

W. I. MILLER.
 MASSAGING DEVICE.
 APPLICATION FILED APR. 27, 1908.

912,016.

Patented Feb. 9, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

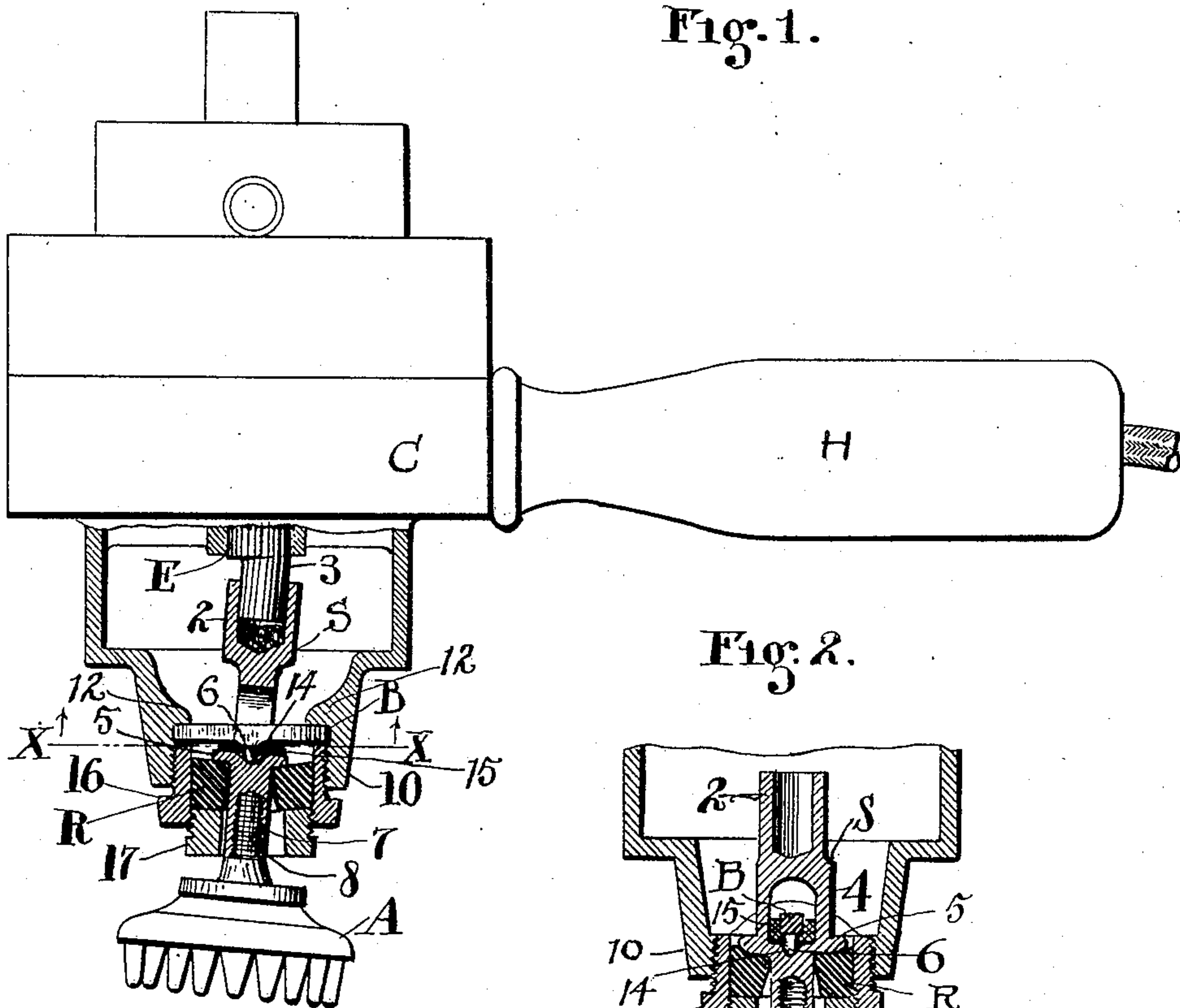


Fig. 2.

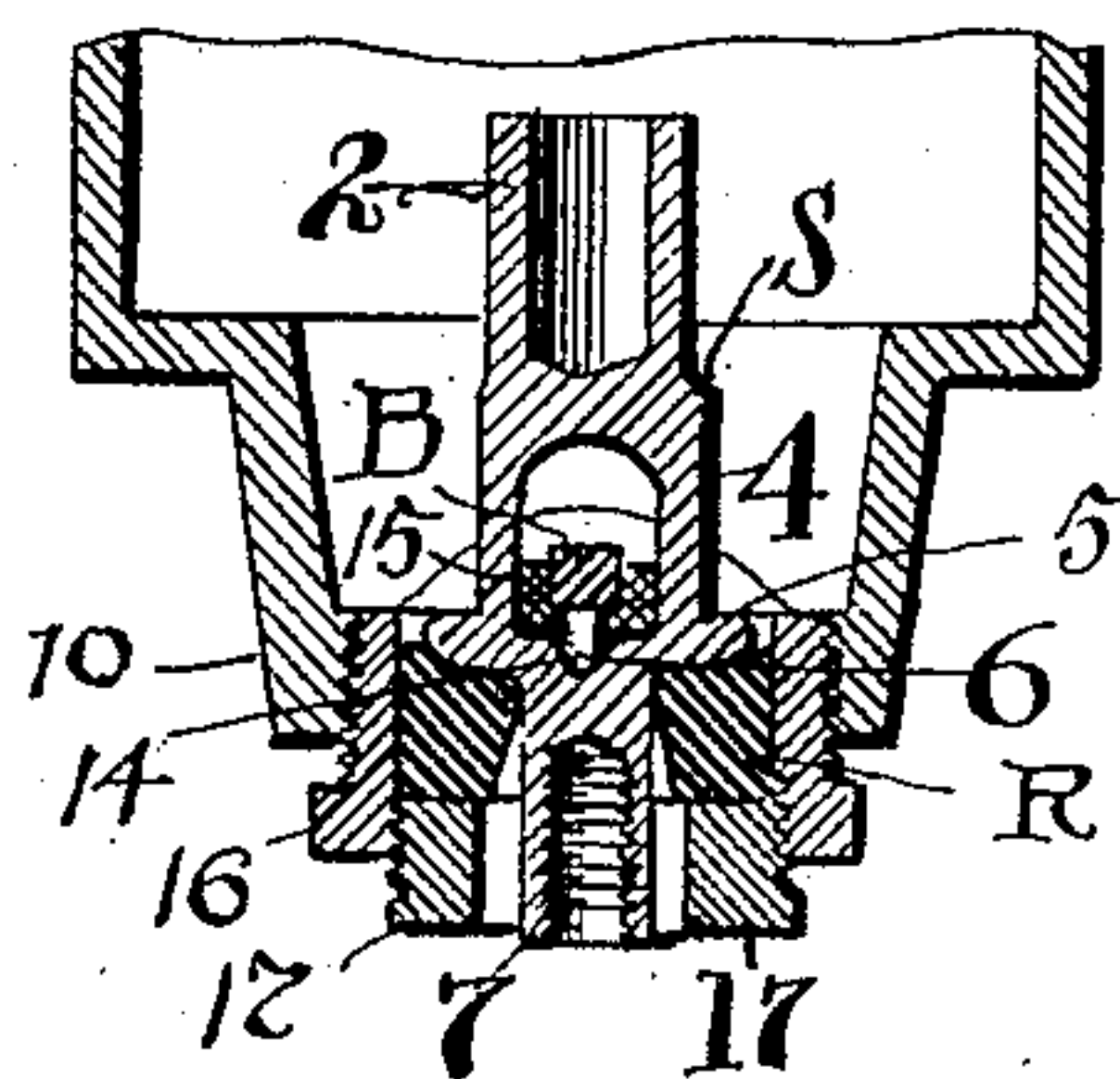


Fig. 4.

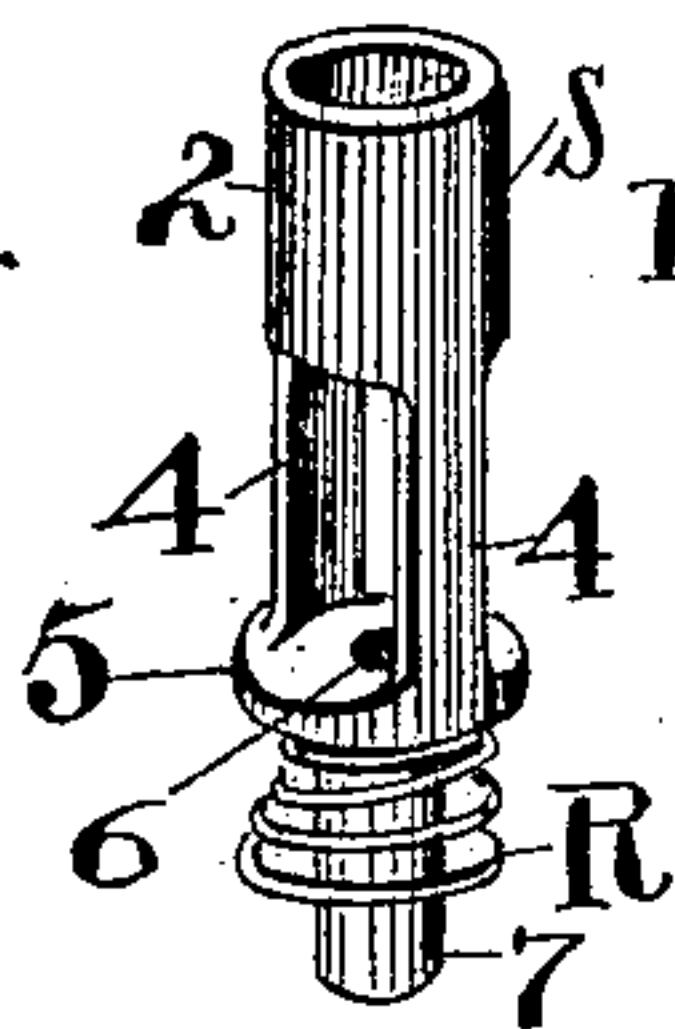


Fig. 5.

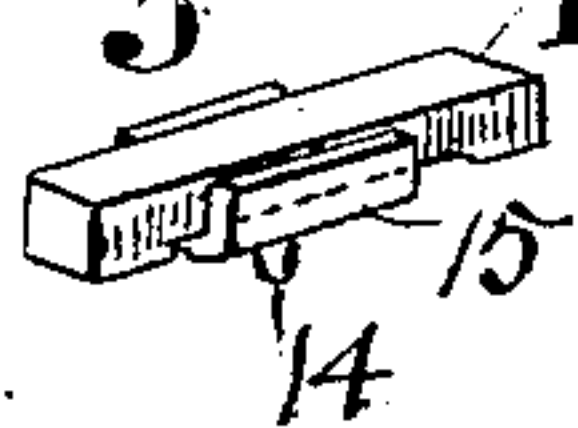


Fig. 6.

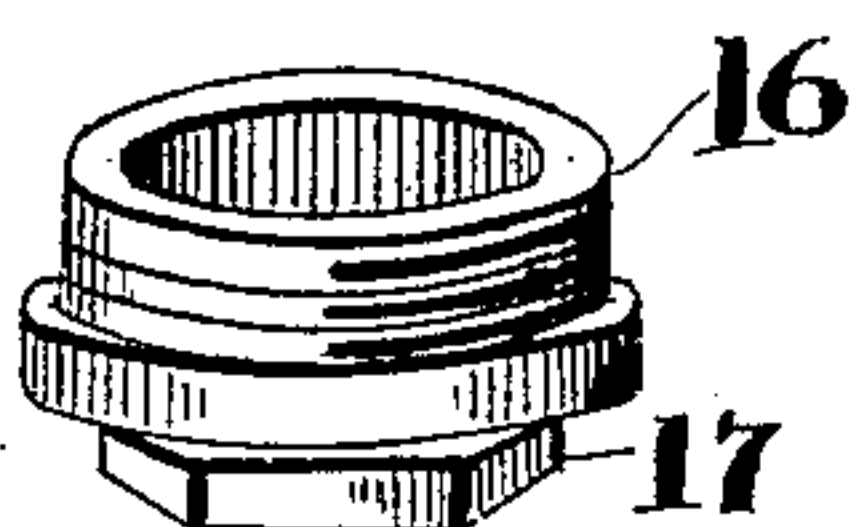
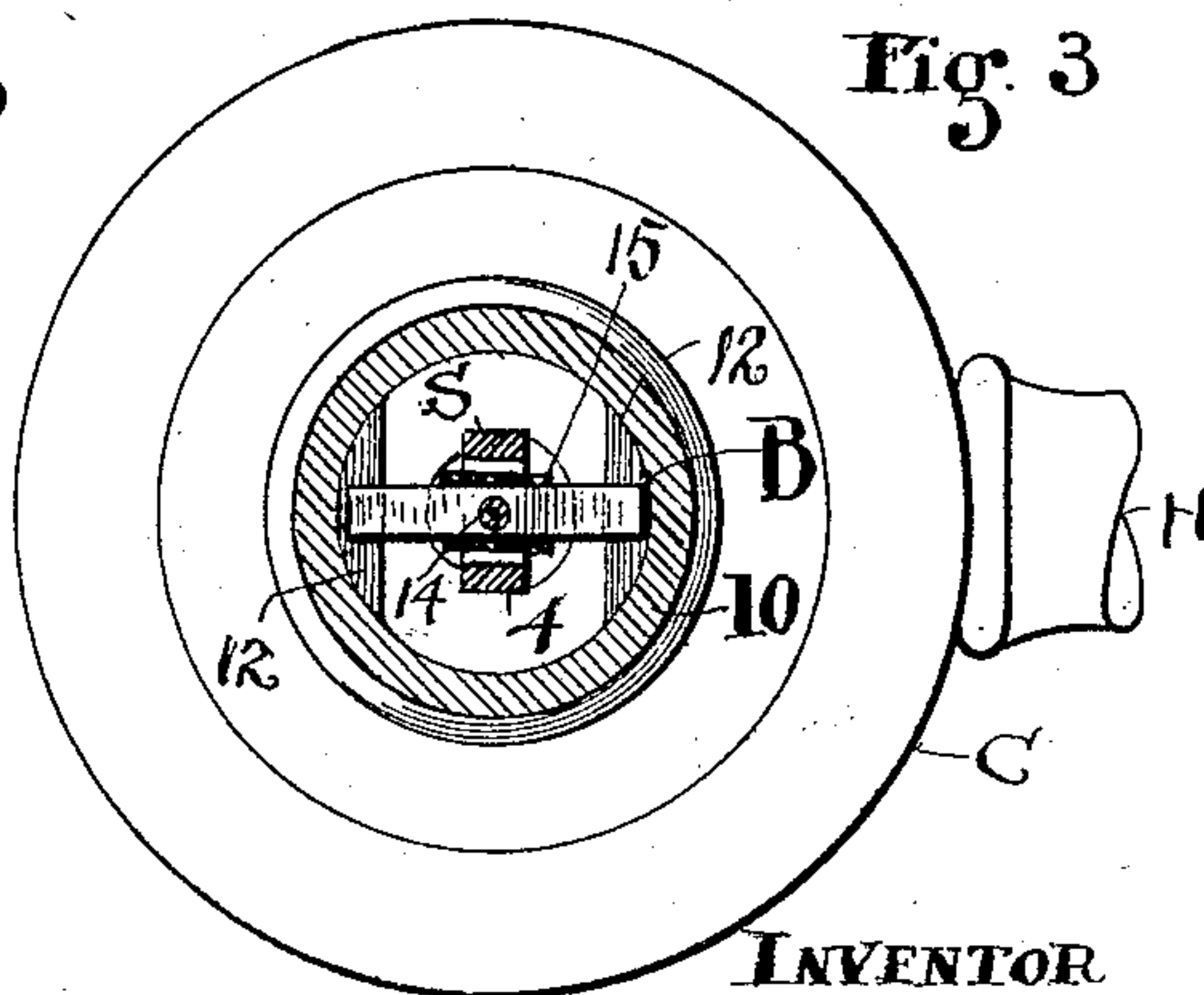


Fig. 3



ATTEST
E. M. Fisher
L. J. Kimball

INVENTOR
W. I. Miller
 BY *Fisher & Moser* ATTYS.

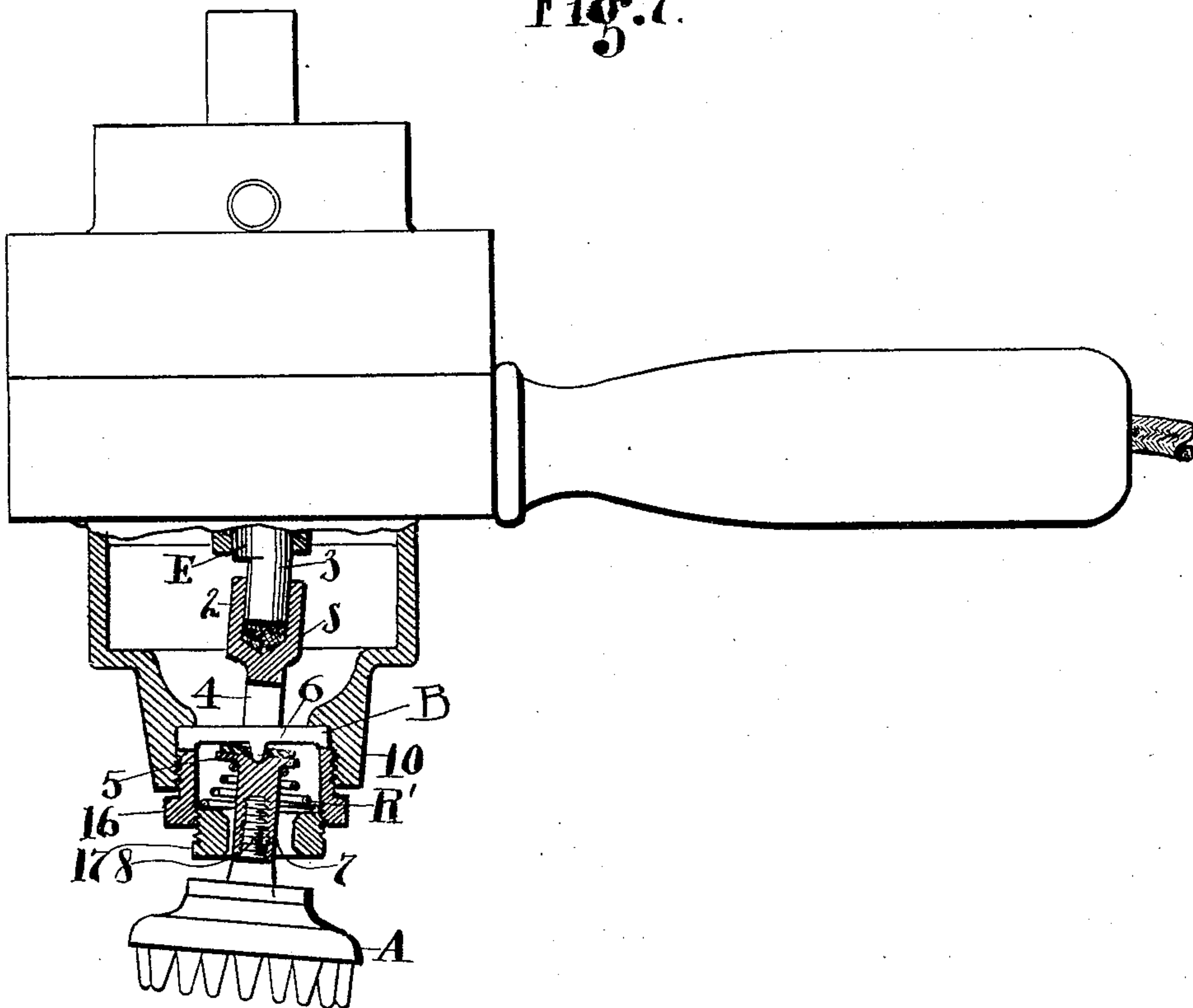
W. I. MILLER.
 MASSAGING DEVICE.
 APPLICATION FILED APR. 27, 1908.

912,016.

Patented Feb. 9, 1909.

2 SHEETS—SHEET 2.

Fig. 7.



ATTEST

E. M. Fisher
F. C. Musson

INVENTOR

Willis I. Miller

BY *Fisher & Moser* ATTYS

UNITED STATES PATENT OFFICE.

WILLIS I. MILLER, OF CLEVELAND, OHIO

MASSAGING DEVICE.

No. 912,016.

Specification of Letters Patent.

Patented Feb. 9, 1909.

Application filed April 27, 1908. Serial No. 429,511.

To all whom it may concern:

Be it known that I, WILLIS I. MILLER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Massaging Devices, and do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to massaging devices, and the invention consists more particularly in the novel means for giving a gyratory movement to the applicator, substantially as shown and described and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of the device or instrument containing my invention and showing the portion which more especially embodies the invention in sectional lines. Fig. 2 is a sectional view at right angles to the portion of the device shown in Fig. 1 and with the parts in normal or balanced position. Fig. 3 is a cross section looking upward on line $x-x$, Fig. 1. Fig. 4 is a perspective detail of the rock support or spindle which carries and actuates the applicator, and Fig. 5 is a perspective view of the rock piece or bar from which the said spindle gets its gyratory or vibratory movements. Fig. 6 is a perspective view of the combined cap and nut which confines the parts in working relation. Fig. 7 is a side elevation of the device showing the working parts in sectional view with a spirally coiled wire spring in lieu of a rubber spring as in Fig. 1, otherwise identical with Fig. 1.

As thus shown the device comprises a suitable shell or casing C and handle H, and a crank shaft E from which power is communicated to the applicator support or spindle S. The said spindle, so-called, has a socket portion 2 at its inner end sleeved over or upon the crank end 3 of motor shaft E, and an integral yoke 4 at its middle adapted to receive and engage the rock-bar B. The said yoke, so-called, is represented by two side portions 4, terminating below in a substantially disk shaped formation 5 in the center and top of which there is a cavity 6. Next beneath said cavity the said spindle has an internally threaded stem 7 adapted to receive the externally threaded stem 8 of the applicator A.

The main casing C has a reduced axial extension terminating in an internally threaded portion 10 within which the operating parts are especially located, and having inner ledges or flanges 12 oppositely next above its internal thread adapted to engage the ends of rock-bar B and hold the same in fixed working position. Said bar has a spur or pivot point 14 on its bottom and leather or like lining 15, preferably on its bottom and sides about said pin, and said pin is adapted to engage in said cavity 6 in the applicator spindle and serve as a point of oscillation or gyration, more properly speaking, of said spindle. In other words said spindle has this single and reduced point of union with bar B as its rocking point under the initial actuation through eccentric 3 on main shaft E. The said parts are confined in working position and relation by a combination cap, in this instance, and a rubber support or seat R. The said cap comprises a substantially ring or band shaped nut 16 which is screwed into threaded socket 10 against cross-bar B and adapted to lock it in place against said flanges 12. The rubber seat R for spindle S is sleeved over stem 7 thereon within ring nut 16 and pressed against the disk or flange 5 on said spindle. The nut 17 is then threaded into nut 16 against the rubber seat or spring member R and thus a yielding support is interposed relatively beneath the rocking point of spindle S and in such relation thereto that it will yield equally all around as said spindle turns on its pivot and by which accommodation is made for its gyratory movements. The equivalent of said rubber R is shown in a spiral spring R', in Fig. 4. In some instances a one part cap instead of the two parts 16 and 17 may be used, but the separate part or nut 17 allows for tightening or loosening the spring member R or R', and to take up wear and slack.

Upon removing nut 16, all the parts including bar B and support S, may be taken from the casing and separated and any part thereof inspected and repaired or renewed.

What I claim is:

1. The device described comprising a casing and a spindle adapted to affix an applicator thereto having a yoke at its middle, a bar passing transversely through said yoke and having a reduced bearing point in said yoke, an operating shaft eccentrically engaged with said spindle, a nut locking said

bar in said casing, an applicator having a stem and a spring bearing beneath said yoke about said stem and adapted to support the applicator in working position and afford
5 movement thereof.

2. The device described comprising a spindle adapted to carry an applicator and a main shaft eccentrically engaging one end of said spindle, in combination with a cross
10 piece passing transversely through said spindle having a pivot point for the spindle, a spring to hold said spindle against said pivot point, separate nuts to lock said spring and cross piece in operating position,
15 and an applicator supported axially against said cross piece and said spring holding the applicator in working position.

3. The combination consisting of the cas-

ing, the main shaft, and a spindle eccentrically engaged with said shaft, a rock-bar
20 passing through said spindle and having a bearing point on its outer side engaged by the spindle, a spring bearing against a lateral flange on the spindle and adapted to hold the spindle in working engagement
25 with said bar, a nut engaging the ends of said bar in said casing and another nut engaging said spring and holding the same in place, and an applicator on the outer extremity of said spindle.
30

In testimony whereof I sign this specification in the presence of two witnesses.

WILLIS I. MILLER.

Witnesses:

E. M. FISHER,

R. B. MOSER.