

No. 773,975.

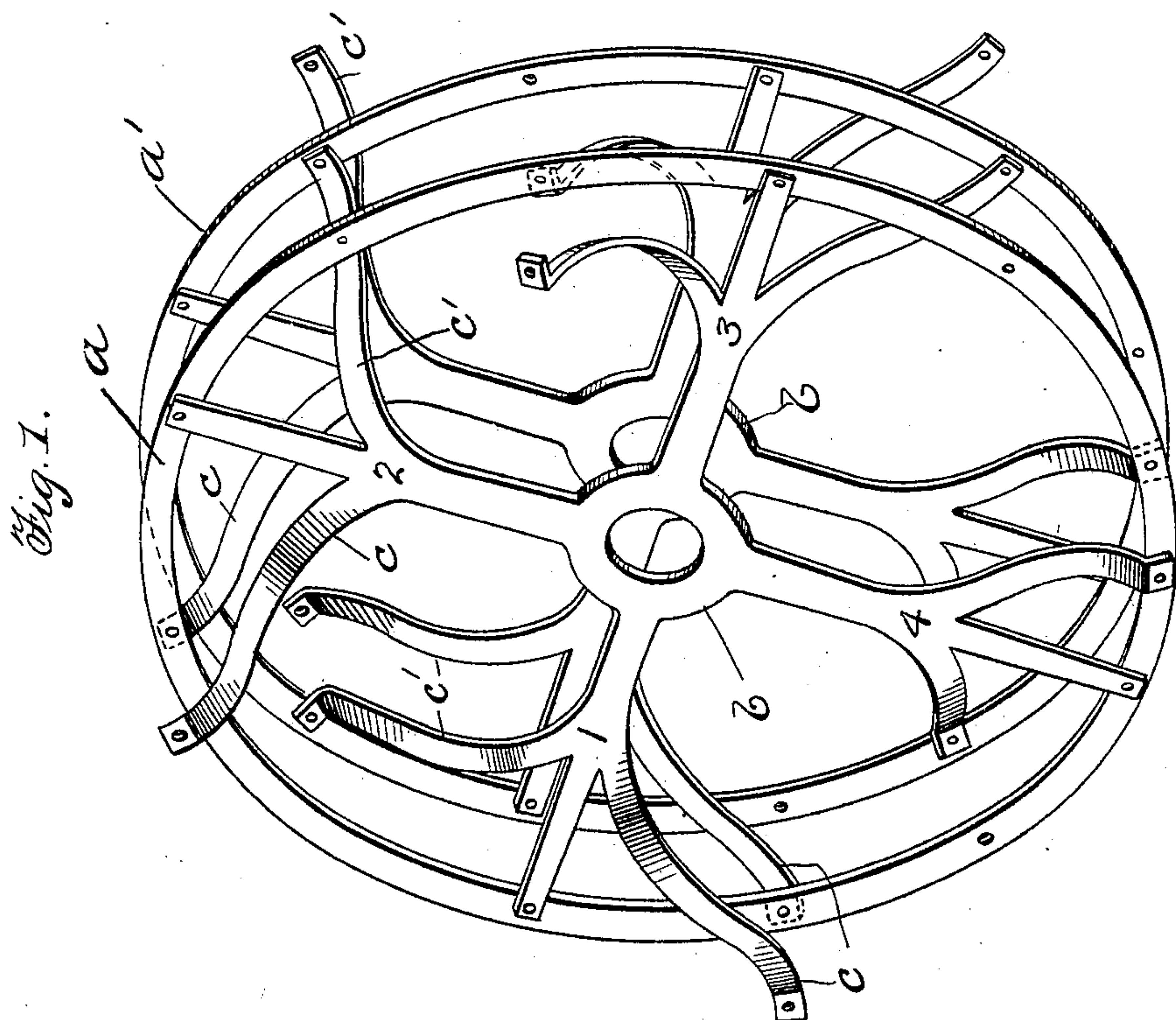
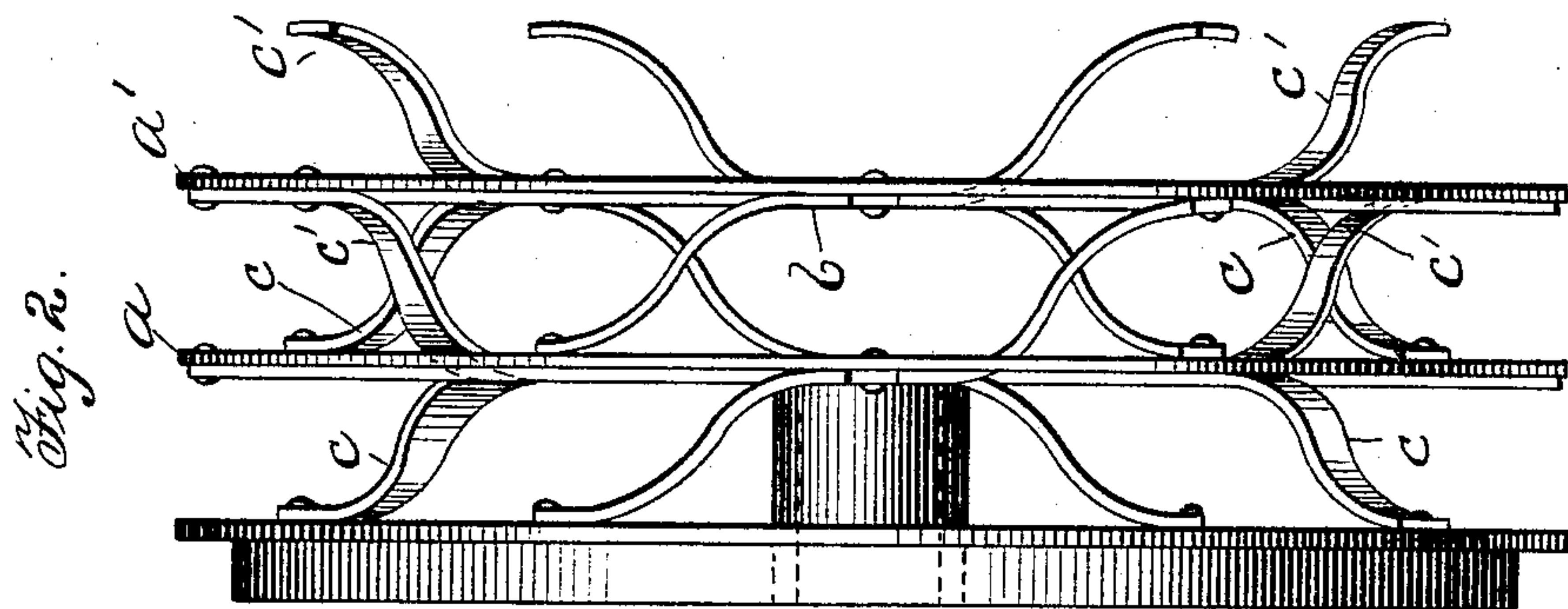
PATENTED NOV. 1, 1904.

H. PARKER.

ROLL FOR PAPER MAKING AND LIKE MACHINERY.

APPLICATION FILED MAY 5, 1903.

NO MODEL.



Witnesses

Frank G. Campbell.

A. Kiemendahl.

Inventor

Howard Parker

By V. B. Hall

Attorney.

UNITED STATES PATENT OFFICE.

HOWARD PARKER, OF NASHUA, NEW HAMPSHIRE, ASSIGNOR TO IMPROVED PAPER MACHINERY COMPANY, OF CASTINE, MAINE, A CORPORATION OF MAINE.

ROLL FOR PAPER-MAKING OR LIKE MACHINERY.

SPECIFICATION forming part of Letters Patent No. 773,975, dated November 1, 1904.

Original application filed January 3, 1903, Serial No. 137,641. Divided and this application filed May 5, 1903. Serial No. 155,742.
(No model.)

To all whom it may concern:

Be it known that I, HOWARD PARKER, a citizen of the United States of America, residing at Nashua, in the county of Hillsboro, and State of New Hampshire, have invented certain new and useful Improvements in Rolls for Paper-Making or Like Machinery, of which the following is a specification.

The roll shown and described herein is particularly adaptable in paper-pulp-treating machinery or in paper-making machinery, although its use is not limited to this class of work.

This invention relates more particularly to the frame or skeleton of the roll, the object being to reduce the weight of this part as much as possible, and yet retain a roll of the required strength. These considerations are of the utmost importance in paper-treating and paper-making machinery. The roll must be stiff and strong, so that it will not sag at the center and leave the paper wet, and it must be light in order to be readily and easily handled.

This application is a division of my application, Serial No. 137,641, filed January 3, 1903.

Figure 1 is a perspective view of an embodiment of my invention. Fig. 2 is a side view of the same.

Referring to the drawings, *a a'* denote a series of metallic rings. These rings are preferably made of wrought metal bent to shape. The peculiar construction of the preferable form of rings is the subject-matter of claims in another application now pending.

b denotes spiders, which are firmly secured to the shaft and which preferably have four arms 1 2 3 4, which support the rings *a a'*, &c. Each arm has branching from it one or more braces *c c'*, one being bent to one side of the plane of the spider and the other to the other side, as clearly shown in the drawings. Preferably there are two of these braces branching from each arm of the spider. Each brace is secured to the next adjacent ring on either side of its own ring, as clearly shown in Fig. 2, and thus it will be seen that every ring in addition to being sup-

ported radially by its own spider is braced from the next adjacent spiders on either side, giving a rigid, strong, and light construction.

I claim as my invention—

1. The improved cylinder or roll construction comprising a frame made up of a series of elements each element being made up of a ring, and a suitable support therefor from a central shaft, and means for laterally bracing each ring from its adjacent rings.

2. The improved cylinder or roll construction wherein the frame is made up of a series of elements adapted for support upon a central shaft, each element comprising a ring and a supporting-spider, and braces extending from each spider to the ring on each side thereof.

3. The improved cylinder or roll construction comprising rings arranged side by side, each ring being supported on the shaft by a spider, each spider, in addition to supporting its own ring, laterally bracing the ring next adjacent to it on each side.

4. In a cylinder or roll construction a series of rings each supported by a spider secured to the shaft, the arms of the spider having braces branching out therefrom in opposite directions, said braces being secured to the next adjacent rings.

5. The combination in a cylinder or roll with the rings arranged side by side, of spiders for supporting said rings, each ring being braced laterally from the spider on either side of it.

6. In a cylinder or roll the shaft, spiders secured thereto and having a plural number of radially-extending arms, and rings formed from a strip of metal suitably bent to shape, said rings being supported by the arms of two or more of said spiders.

In testimony whereof I affix my signature in presence of two witnesses.

HOWARD PARKER.

Witnesses:

B. A. PEASE,
L. M. CARLETON.