

No. 747,426.

PATENTED DEC. 22, 1903.

J. HORMBY.
BUFFER WHEEL.

APPLICATION FILED MAY 8, 1903.

NO MODEL.

Fig. 1

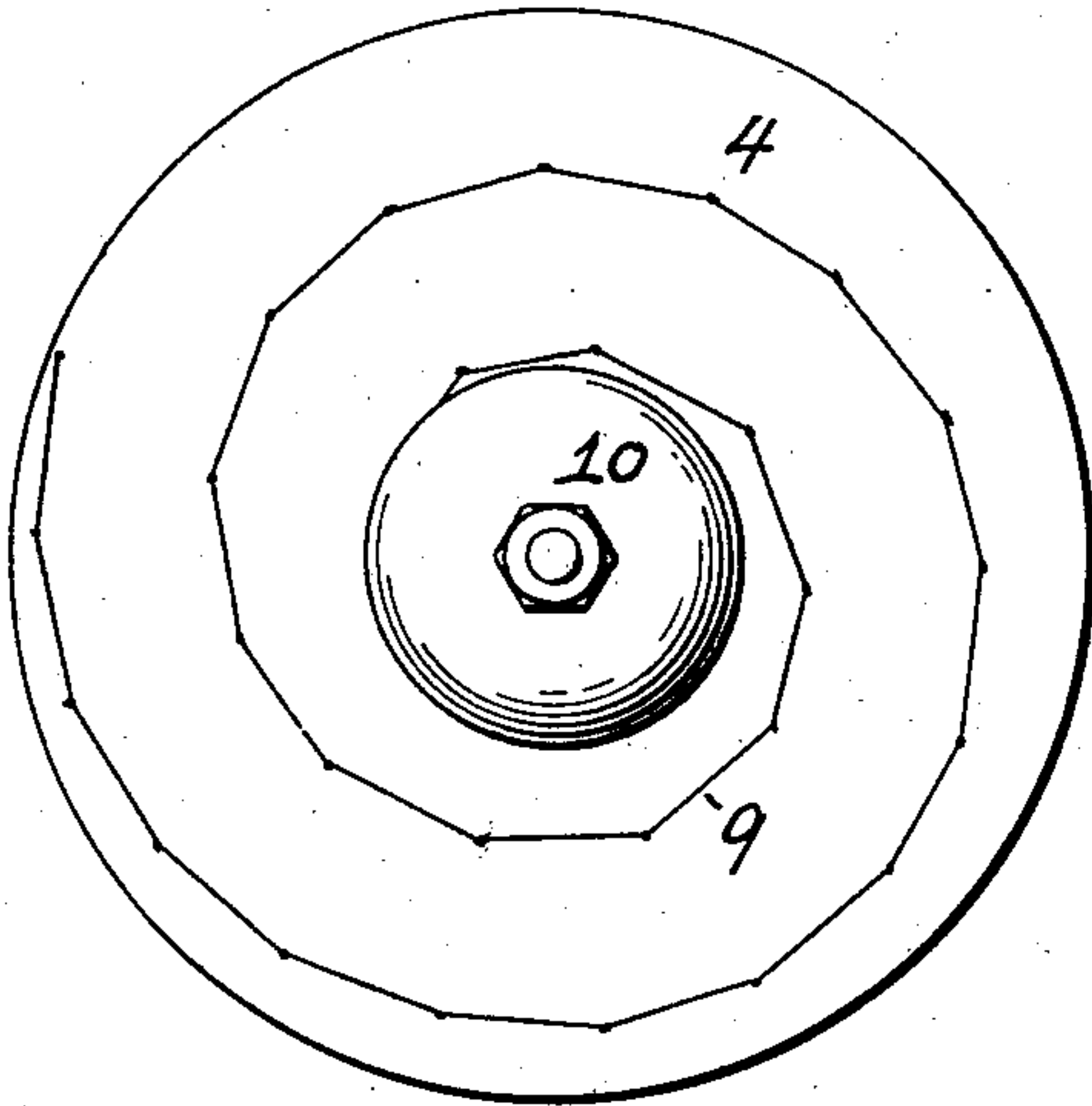


Fig. 2

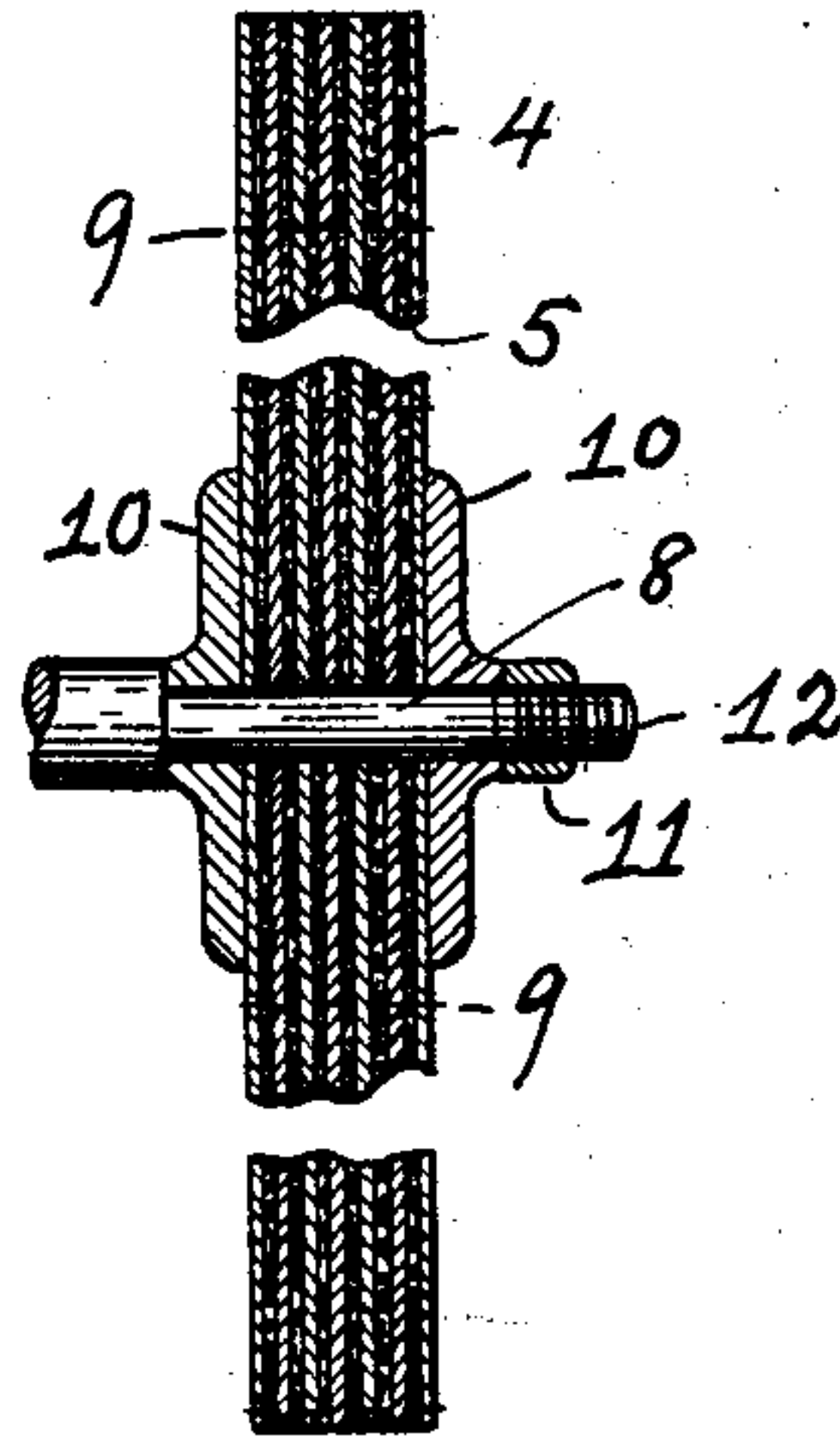


Fig. 3

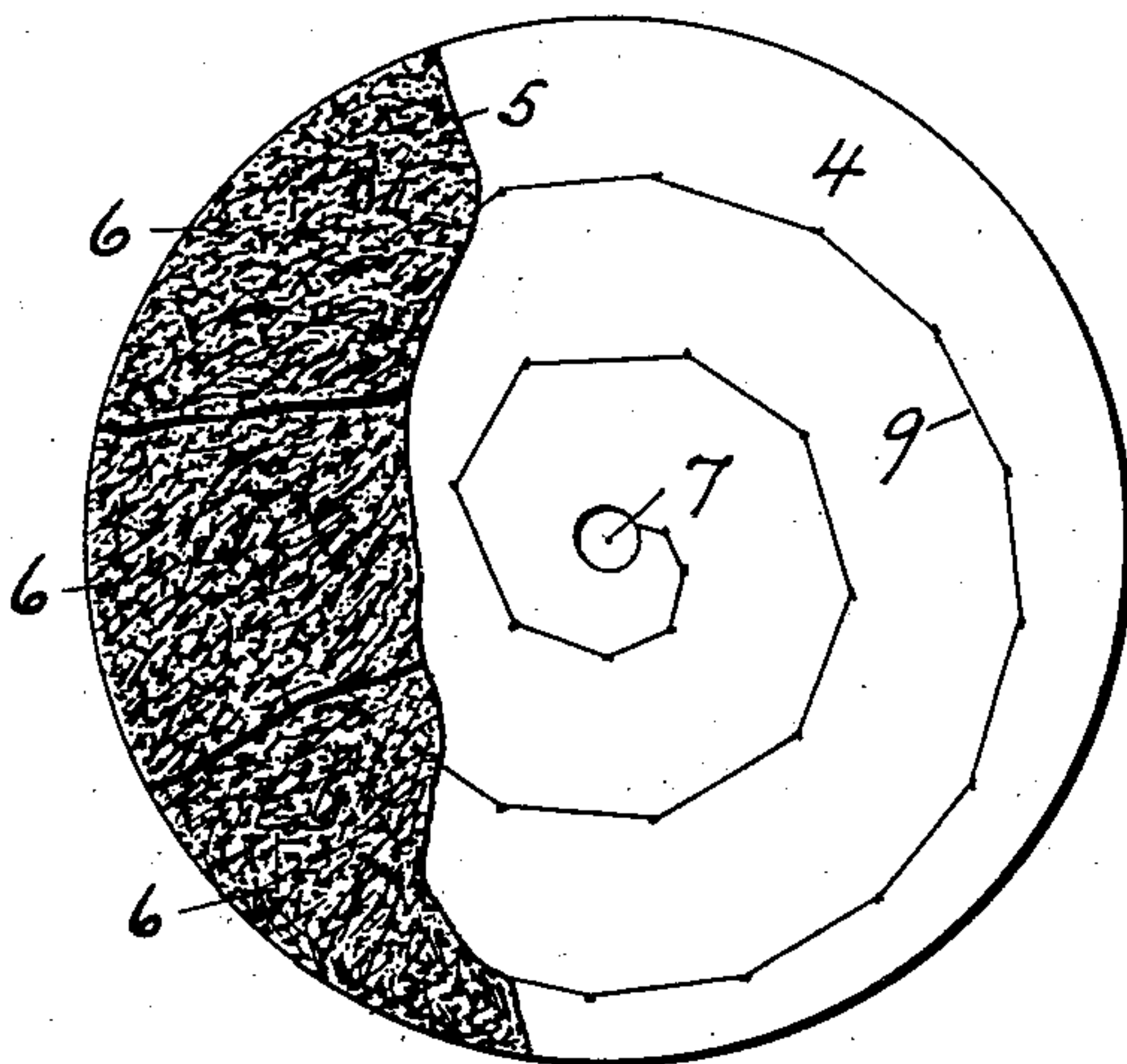
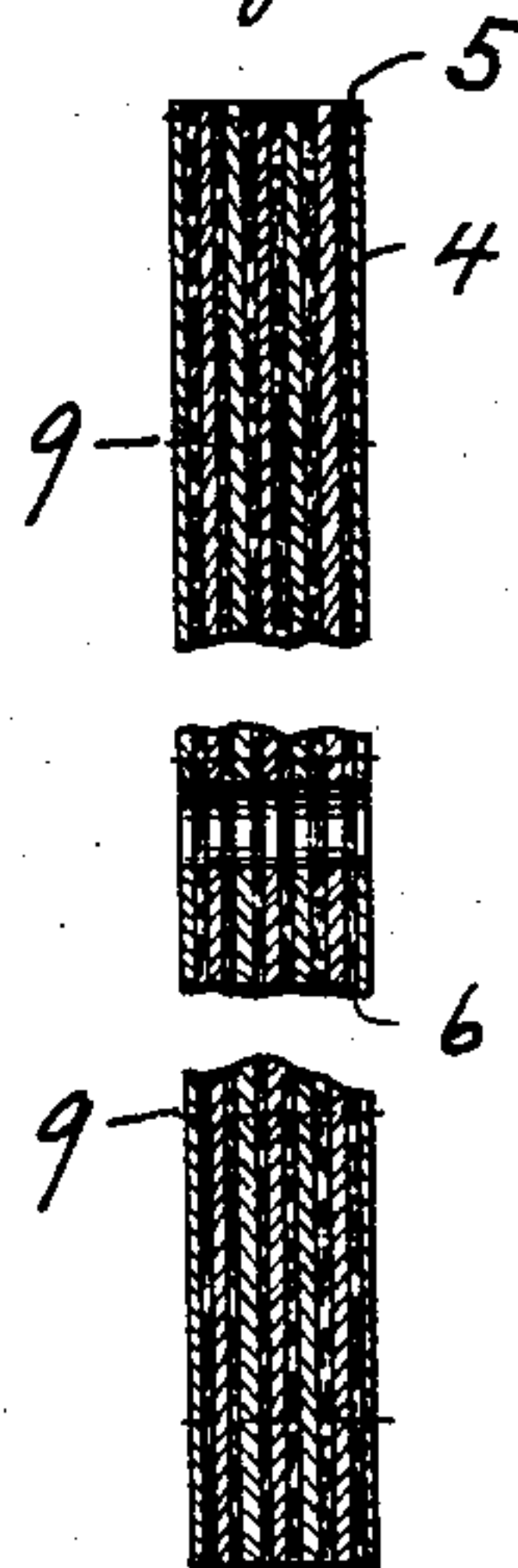


Fig. 4



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN HORMBY, OF WOONSOCKET, RHODE ISLAND.

BUFFER-WHEEL.

SPECIFICATION forming part of Letters Patent No. 747,426, dated December 22, 1903.

Application filed May 8, 1903. Serial No. 156,177. (No model.)

To all whom it may concern:

Be it known that I, JOHN HORMBY, a citizen of the United States, and a resident of Woonsocket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Buffer-Wheels, of which the following is a specification.

My invention relates to buffer-wheels, and has for its object the production of a wheel permanently charged with a proper quality and amount of polishing material.

My experience in the use of buffer-wheels has been confined mainly to the button-making trade; but I infer that difficulties similar to those which I have encountered exist in analogous situations in other trades in which this class of machines are employed. In the button trade wheels of this description have been made of a series of circular leaves of muslin, cloth, or similar fabric squeezed together and mounted upon an axle at right angles to the plane of each leaf. The wheels so made have been attempted to be charged with some kind of polishing material. This was done by bringing intermittently in contact with a point on the surface of the rapidly-revolving wheel a stick of rouge or similar material. Such sticks of rouge are composed of a mixture of red peroxid of iron and some waxy material which have been incorporated into a comparatively homogeneous body under the action of heat or in some similar manner and made into sticks. When the rouge stick touches the edge of the revolving buffer-leaf, the friction caused by the contact melts the waxy stick somewhat and transfers a portion of its material to the buff; but as a matter of fact the bulk of it drops to the floor. There are disadvantages about this practice which are obvious. The rouge stick wears away at one place and not at another, it is not always uniform in quality, and the buffer-leaves are not always charged with the proper quantity of material.

My invention has for its object the overcoming of these difficulties and the continued use of flexible buffer-leaves and provides, further, for the charging of such leaves with oil, which is desirable, and with polishing-powder, which is necessary, in such a manner as to always provide the surface of the buff with an oily layer of the polishing material.

To that end I make the buffer-leaves of circular sheets of cotton cloth, muslin, or similar fabric. I then charge them by first sprinkling or soaking them with oil, preferably a somewhat heavy sticky oil. The leaves should not be soaked or saturated with the oil so as to drip, but should be fairly moist and sticky. I then sprinkle or dust a suitable polishing-powder—for instance, tripoli, red oxid of iron, infusorial earth, or any other powder suitable to be used with the material to be buffed—on the moistened leaves. One or both sides of the leaves may be charged, this to be determined by the subsequent use to which the buffer-wheel is to be put. The excess of dry powder is then shaken off and the leaves are secured together. I prefer sewing to any other form of securing them together, because there is in such case less likelihood of hard particles appearing at the edges of the buff as the leaves wear down; but the leaves may be secured together in any other suitable manner without departing from the principle of my invention. The buffer-wheel made in this way wears evenly. It is always supplied at its edges with a suitable quantity of the polishing material, and, moreover, material of an oily nature.

The lint which flies off from the usual dry buffer-wheel is notably absent with my wheel, and the health of the workman is therefore not endangered. The addition of the polishing-powder increases the weight of the wheel, and therefore improves its steadiness and enables the workman to press heavier against it without spreading and to do more work in less time, and the powder also increases the thickness of the wheel for the same number of leaves.

In the drawings, Figure 1 is a side elevation of one of my improved buffer-wheels mounted upon a shaft. Fig. 2 is a central transverse vertical section of the same, showing a portion of the shaft in elevation. Fig. 3 is a side elevation of my improved buffer-wheel removed from the shaft and showing parts broken away to disclose parts underneath the same, and Fig. 4 is a central transverse vertical section thereof.

In the drawings, 4 is the buffer-wheel, composed of a plurality of leaves 5, of cloth or other suitable material, the surfaces of which

have been charged with an oily substance and dusted with a polishing powder, (represented by the numeral 6.) The leaves are each provided with a central aperture 7 to admit of the passage of the shaft 8 through them.

9 represents the stitches of thread whereby the leaves are held together, and the leaves are shown secured in position upon the shaft by suitable fastening-plates 10 and nut-lock 11, the latter engaging the threaded end 12 of the shaft.

What I claim as new is—

A buffer-wheel comprising a plurality of leaves of cloth individually charged with an oily substance and polishing-powder and suitably secured together.

Witness my hand this 1st day of May, 1903, at the city of Woonsocket, in the county of Providence and State of Rhode Island.

JOHN HORMBY.

Witnesses:

CHARLES H. MCFEE,
JAMES J. SMITH.