C C and tubular caps C' C' in combination with the bolt *g* and spokes B, substantially as described.

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