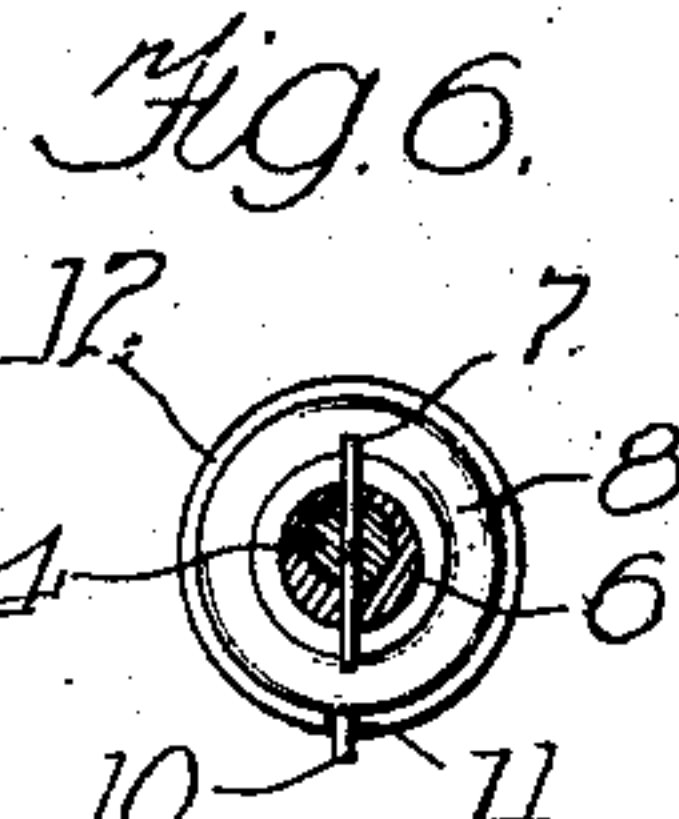
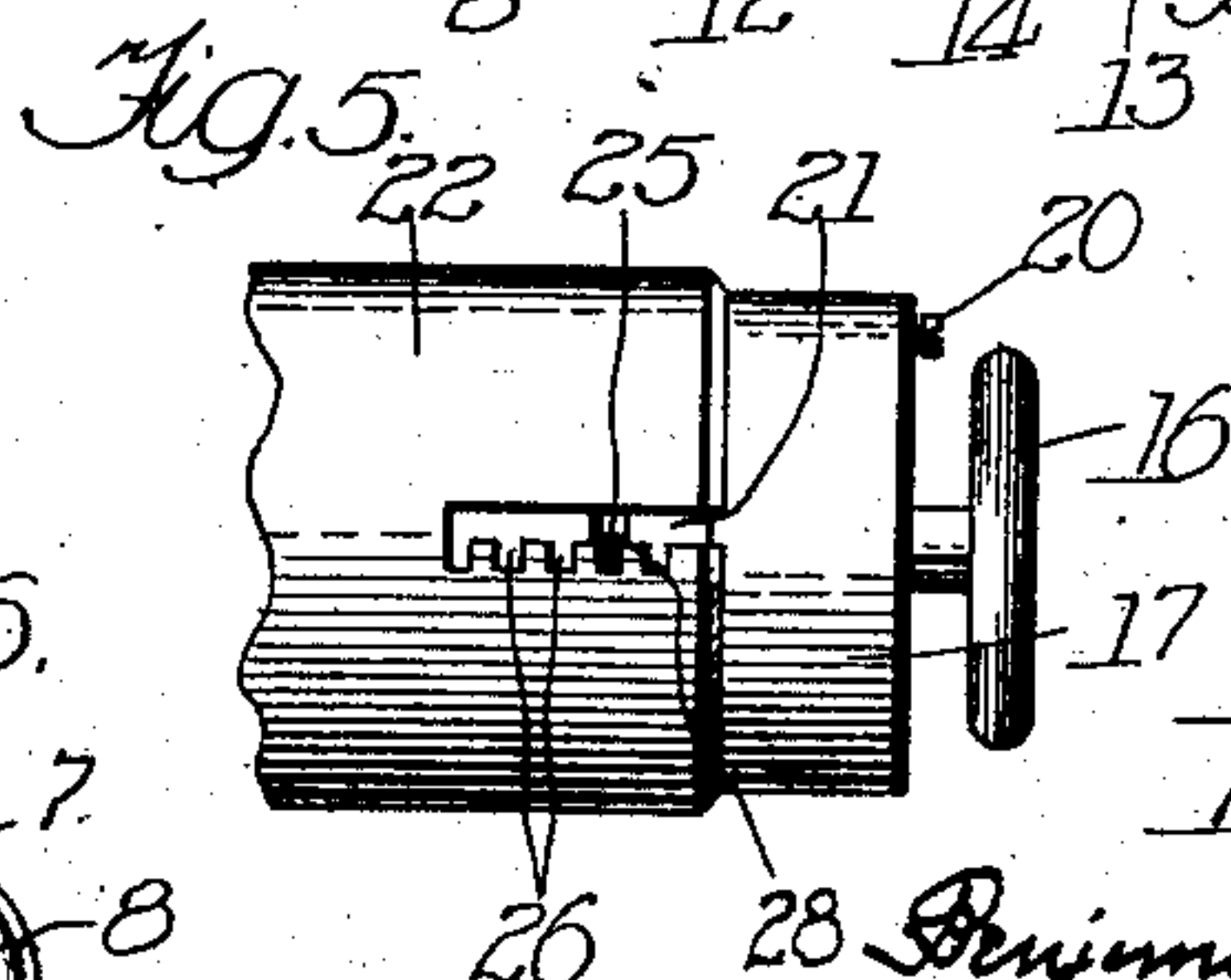
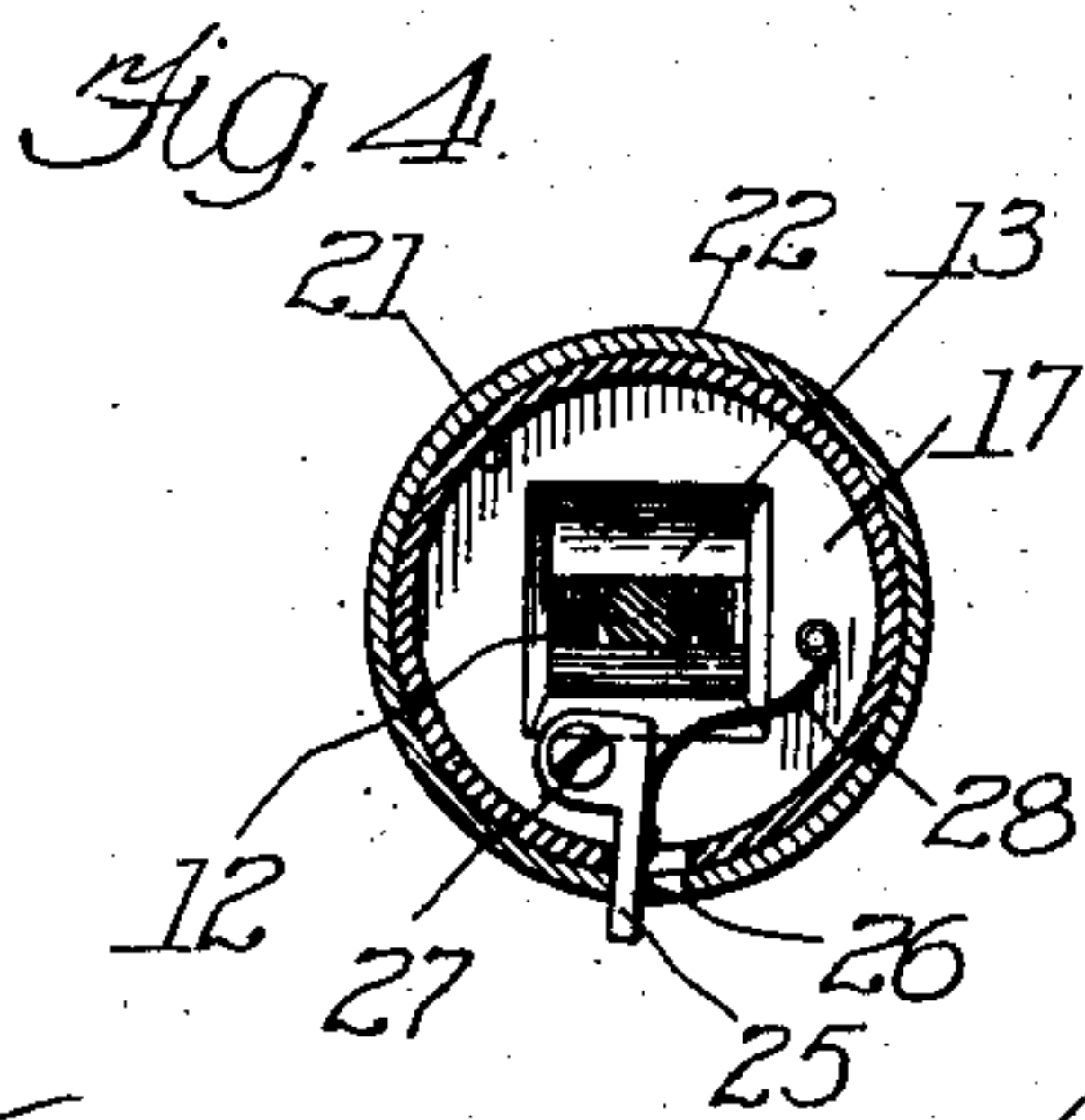
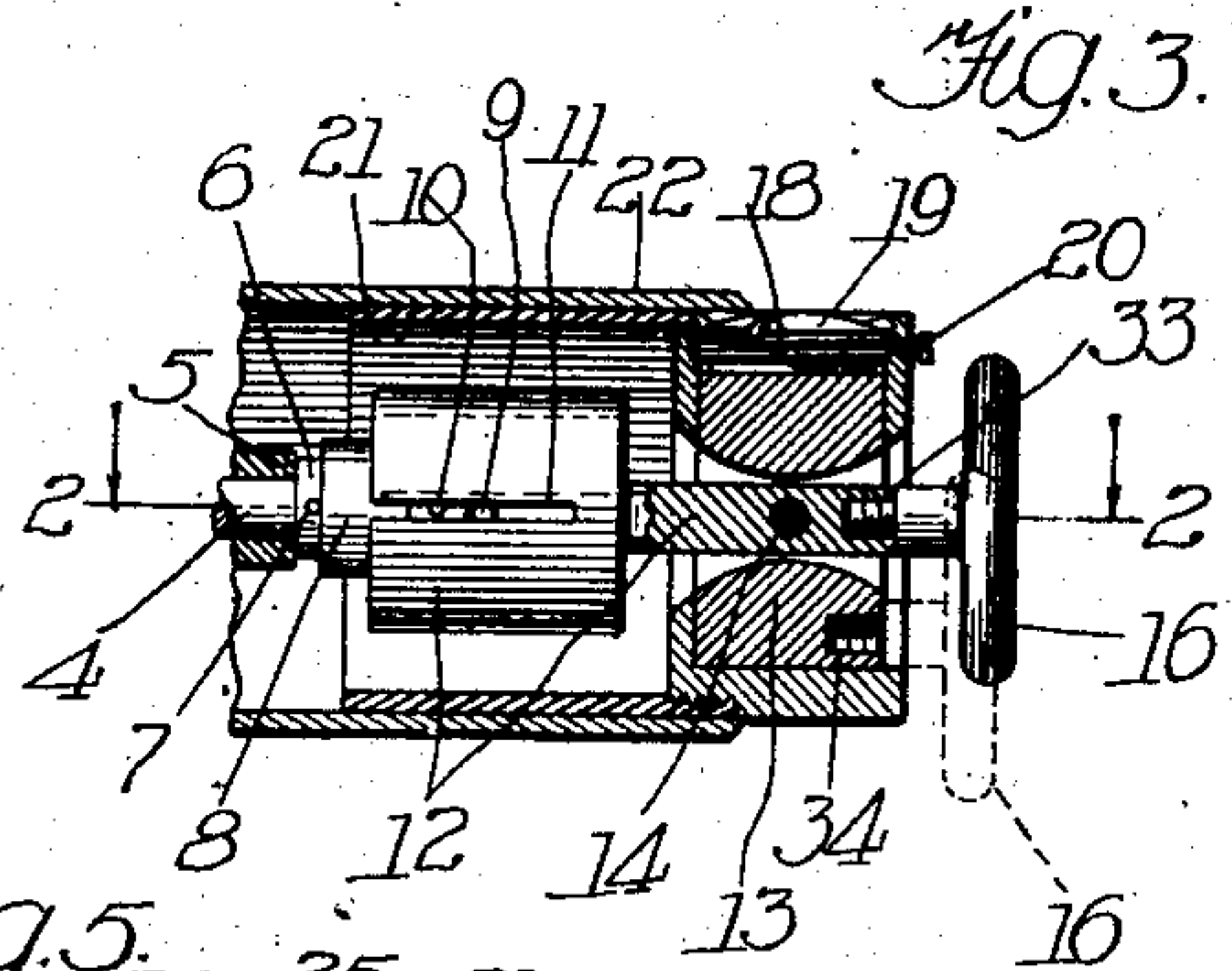
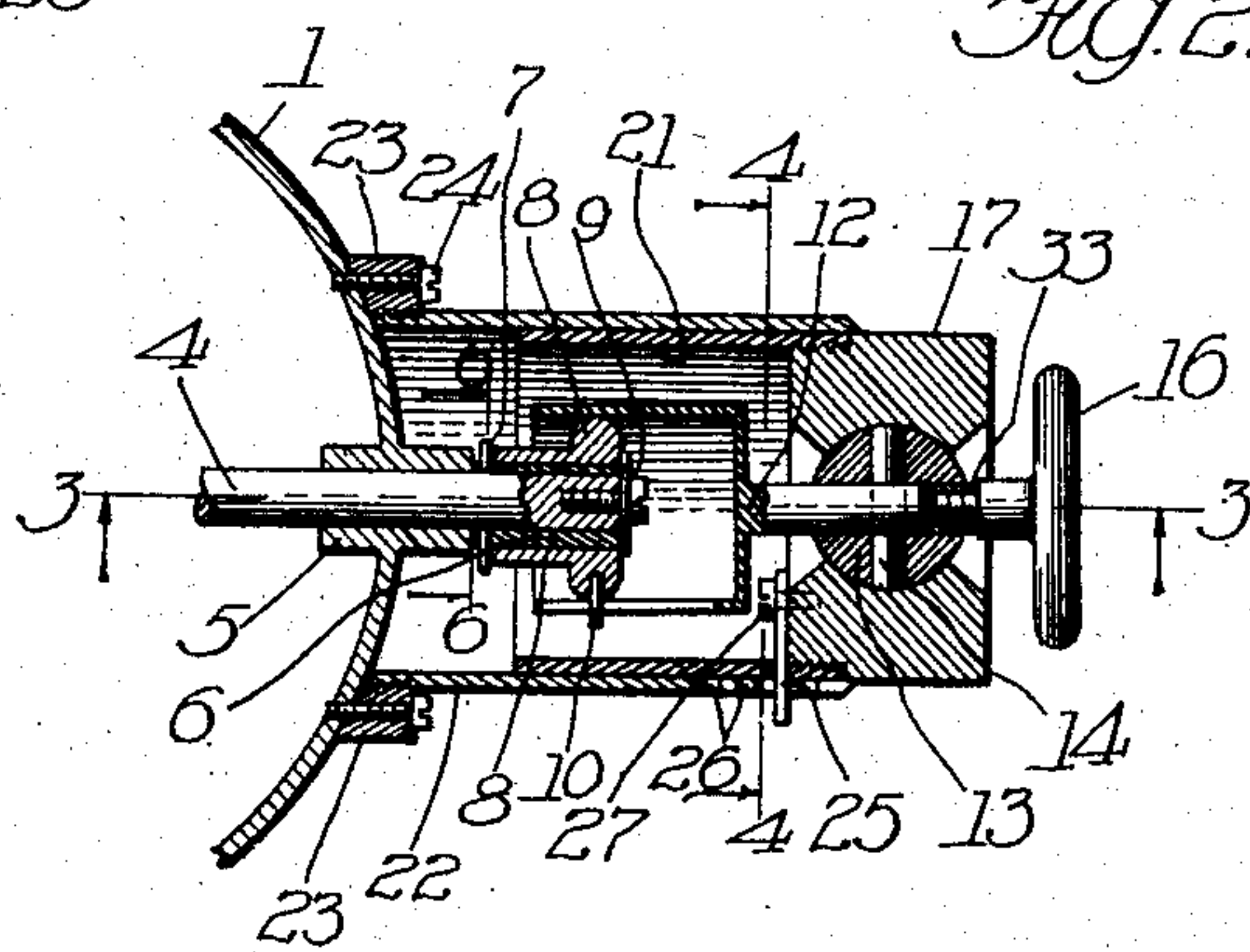
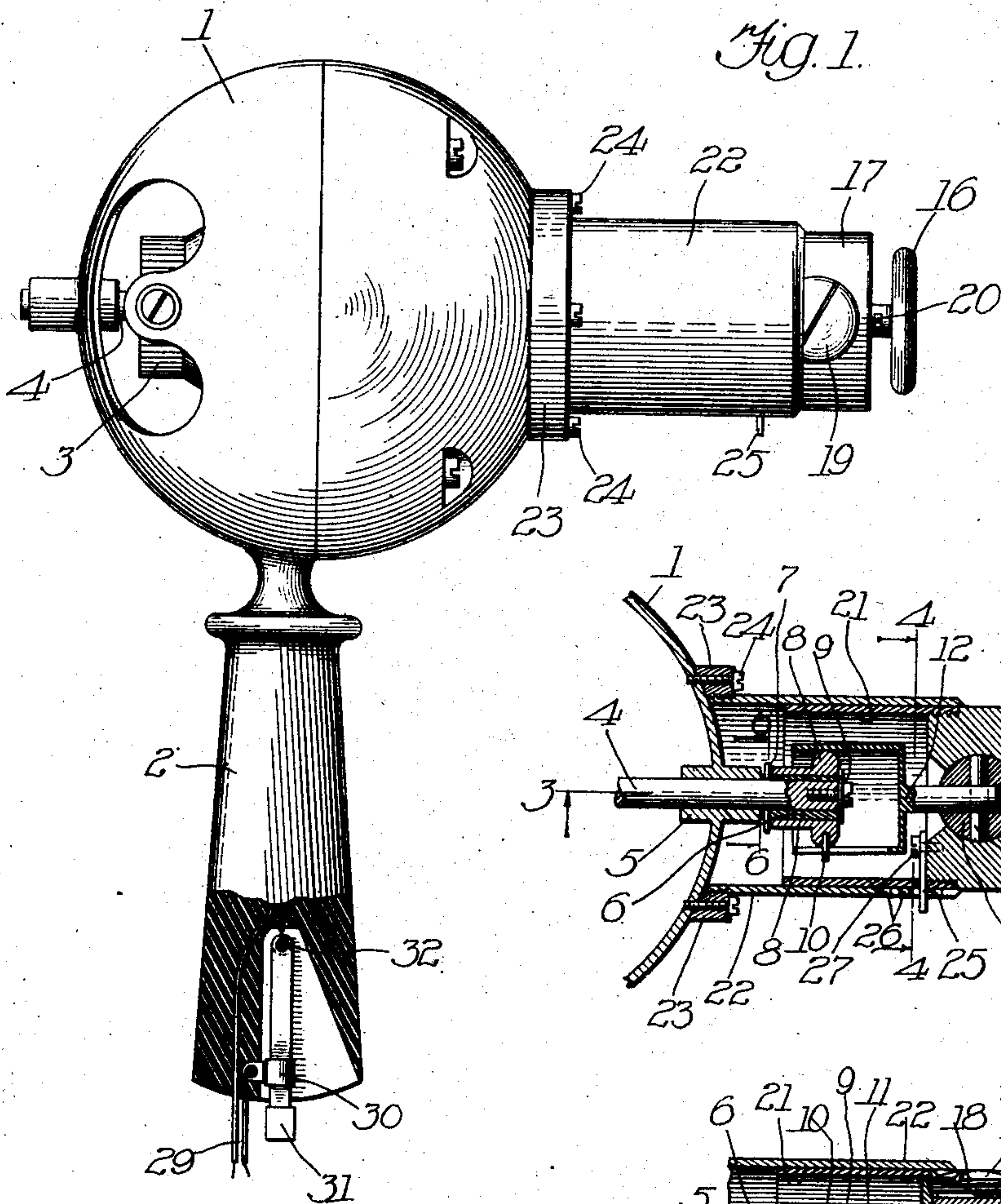


B. L. GATES.
 MASSAGE APPARATUS.
 APPLICATION FILED MAR. 12, 1909.

973,770.

Patented Oct. 25, 1910.



Witnesses:
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UNITED STATES PATENT OFFICE.

BENJIMAN L. GATES, OF CHICAGO, ILLINOIS.

MESSAGE APPARATUS.

973,770.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed March 12, 1909. Serial No. 483,075.

To all whom it may concern:

Be it known that I, BENJIMAN L. GATES, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Massage Apparatus; and I do declare the following to be a full, clear, and exact description of my invention, the following being a specification.

The object of my invention is to provide a massage apparatus for massage and vibratory treatment that will impart a rocking, as well as a circular motion to a massage applicator; either motion being shortened or lengthened by simple means and adapted to be used with an electric motor, or other rotating shaft.

The above mentioned improvements are embodied in the machine illustrated in the accompanying drawings in which:—

Figure 1 is a side elevation of a massage apparatus, embodying my invention. Fig. 2 is a central vertical longitudinal view through the forward, vibrator end, of said apparatus showing the general detail construction. Fig. 3 is a horizontal section through the forward vibrator end, of said apparatus showing particularly the two possible locations of applicators to secure different motions. Fig. 4 is a sectional view upon line 4—4 of Fig. 2 showing particularly the latch for holding the telescoping members in any desired adjustment. Fig. 5 is an under view of the vibrator projection showing the latch and notches used in making adjustments. Fig. 6 is a vertical sectional view on line 6—6 of Fig. 2 showing the relative location of drive shaft, eccentric, sleeve and tubular end of oscillator bar.

Referring to the characters of reference, which are the same for the same parts in all views; 1 is a motor case, and fixed to case 1 is the handle 2 for holding the apparatus. In the motor case 1, are the parts which comprise an electric motor, the armature 3 which revolves a shaft 4, shaft 4 being shown in Fig. 2, journaled in motor case 1; shaft 4 projects through the forward bearing 5 and eccentric 6 is pinned to shaft 4 by pin 7 which projects above the face of the eccentric 6, and forms a stop for sleeve 8 which is enlarged at outer end, forming an oval face which serves as a bearing to operate the oscillator bar 12, the said sleeve is held on the eccentric 6 by the screw

and washer 9. Pin 10 projecting from the sleeve 8 prevents the rotation of the said sleeve by engaging in the slot 11 which extends the length of tubular part of oscillator bar 12, oscillator bar 12, one portion of which is tube shaped, telescoping over the sleeve 8, the other portion of the oscillator bar being pinned in a slot of a roller 13 by pin 14. Oscillator bar 12 is tapped at 33 to receive the applicator 16. The roller 13 is socketed in 17 and retained there by the washer 18 and the screw 19. Screw 19 is locked by screw 20, Fig. 1. The roller 13 is tapped at 34 to receive applicator 16. The bearing 17 in which the roller 13 is socketed, is fixed in the tube 21, the whole of which telescopes in the tube 22. Tube 22 is fixed to ring 23 and the ring is attached by screws 24 to motor case 1, Fig. 1. The telescoping parts 17 and 21 are held in fixed position by latch 25 which engages in notches 26 on the side of a slot which extends from the outer end of the tube 22.

The latch 25 is loosely attached to bearing 17 by screw 27 and held in notches 26 by spring 28, Fig. 1 showing lower portion of handle 2 with wires 29, one wire of which passes direct to motor the other wire being broken, one end of which is fixed to plate 30, the other end is fixed to a bar 31 which is pivoted at 32.

The action of the apparatus may be described as follows:—Engaging the switch in base of handle, starts the motor, the rotation of motor shaft rotates the eccentric which, through the action of the sleeve gives the end of oscillator bar a circular movement; this same movement is also imparted to the applicator when attached to the end of oscillator bar, but when it is desired to have simply a rocking movement of the applicator, this part is attached to the roller 13 at point 34. A further regulation of the movement of the applicator is secured by the telescoping sleeve, made possible through the action of the latch 25 and the notches 26, an extension of the frame serving to shorten the stroke of the applicator.

Having thus fully set forth my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a massage apparatus the combination of a motor, a motor case, an adjustable extension from said case in line with the axis of the motor shaft, a roller journaled

in the outer end of the adjustable case extension, a cam attached to motor shaft, a sleeve fitted over said cam, an oscillator bar telescoping said sleeve, means for attaching
5 said oscillator bar to said roller, an applicator and means for removably attaching said applicator to said oscillator bar.

2. In a massage apparatus the combination of a suitable case, of a drive shaft, of a
10 cam, of a sleeve, of a pin for preventing said sleeve from rotating, of an oscillator bar, of a tubular recess in end of said oscillator bar in which said sleeve is adjustably fitted, of
15 attaching said oscillator bar to said roller, of an applicator, of means for removably attaching said applicator to said oscillator bar and means for removably attaching said applicator to said roller.

3. In a massage apparatus in combination, an electric motor with a rotating shaft, a tubular extension from motor case, a slot in the outer end of said extension, of notches in said slot, of a latch engaging with said
20 notches, of a telescoping tube carrying said latch, of a roller journaled in the outer end
25 of said tube, of an oscillator bar attached to said roller, said oscillator bar being adjustable in the tubular extension through the adjustment of said telescoping tube
30 which is held in any desired position by the latch engaging in the notches in said tubular extension substantially as and for the purpose described.

BENJIMAN L. GATES.

Witnesses:

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