

No. 681,960.

Patented Sept. 3, 1901.

R. FLANIGAN.
SPINNING TOOL.

(Application filed May 15, 1901.)

(No Model.)

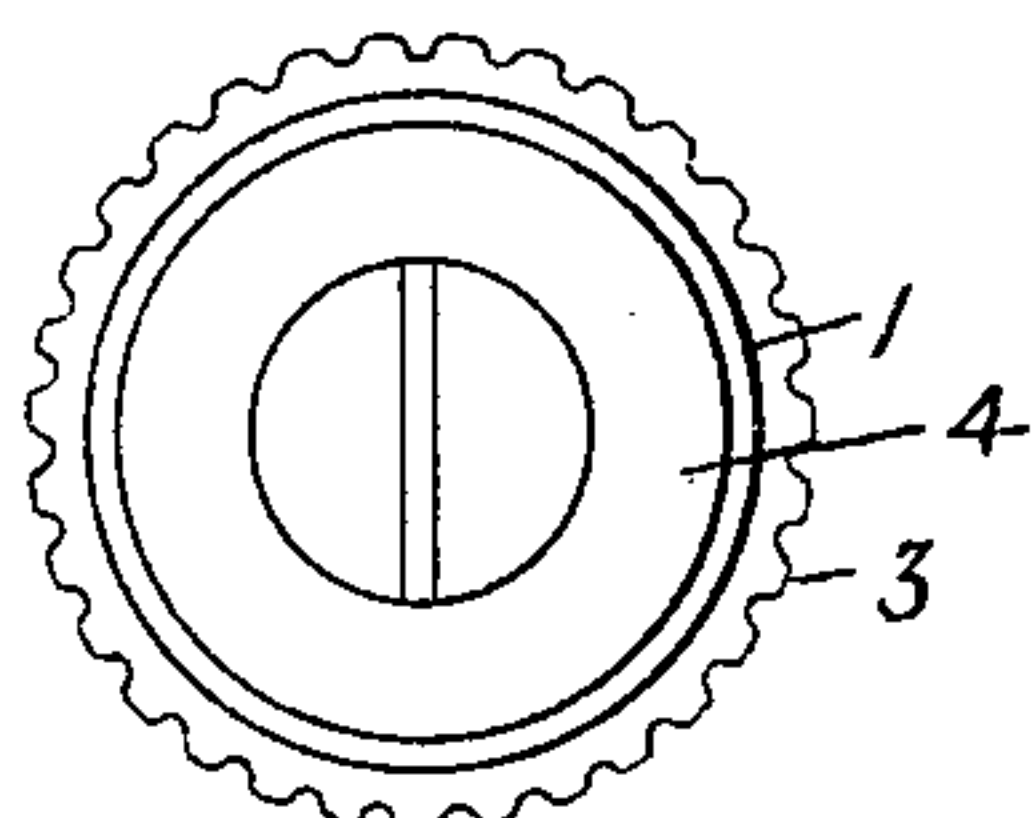


Fig. 2.

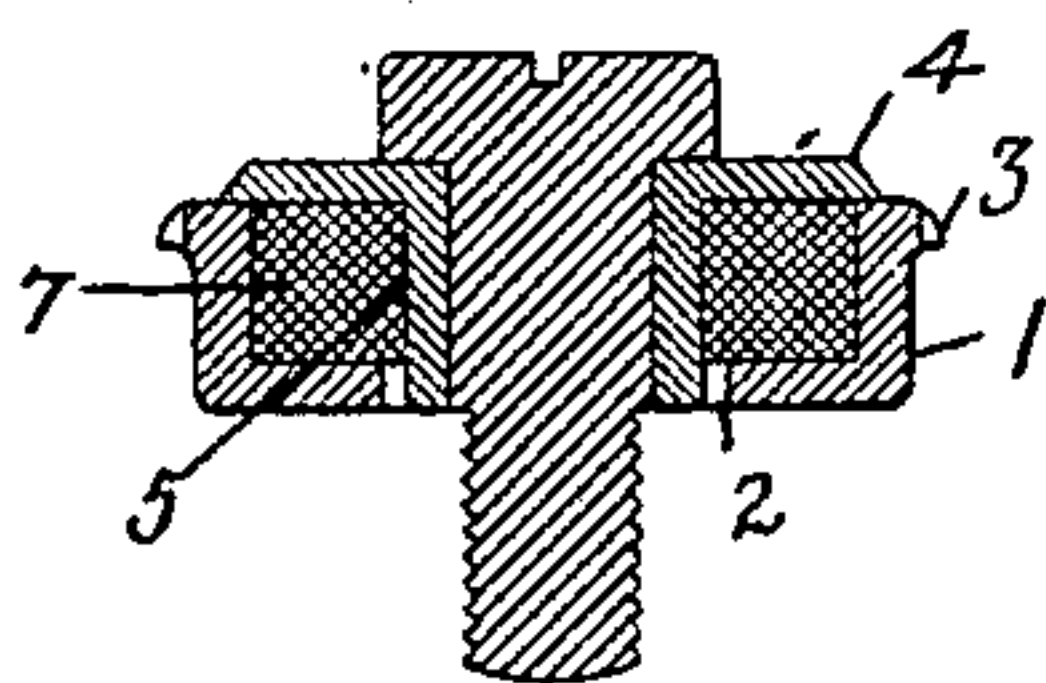


Fig. 3.

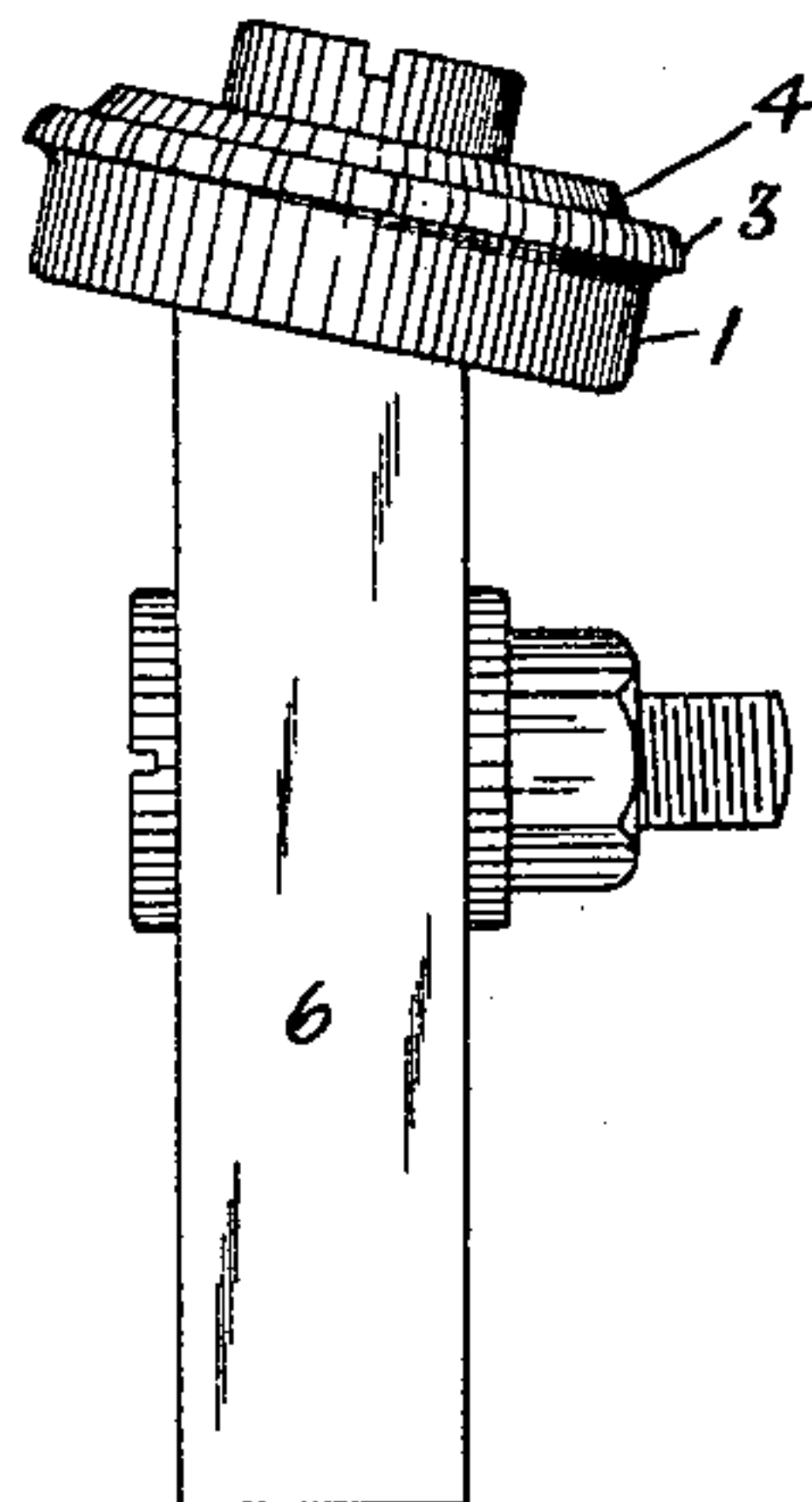


Fig. 1.

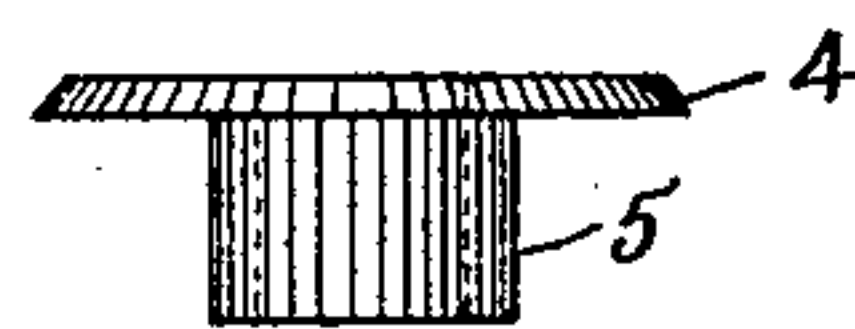


Fig. 4.

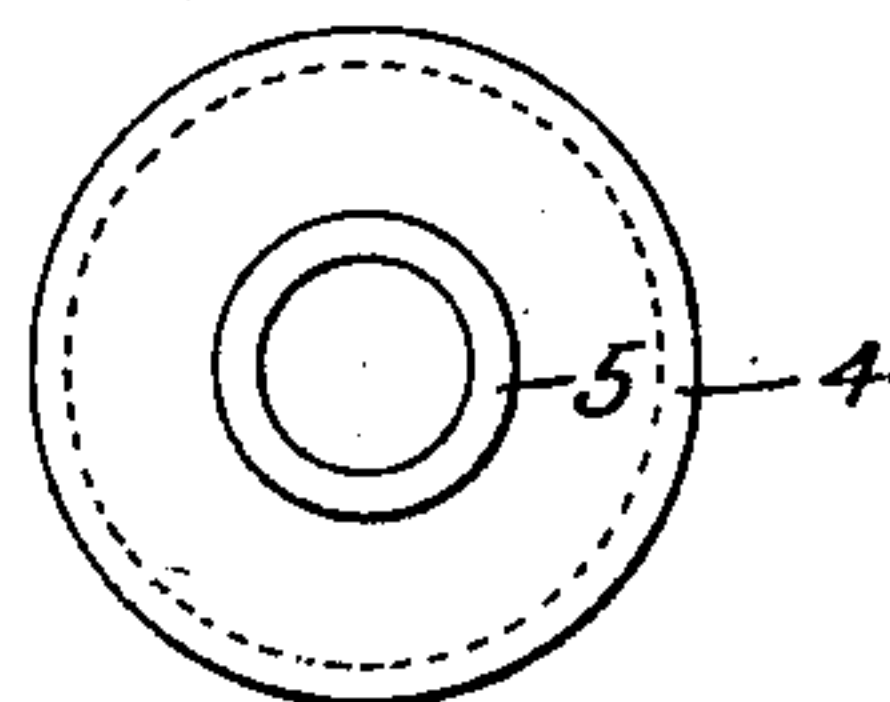


Fig. 5.

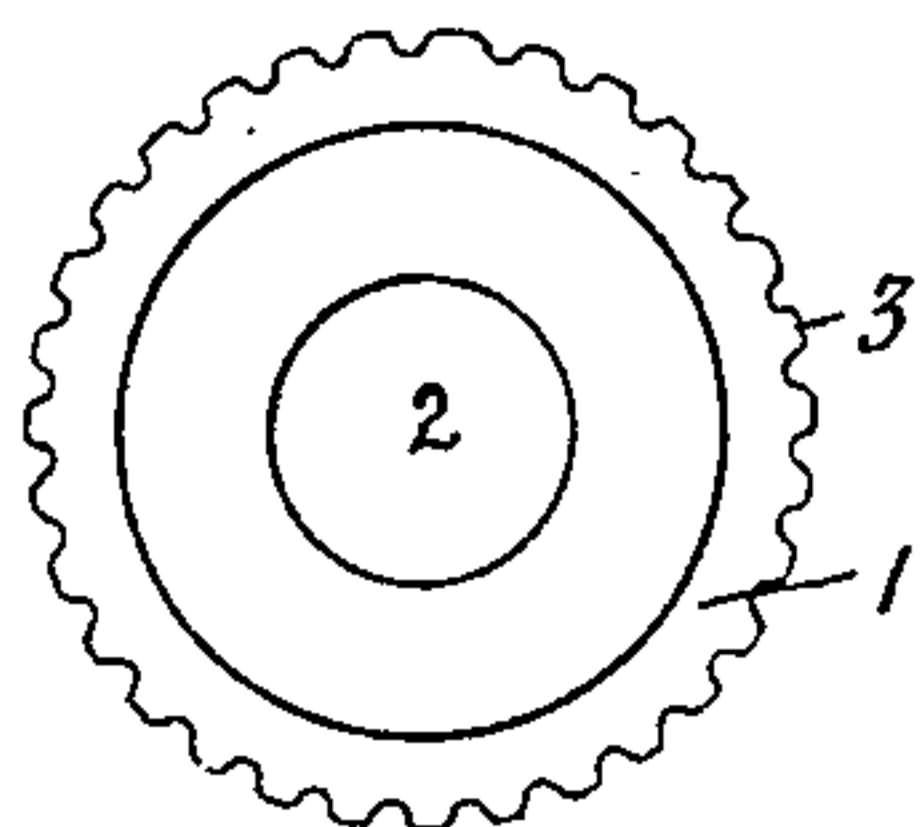


Fig. 6.

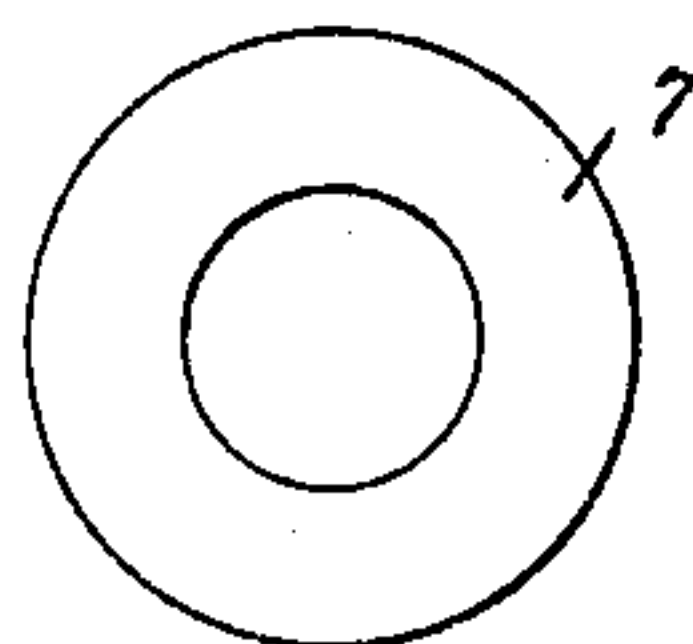


Fig. 8.

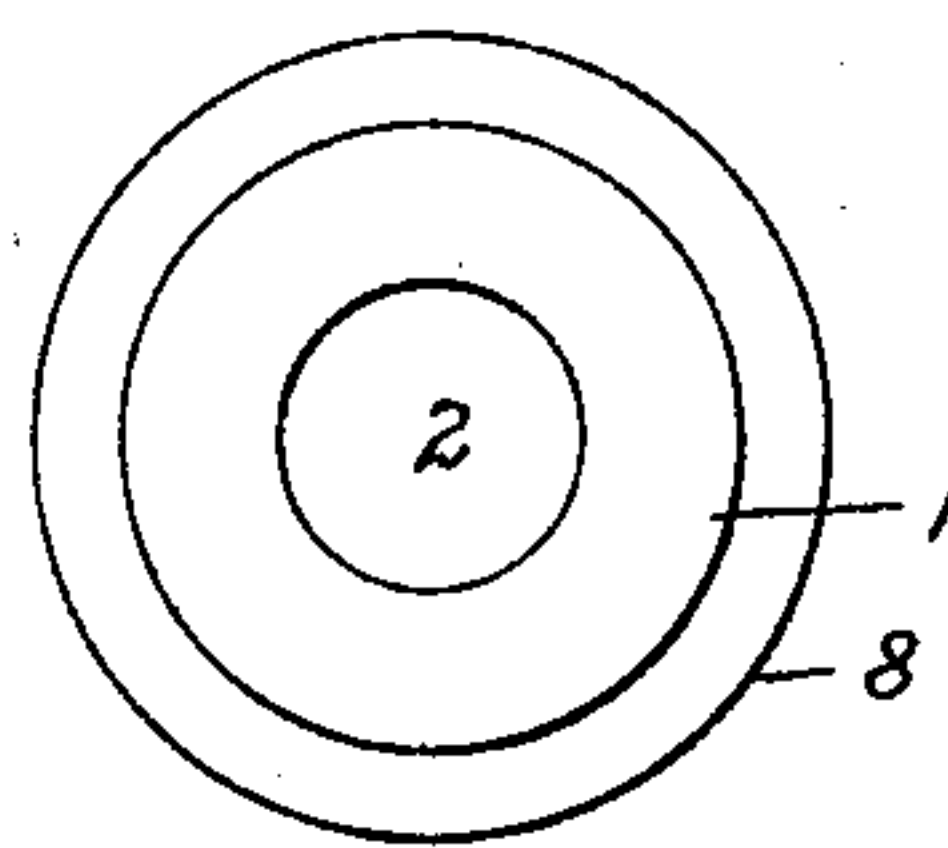


Fig. 10.



Fig. 7.



Fig. 9.



Fig. 11.

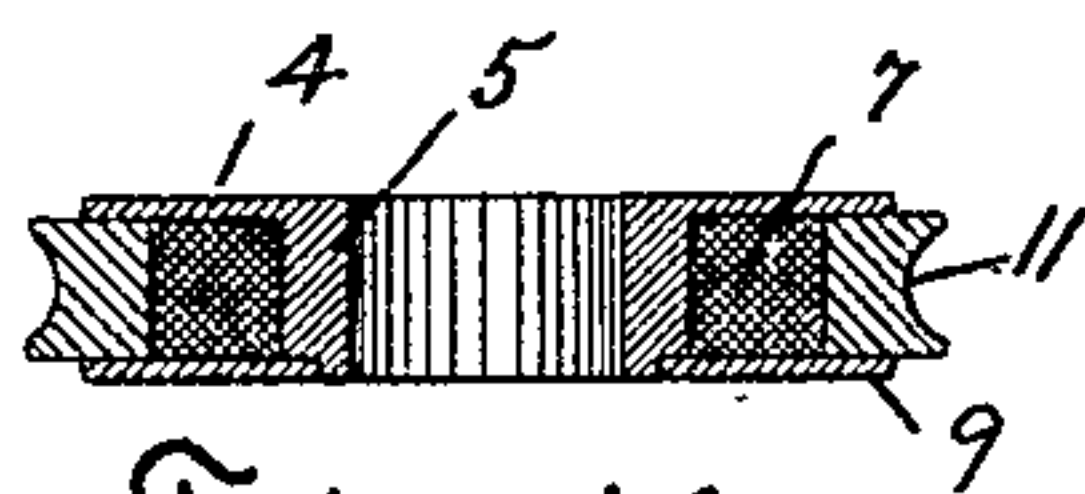


Fig. 14.

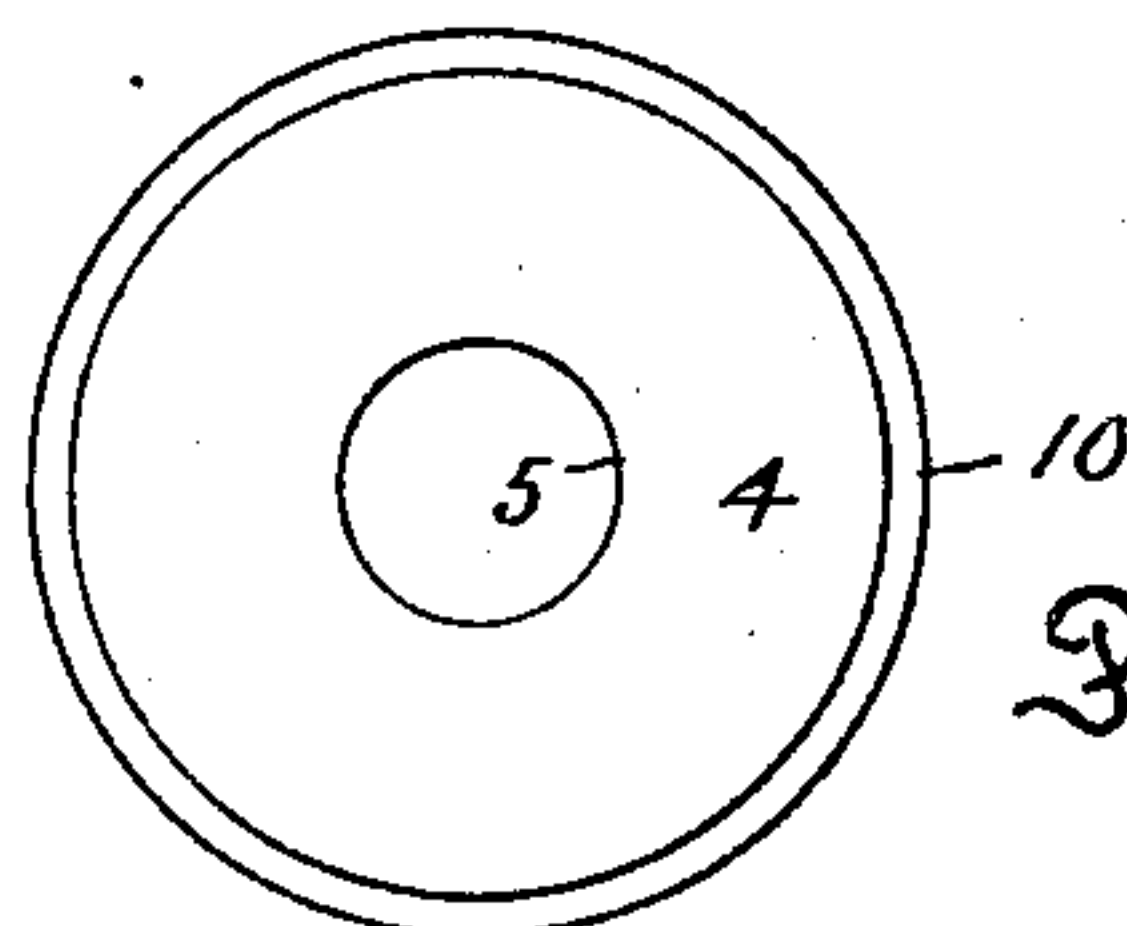


Fig. 12.

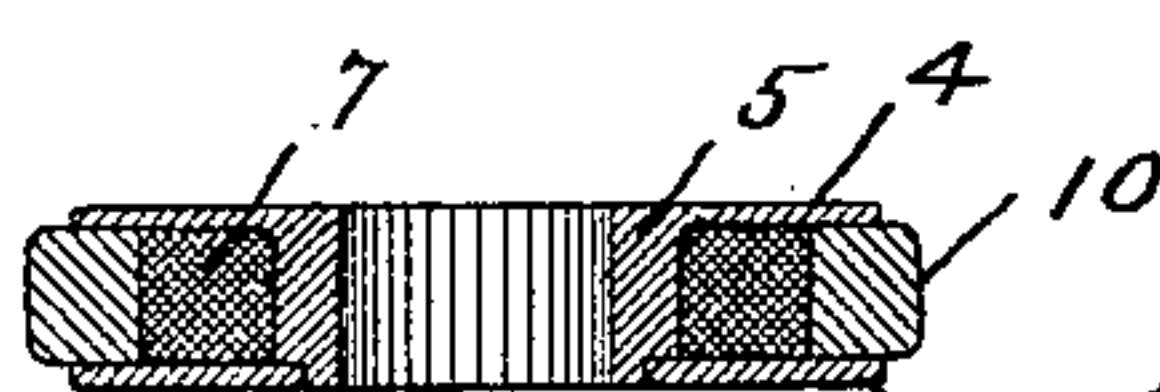


Fig. 13.

Witnesses:
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Attorney.

UNITED STATES PATENT OFFICE.

ROBERT FLANIGAN, OF BALTIMORE, MARYLAND.

SPINNING-TOOL.

SPECIFICATION forming part of Letters Patent No. 681,960, dated September 3, 1901.

Application filed May 15, 1901. Serial No. 60,270. (No model.)

To all whom it may concern:

Be it known that I, ROBERT FLANIGAN, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Spinning-Tools, of which the following is a specification.

This invention relates to improvements in spinning-tools.

10 The object of the invention is to provide a resilient tool of such a construction as to permit of spinning metal around an uneven or indented surface, and is especially adapted for spinning metal around glass surfaces,
15 such as bottle-necks, which latter are generally uneven and which are frequently broken by the use of a rigid tool. I do not wish, however, to be understood as limiting the use of my invention to spinning metal around
20 uneven or indented surfaces, as it is obvious it may be used for any kind of metal spinning.

The invention consists of the new and novel parts and combination of parts herein-
25 after more fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of my invention secured to a post and having a corrugated flange for spinning and at same time fluting or corrugating
30 metal. Fig. 2 is a plan view of same. Fig. 3 is a vertical central section. Fig. 4 is a side elevation of the flanged hub. Fig. 5 is an inverted plan view of same. Fig. 6 is a
35 detailed plan view of the cup-shaped metal ring having a corrugated flange. Fig. 7 is a side elevation of same. Fig. 8 is a plan view of the rubber ring which fits within the cup-shaped ring and around the hub. Fig. 9 is a
40 side elevation of same. Fig. 10 is a detailed plan view of a modification of the cup-shaped ring, having a plain flange instead of the corrugated flange. Fig. 11 is a side elevation of
45 same. Fig. 12 is a plan view of another modification of my invention, showing the elastic ring around the hub and held between the flange of said hub and a metal disk and a metal ring around said elastic ring. Fig. 13 is a vertical central section of same, and Fig.

14 is a further modification showing a con- 50
caved metal ring surrounding the elastic ring instead of a convexed ring, as shown in Figs. 12 and 13.

Similar numerals refer to like and corresponding parts throughout the several views. 55

Referring to the accompanying drawings, forming part of this specification, 1 designates a metal cup-shaped ring, having a central aperture 2 and a corrugated flange 3 for the purpose of spinning and at the same time 60
corrugating or fluting the metal. Resting upon the upper surface of the cup-shaped ring 1 is the flange 4 of the hub 5, which latter extends down through and is slightly smaller in circumference than the central aperture 2 65
in the cup-shaped ring 1. The hub 5 extends slightly below the lower surface of the ring 1, so that when the tool is secured to the post 6, as shown in Fig. 1, the lower end of the hub 5 will impinge against the said post and 70
allow the cup-shaped ring 1 to reciprocate on the hub 5. Fitted within the said cup-shaped ring 1 and surrounding the hub 5 is an elastic ring 7, of rubber or other suitable material, which serves to keep the cup-shaped ring 1 to 75
its normal position relative to the hub 5 and which allows the said ring 1 to yield when it is forced against the metal with sufficient force to overcome the tension and displace the rubber ring 7. When the metal is being spun, 80
should the surface to which the said metal is to be spun be uneven or indented the elastic ring 7 allows the said ring 1 to yield and accommodate itself to the said surface.

In Figs. 10 and 11 I have shown a modifi- 85
cation of the cup-shaped ring 1, the flange 8 at the upper edge of which is plain instead of corrugated, as shown in the previous figures.

In Figs. 12 and 13 I have shown another 90
modification, in which a disk 9 is riveted to the lower end of the hub 5, and a convexed metal ring 10 surrounds the elastic ring 7 and is held in position and allowed to reciprocate laterally between the disk 9 and the flange 4 95
of the hub 5.

In Fig. 14 I have shown a further modification, in which a concaved ring 11 is used

instead of the convexed ring shown in Figs. 12 and 13.

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

1. As an article of manufacture a corrugated spinning-tool.
2. As an article of manufacture a spinning-tool having a corrugated flange.
3. In a spinning-tool, the combination of a hub; a ring surrounding said hub and having a laterally-projecting annular flange at its upper end; and means between said hub and ring to allow the latter to yield laterally on said hub.
4. In a spinning-tool, the combination of a cup-shaped ring having a central aperture therein and a laterally-projecting annular flange at its upper end; a flanged hub slightly smaller in circumference than the central aperture in said ring and having the flange resting upon the upper edge of the said ring;

and an elastic ring between said cup-shaped ring and hub.

5. In a spinning-tool, the combination of a cup-shaped ring having a central aperture therein and a laterally-projecting annular flange at its upper end; a flanged hub projecting through the said aperture and adapted to be fitted over a spindle; and an elastic ring between said cup-shaped ring and hub.

6. In a spinning-tool, the combination of a hub; a ring surrounding said hub and having a laterally-projecting annular corrugated flange at its upper end; and means between said hub and ring to allow the latter to yield laterally on said hub.

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

ROBERT FLANIGAN.

Witnesses:

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GEORGE H. READ.