

No. 663,912.

Patented Dec. 18, 1900.

L. LEVETT.
POLISHING WHEEL.

(Application filed June 2, 1900.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1

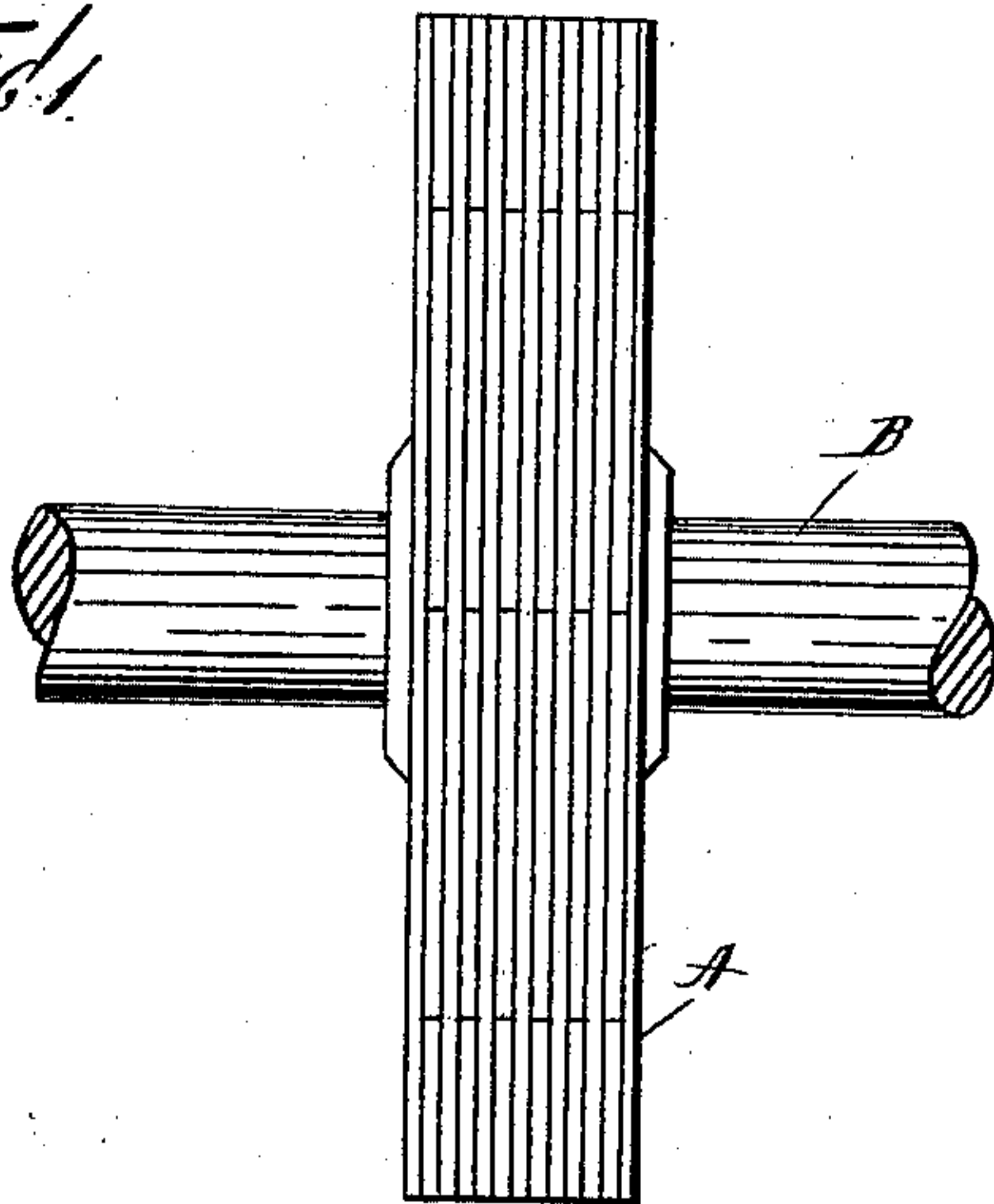


Fig. 2

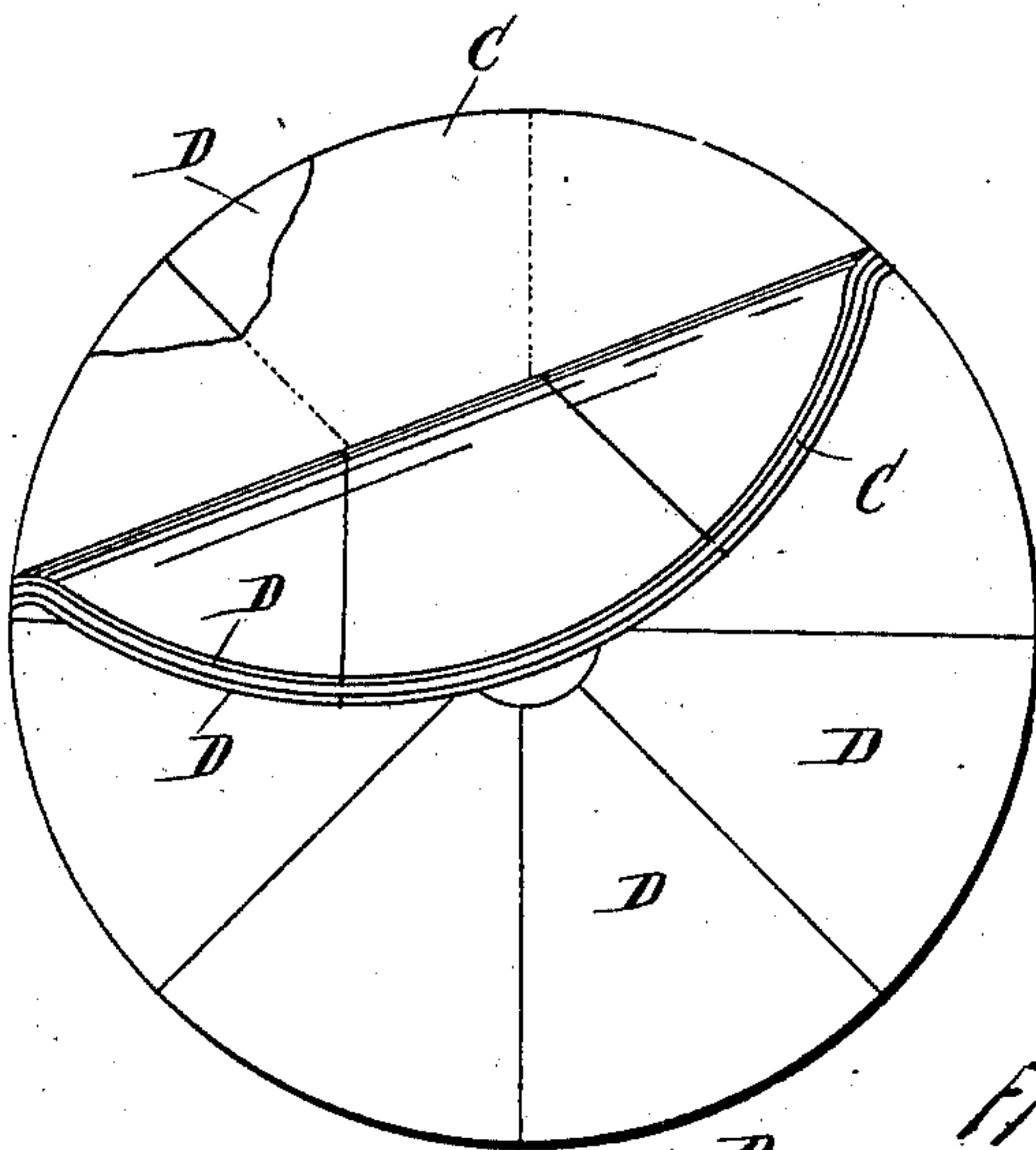


Fig. 3

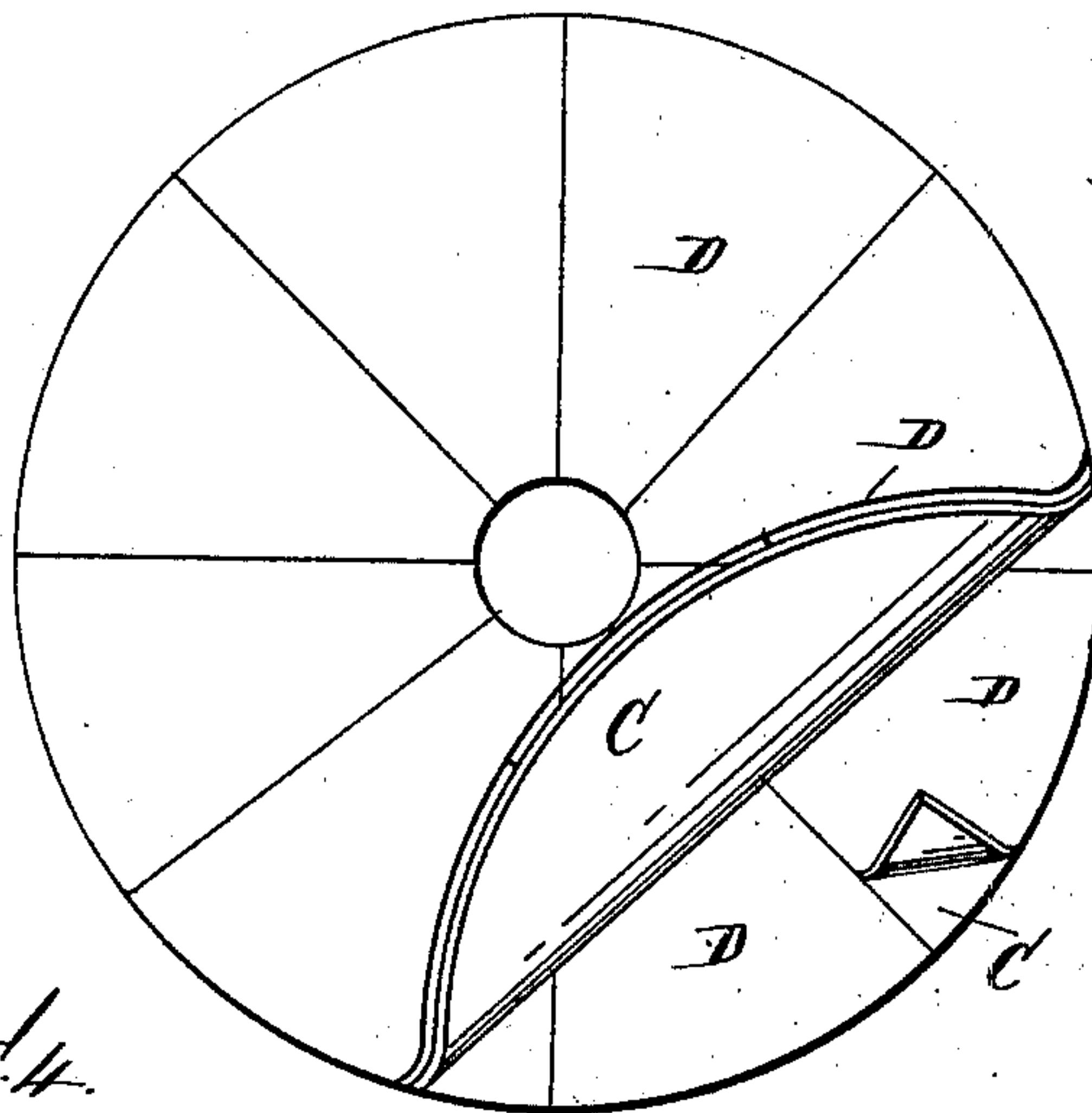
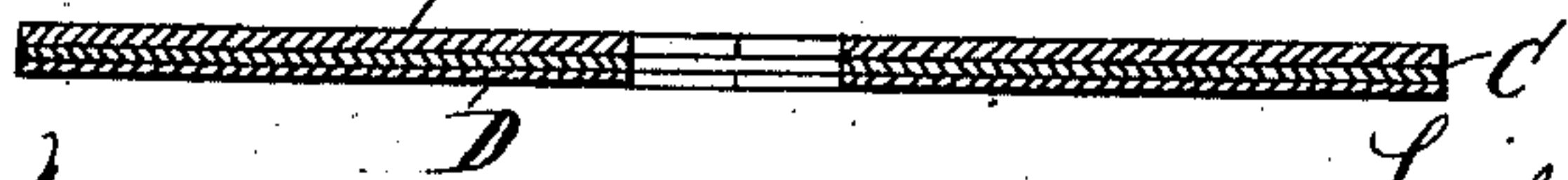


Fig. 4



WITNESSES

John Buckler,
F. A. Stewart

INVENTOR

BY

Louis Levett
Edgar Salter & Co.
ATTORNEYS

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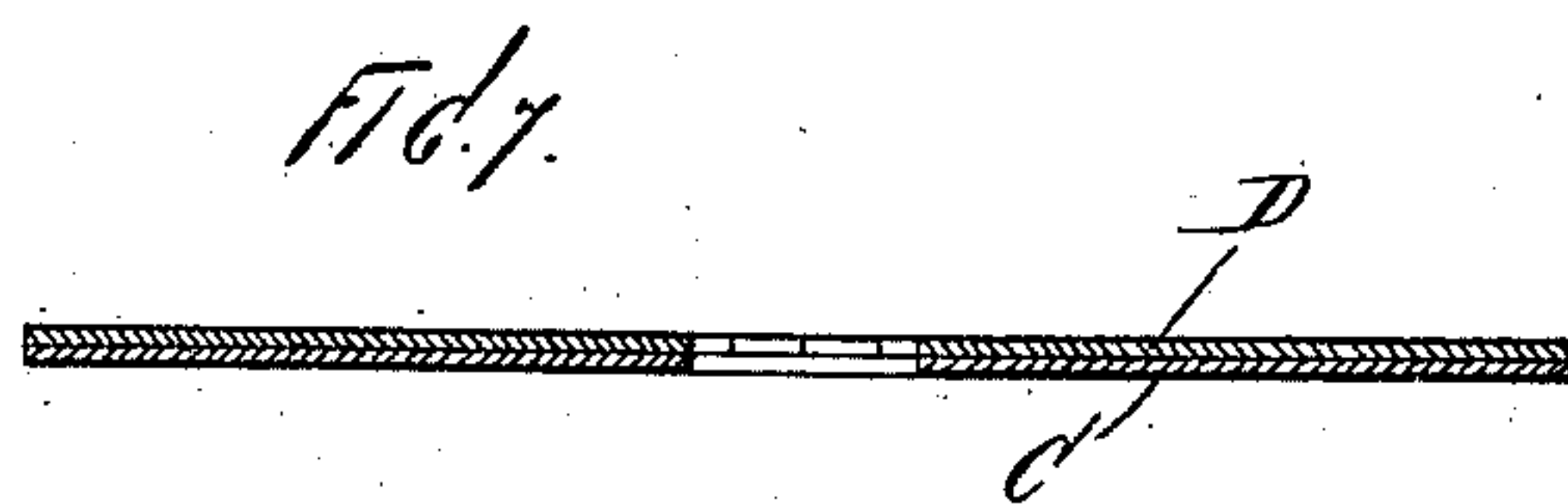
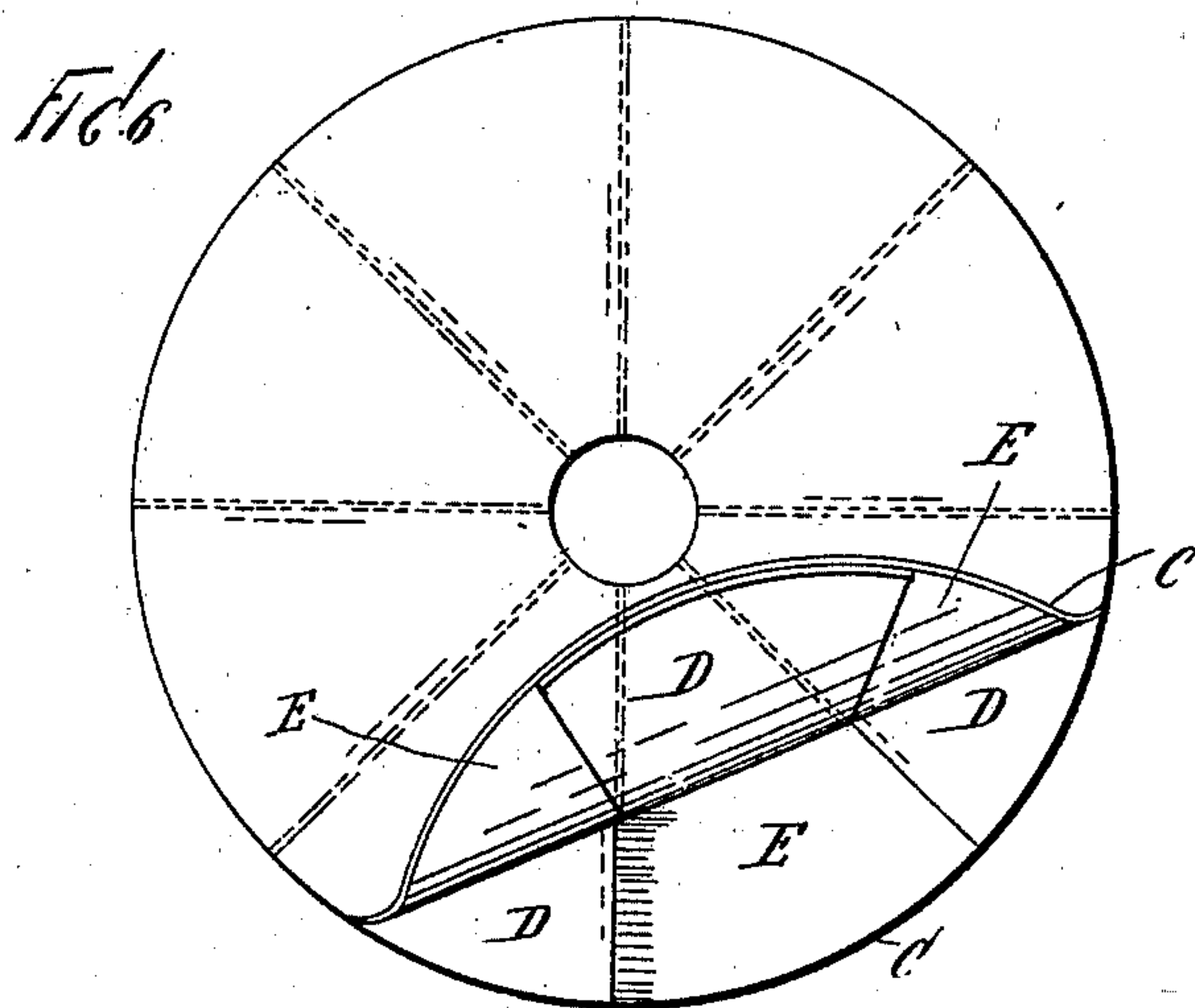
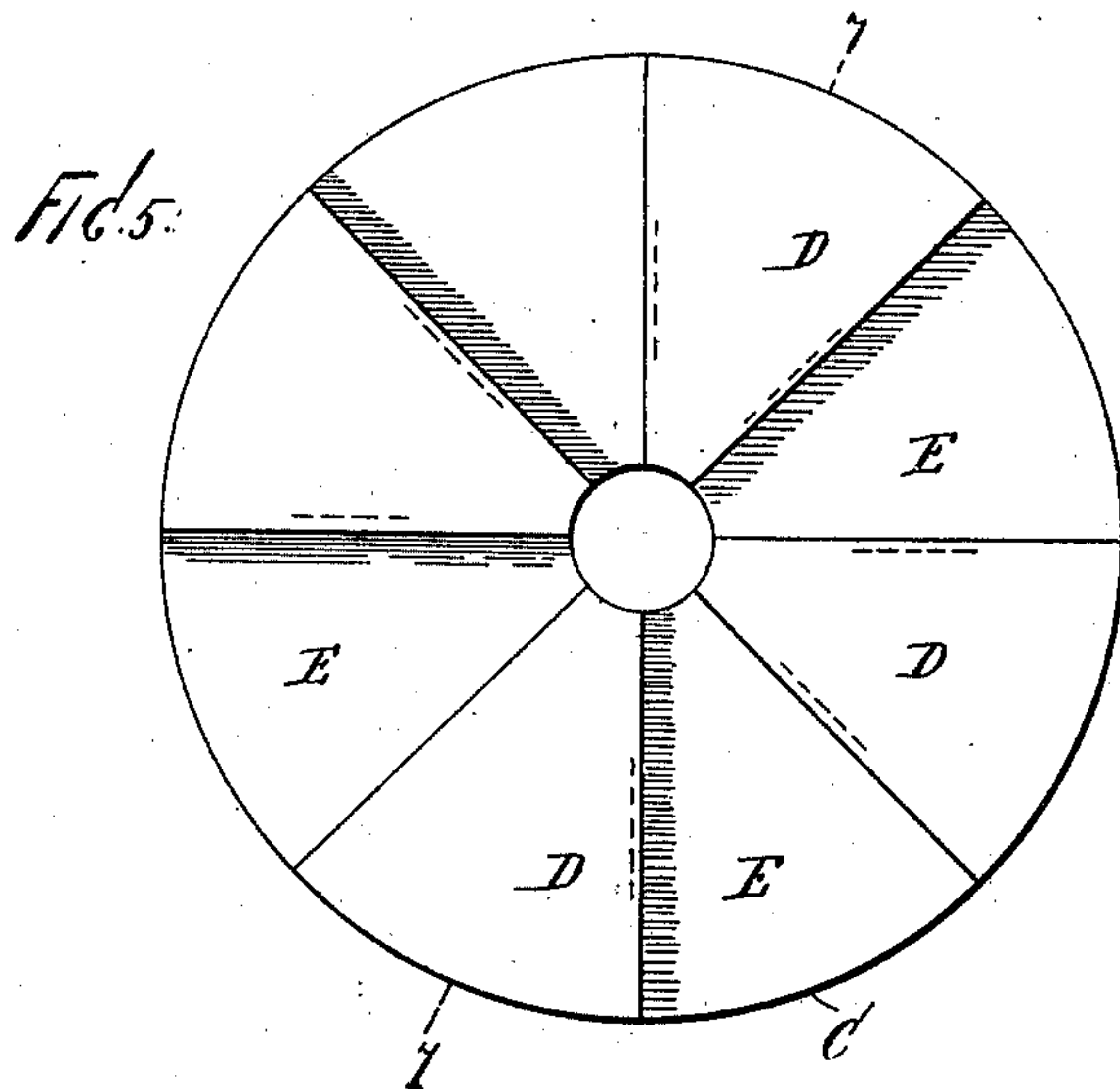
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2 Sheets—Sheet 2.



WITNESSES

John R. Miller,
L. A. Stewart

INVENTOR

BY

Louis Levett
Edgar Sale
ATTORNEYS

UNITED STATES PATENT OFFICE.

LOUIS LEVETT, OF NEW YORK, N. Y.

POLISHING-WHEEL.

SPECIFICATION forming part of Letters Patent No. 663,912, dated December 18, 1900.

Application filed June 2, 1900. Serial No. 18,808. (No model.)

To all whom it may concern:

Be it known that I, LOUIS LEVETT, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Polishing-Wheels, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to polishing-wheels for use in polishing metal and other substances; and the object thereof is to provide an improved wheel of this class which is strong and durable and which is also comparatively inexpensive.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which the separate parts of my improvement are designated by the same reference characters in each of the views, and in which—

Figure 1 is a plan view of a polishing-wheel made according to my invention mounted on the spindle or shaft of a lathe; Fig. 2, a plan view of two of the elements of which my improved polishing-wheel is composed, one of said elements being turned downwardly from the upper side and a portion of the other element broken away so as to show the construction thereof; Fig. 3, a similar view of two of the elements of which my improved polishing-wheel is composed, one of the elements being turned upwardly from the lower side and a portion of the other element being turned up; Fig. 4, a section through one form of one of the elements of which the wheel is composed; Fig. 5, a plan view of a modified form of one of the elements of which my improved polishing-wheel is composed; Fig. 6, a similar view showing two of the elements shown in Fig. 5 connected, with one of said elements being turned up from the bottom; and Fig. 7, a section on the line 7 7 of Fig. 5.

In Fig. 1 of the accompanying drawings I have shown a polishing-wheel A, made according to my invention, which is mounted on the shaft or spindle B of a lathe or other machine, and in the practice of my invention I cut from any suitable textile or woven fabric—such as cotton cloth, woolen cloth, felt, or similar material—a plurality of disks C

and also a plurality of radial sectors D, which are sewed or otherwise secured to one or both sides of the disks C, as shown in Figs. 2 to 4, inclusive.

One of the circular disks C, with the radial sectors secured to either or both sides thereof, forms what I call one of the “elements” of my improved polishing-wheel, and in Fig. 2 I have shown two of these elements connected, one of the same being turned downwardly from the upper side. The element which is not turned down consists of a circular disk C, with radial sectors secured to one side thereof and forming a complete disk, while the element which is turned down shows a circular disk C, with the radial sectors secured to both sides thereof, forming three complete disks. It will thus be seen that the radial sectors D may be secured to one or both sides of the circular disks C, and when they are secured to one side the complete element is of two thicknesses, while when they are secured to both sides the complete element is of three thicknesses.

In Fig. 3 I have shown two of the elements of my improved polishing-wheel connected, one of said elements being turned upwardly and being composed of a circular disk C and radial sectors D secured to one side thereof, and the element which is not turned up is similarly constructed, as is clearly shown in said figure. In the sectional view shown in Fig. 4 the element is composed of a central circular disk C and radial sectors D secured to each side thereof. In practice any number of these elements may be secured together, so as to form the wheel A, and instead of making the disk C and radial sectors D of textile or woven material they may in some cases be made of leather.

In practice the radial sectors D and the disks C, when composed of textile or woven material, are so cut that the warp or woof of the radial sectors will be different from that of the disks, and by reason of this construction the wheels are made strong, durable, and effective.

In Figs. 5 to 7, inclusive, I have shown a modified form of construction in which I employ the circular disk C and the radial sectors D; but the radial sectors D in this form of construction are secured to the disk C, so

as to form corresponding sectoral spaces E of the same dimensions as the radial sectors D, and when two of the elements of this construction are placed together the radial sectors D of one of the disks C fit in the sectoral spaces E of the adjacent disk C and fill said spaces, thus forming an intermediate disk composed entirely of the radial sectors D.

It will be apparent that the radial sectors D may be secured either to one or both sides of the circular disk C, and any number of elements thus formed may be connected in order to produce the buffet-wheel shown in Fig. 1.

I am aware that polishing-wheels have been heretofore made of separate sectoral pieces placed together so as to form circular disks, a number of the same being connected to form the wheel; also, that polishing-wheels have been made of layers of yielding or flexible material, such layers being formed of scraps or fragments, the whole being united together and provided with a central arbor and the completed wheel or wheels being provided with external side disks or single pieces of like material, covering the opposite sides thereof; also, that polishing-wheels composed of separate sectors of textile fabric have been made, the sectors being so arranged that the fiber thereof will run in different directions; but the construction herein shown and described, in which I provide a wheel composed of complete disks of polishing material and intermediate disks composed of separate sectors of polishing material, is new, and by means of this construction I am enabled to produce a polishing-wheel which is strong and durable and comparatively inexpensive when the

material of which the wheel is composed is woven or fabric material and the radial sectors are so cut that the warp and woof thereof run in different directions from the warp and woof of the complete disks.

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

1. A polishing-wheel composed of circular disks of polishing material, and radial sectors of the same material secured to the side of said circular disks, the radial sectors being secured to the side of the circular disks so that when the latter are connected to form a wheel, the said wheel will be composed entirely of circular disks, the alternate disks being composed of radial sectors, substantially as shown and described.

2. A polishing-wheel composed of separate elements, each of which consists of a circular disk of polishing material, and radial sectors secured to the sides thereof, the radial sectors being secured to the sides of the disk in such manner that when a number of said elements are connected to form a wheel, the wheel will be composed of separate disks, the alternate disks being composed of separate radial sectors, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 1st day of June, 1900.

LOUIS LEVETT.

Witnesses:

F. A. STEWART,
V. M. VOSLER.