

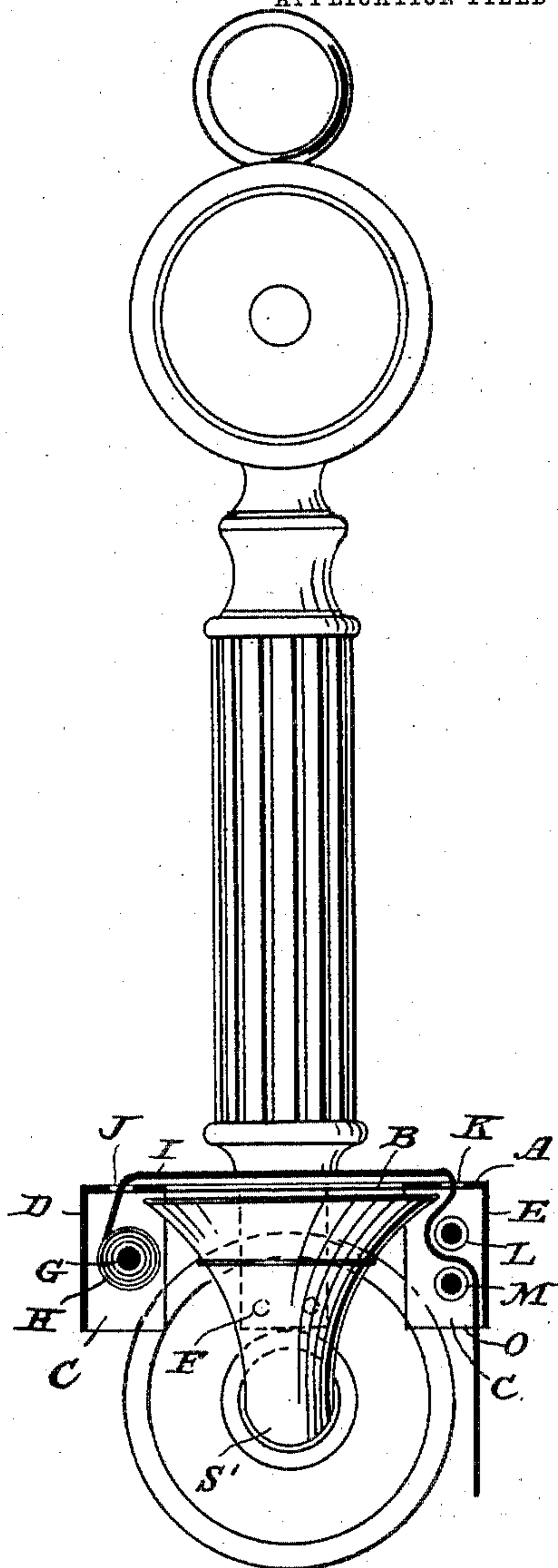
No. 776,112.

PATENTED NOV. 29, 1904.

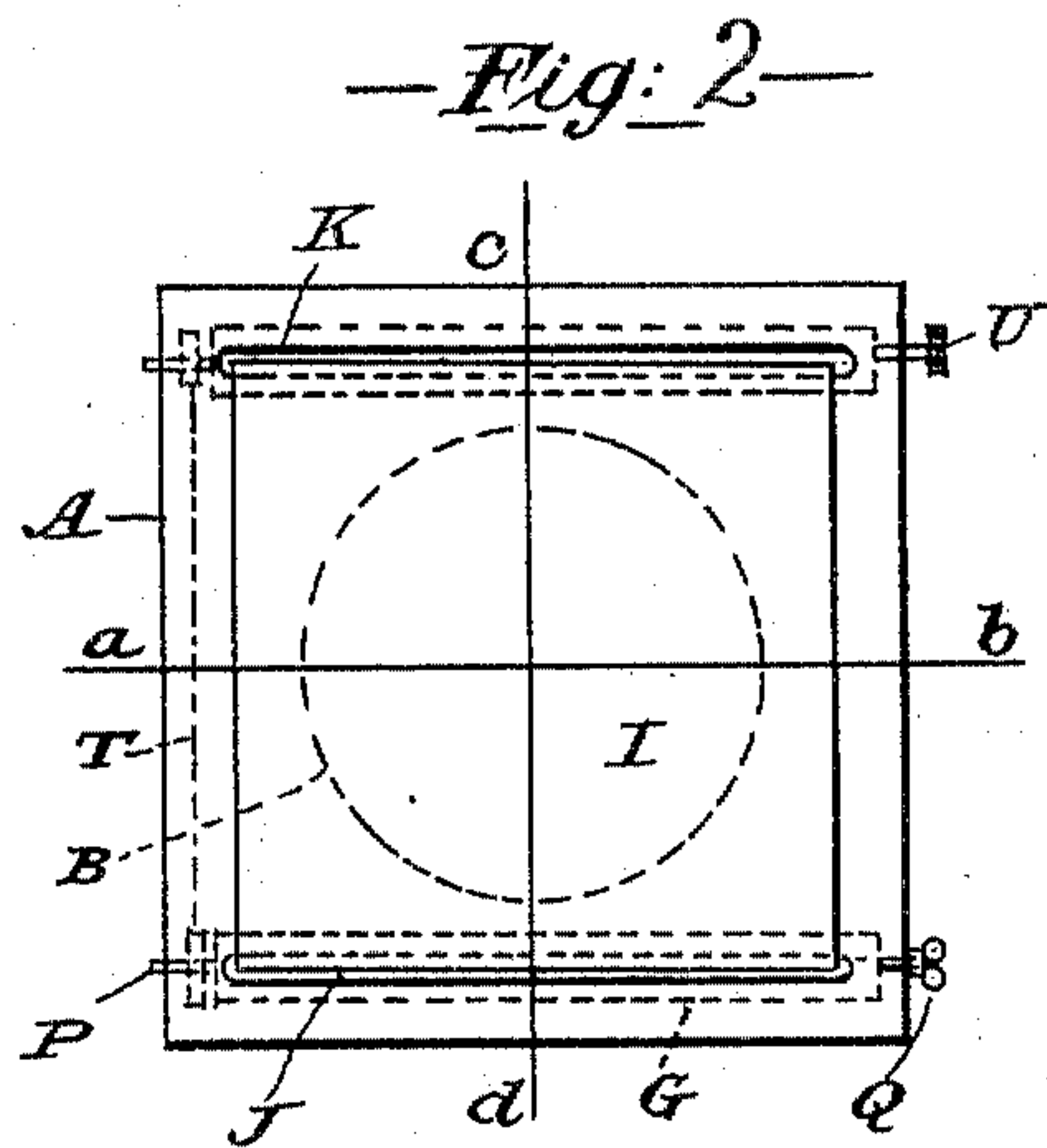
S. CHURCHILL-OTTON.
SANITARY ROTATING DIAPHRAGM FOR TELEPHONES.

APPLICATION FILED MAY 7, 1904.

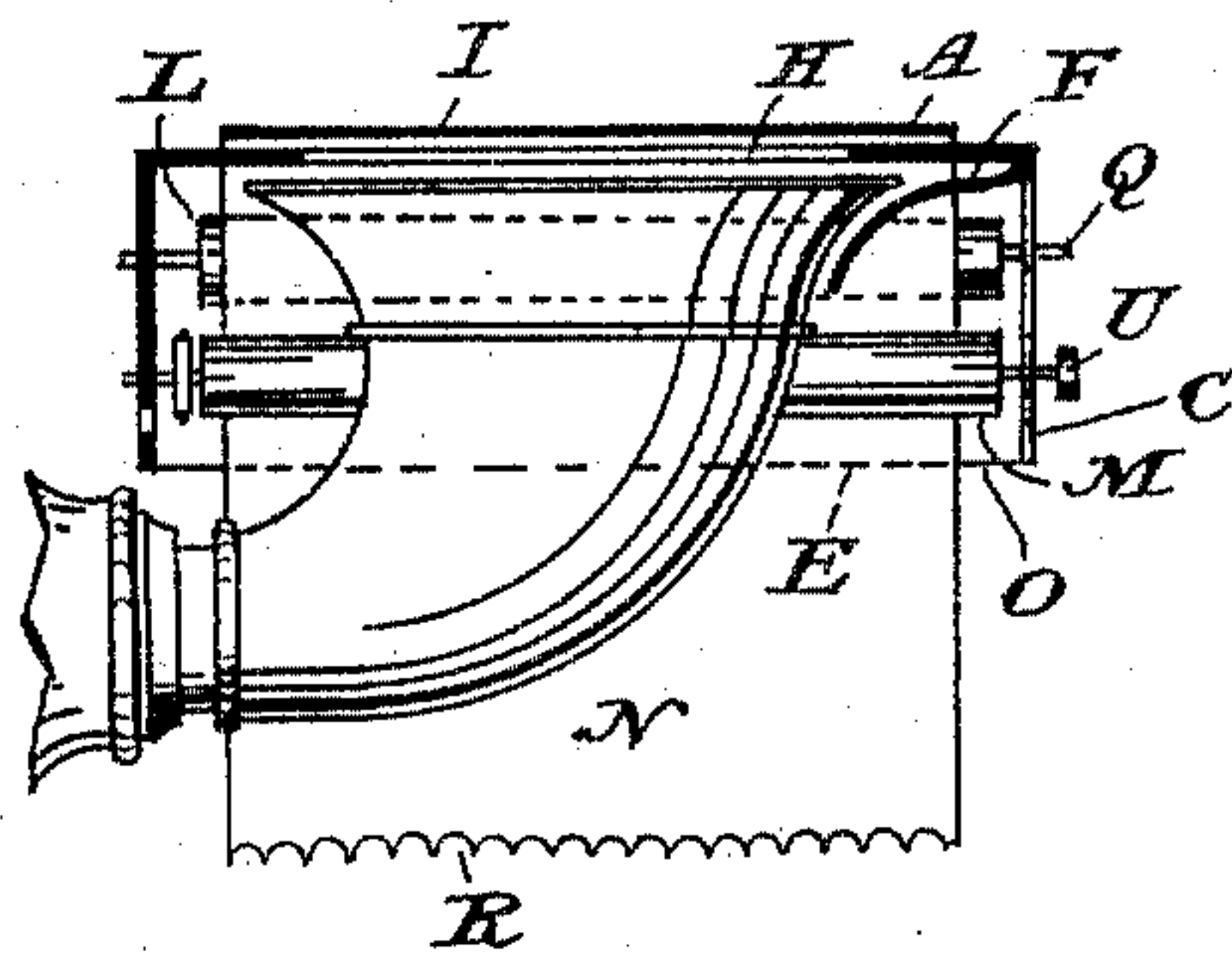
NO MODEL.



—Fig:1—



—Fig:2—



—Fig:3—

Witnesses:

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UNITED STATES PATENT OFFICE.

SIDNEY CHURCHILL-OTTON, OF EAST MELBOURNE, VICTORIA,
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SANITARY ROTATING DIAPHRAGM FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 776,112, dated November 29, 1904.

Application filed May 7, 1904. Serial No. 206,879. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY CHURCHILL-OTTON, commercial traveler, a British subject, residing at 206 Albert street, East Melbourne, in the State of Victoria, in the Commonwealth of Australia, have invented a certain new and useful Invention in Sanitary Rotating Diaphragms for Telephones, of which the following is a specification.

This invention is designed for the purpose of allowing a person using a telephone to mechanically move away the previously-used paper diaphragm hereinafter described, when a fresh surface will be presented, so that there will be a clean diaphragm for each person to breathe or speak upon.

Referring to the accompanying drawings, which form a part of this specification, Figure 1 represents an elevation of a telephone-transmitter with my said diaphragm attachment thereon shown in section upon line *ab* of Fig. 2, such figure representing a plan of the attachment. Fig. 3 is a section elevation of same, taken upon vertical line *cd* of said Fig. 2.

In carrying out my said invention I use, preferably, a square-shaped plate A, having a central circular opening B and two partially-flanged sides C and flanged ends D and E, while mid-length of the latter are situated two ears or lugs F F, which both serve the purpose of allowing the said attachment to be suitably and securely fixed upon the transmitter by means of wire or the like. With said flanges C of plate A are arranged three rollers, one of which, G, called "the removable feed-roller" carries a continuous roll of sanitary paper H, which is mechanically unwound to form a band 1, such band moving upward through the slot J and over the central opening B of plate A, thence passing downward through the slot K and outward between the two rollers L and M, termed "the tension-rollers," from which the free end portion of the paper band hangs ready to be cut or torn off by pressing it against the bottom edge O of the end E. Said feed-roller G is carried by the spindle P, one end of which has a removable pin forming its axle Q, which

allows of the said roller G being removed and replaced, carrying another supply of paper when required. The said continuous roll H may be marked off into sections by black lines or perforations, such as R.

For the purpose of insuring the continuous feed of the paper band 1 to and across the transmitter-mouthpiece S', I connect the paper-feed roller G with one of the said tension-rollers by means of a small chain or band T, and upon one end of the spindle P of said roller M is secured a small milled wheel or disk U, which is situated at the outer side portion of said plate A.

It may be explained that the rollers G, L, and M are arranged beneath the said flanged plate A and that the paper-band diaphragm traverses above. The different parts may be made of vulcanite, zylonite, or any suitable material.

The manner of using my said invention is as follows: In order to discard the previously-used paper-band diaphragm and to have a clean and unused one, the user operates the milled wheel or disk U of the said tension-rollers L and M, which operate the chain T and feed-roller G, thus moving the paper band mechanically across the central opening B of the plate A and also mechanically moving away the previously-used paper-diaphragm surface that is to be torn off or cut off, as before described.

Having now described my said invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a telephone-transmitter, of a frame having a central opening secured thereto, a roll G carrying the paper diaphragm mounted in one side of the frame, rollers for feeding the paper mounted in the other side of the frame, and a chain connecting the roll G with one of the other rollers, substantially as described.

2. As a mechanically hand-operating diaphragm attachment to and for telephone-transmitters for carrying and feeding a roll of paper serving as a consecutive series of paper diaphragms, the combination of a plate

or frame with central opening and flanged
sides and ends suitably slotted and provided
with lugs, a removable feed-roller with thumb
screw or disk, two tension-rollers and chain
5 connecting such feed-roller with one of such
tension-rollers adjusted and operating as be-
fore described.

In witness whereof I have hereunto set my
hand in presence of two witnesses.

SIDNEY CHURCHILL-OTTON.

Witnesses:

JONATHAN BEAR,
LESLIE L. BEAR.