

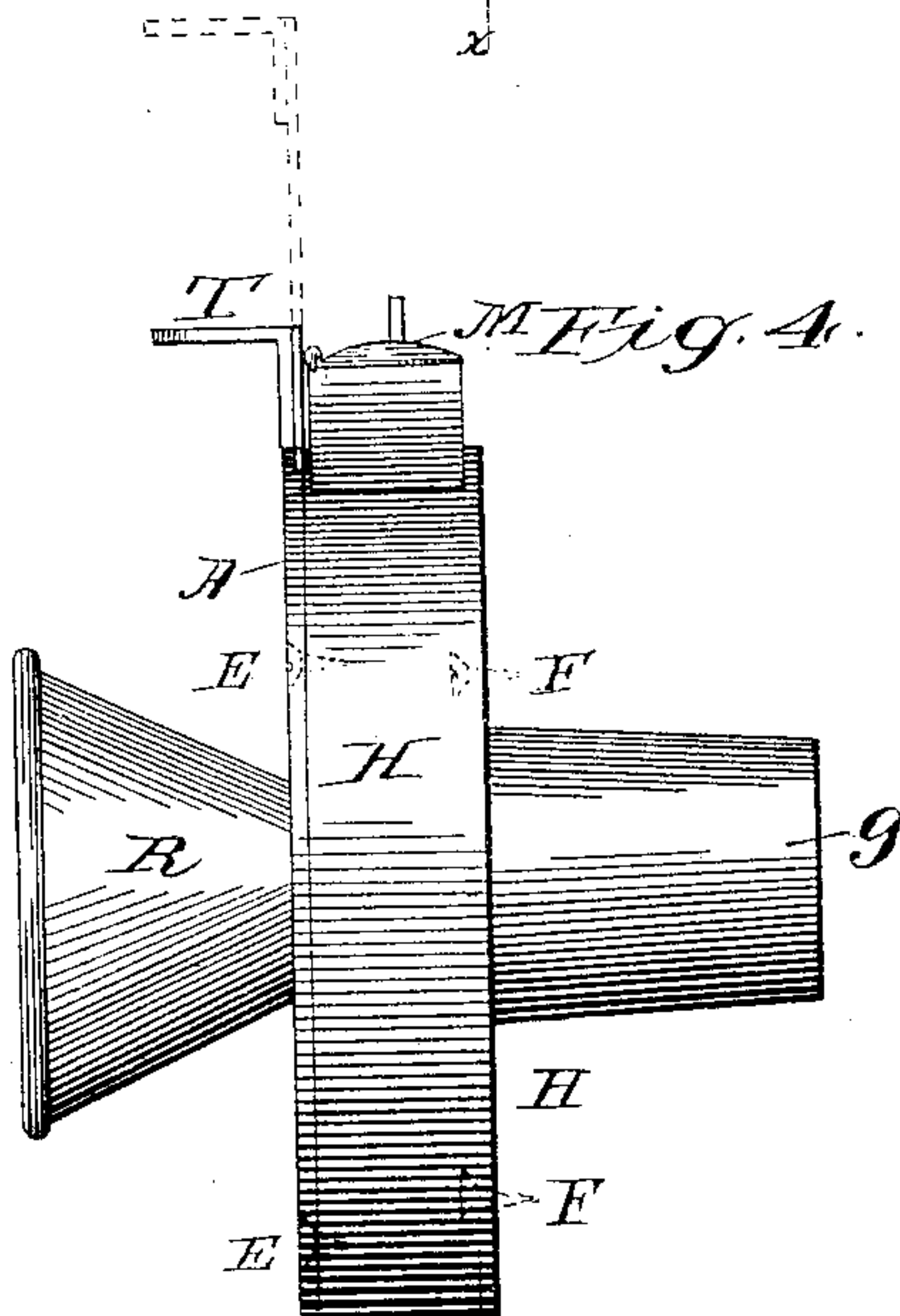
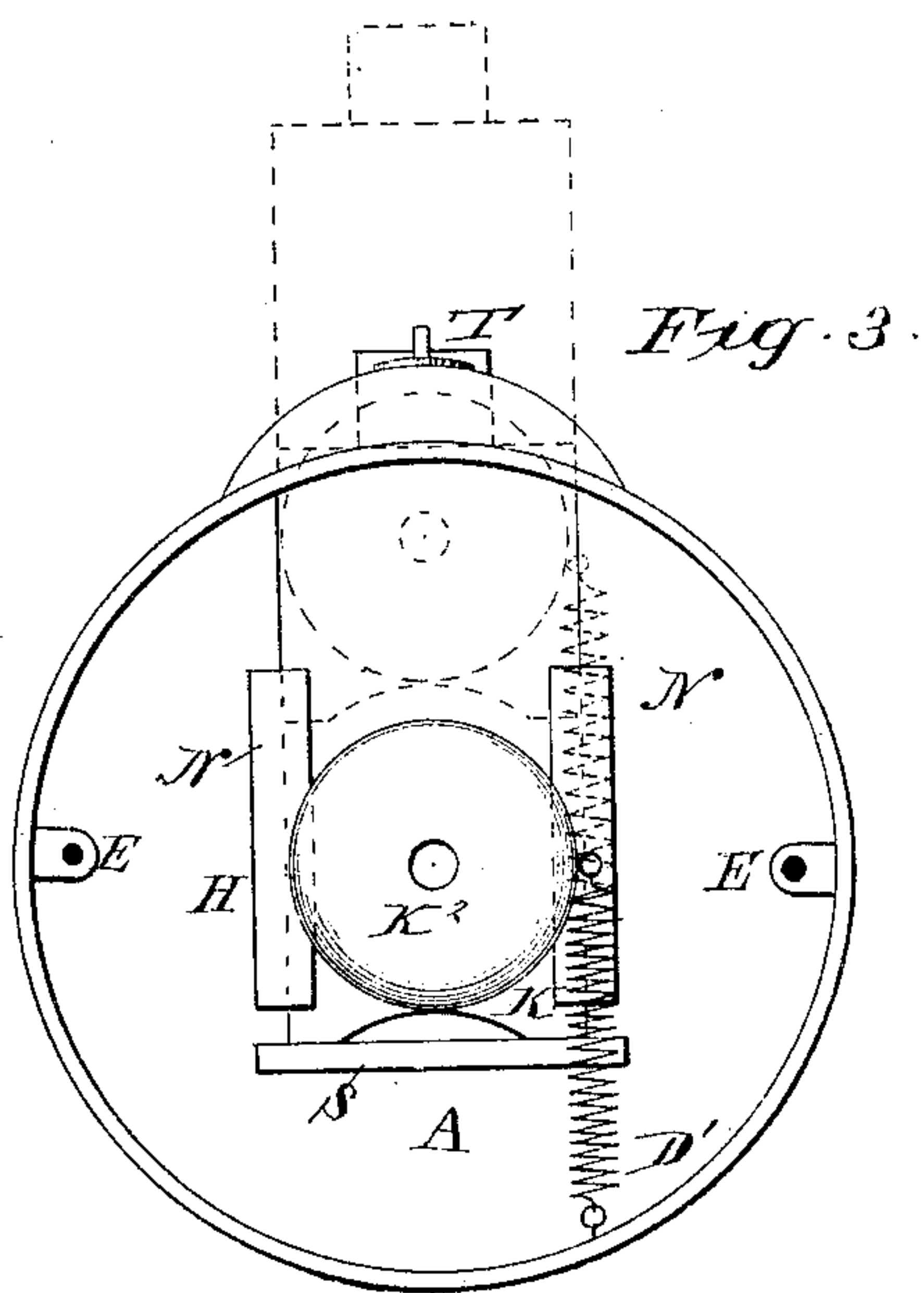
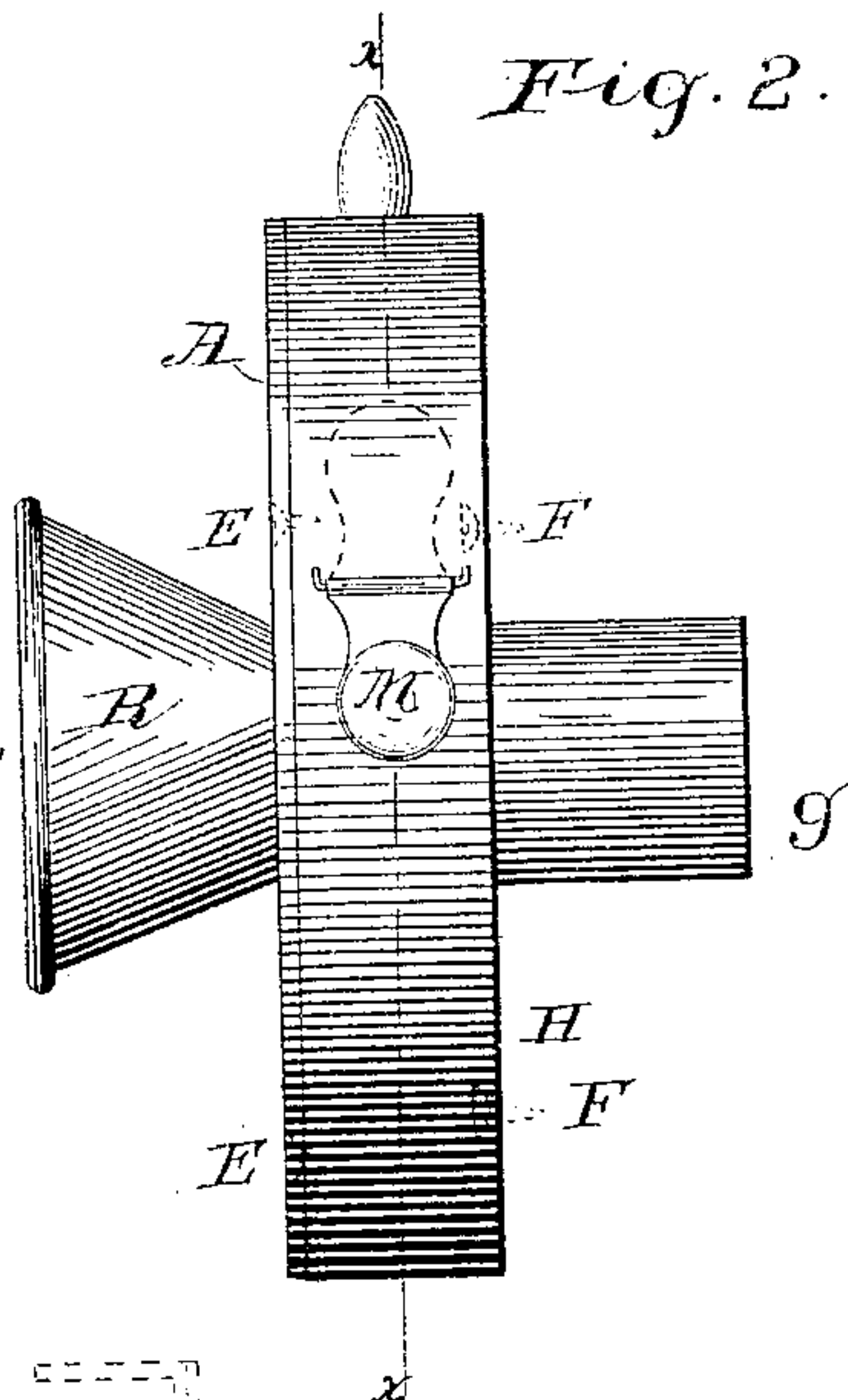
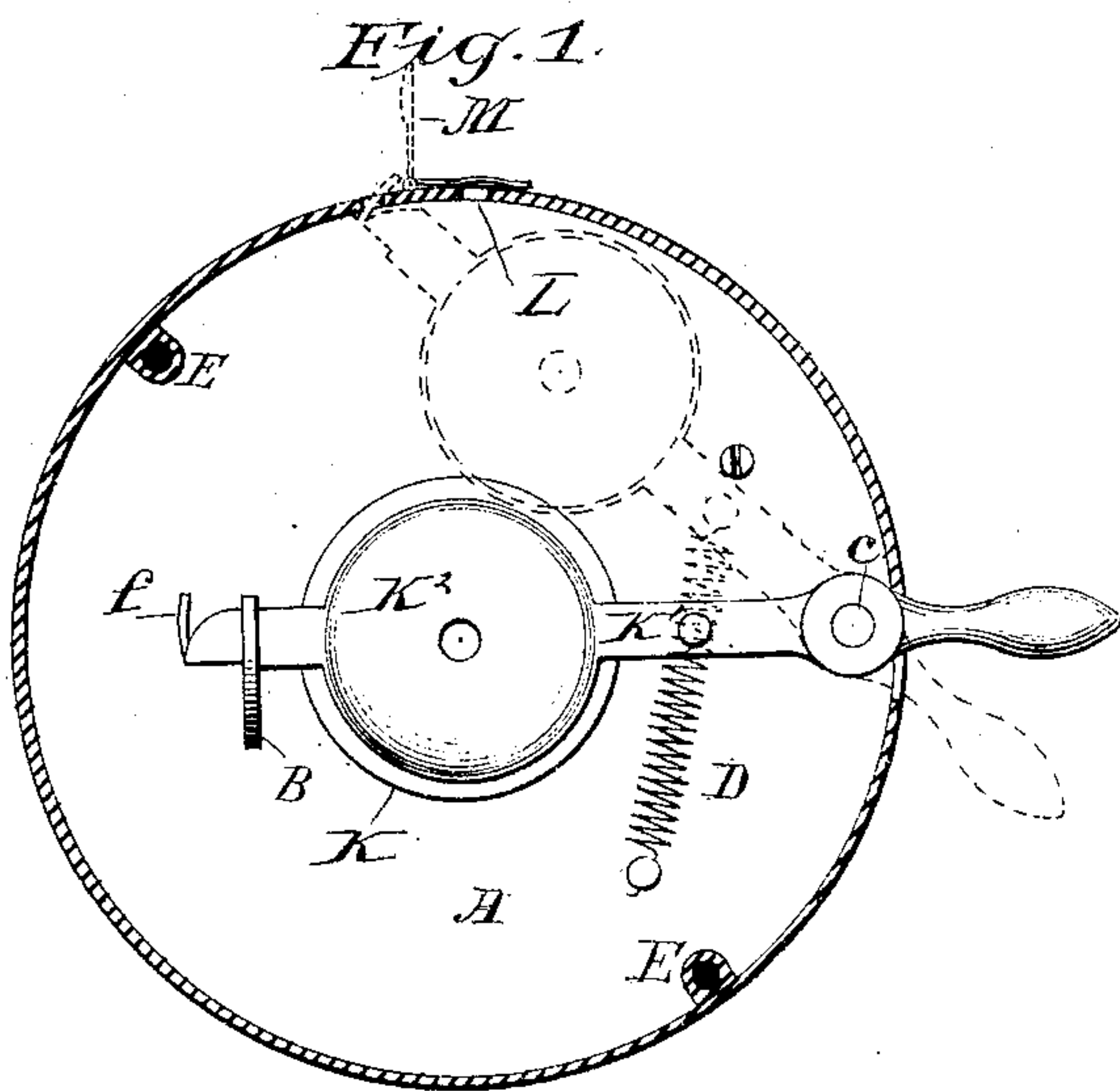
(Model.)

R. MAY.

SPEAKING TUBE ANNUNCIATOR.

No. 310,601.

Patented Jan. 13, 1885.



Witnesses:

M Bradshaw
Martha Harkin

Inventor:
Robert May

UNITED STATES PATENT OFFICE.

ROBERT MAY, OF NEW YORK, N. Y.

SPEAKING-TUBE ANNUNCIATOR.

SPECIFICATION forming part of Letters Patent No. 310,601, dated January 13, 1885.

Application filed December 14, 1883. (Model.)

To all whom it may concern:

Be it known that I, ROBERT MAY, of the city, county, and State of New York, have invented a new and useful Improvement in Mouth-Pieces and Whistles or Annunciators for Speaking-Tubes; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

My invention relates to the mouth-piece and whistle or annunciator for a speaking-tube. It has for its object to obtain in a neat and compact form a mouth-piece which may be securely fastened to the wall independently of the speaking-tube to which it is connected, will admit of being opened to obtain access to its slide and whistle without breaking its connection with the wall and tube, and in which the "tell-tale," automatically opened by the blast of air sounding the whistle, will be automatically closed by the movement of the slide in opening the mouth-piece.

It consists in constructing the mouth-piece in two divisions, one of which, consisting of a shallow cylindrical case, carries upon its periphery the tell-tale, and, if desired, the whistle also, and is adapted to be firmly screwed to the wall in proper register and connection with the end of the speaking-tube, while the second division, consisting of an outer disk or plate fitting upon and covering the inner case, and which is secured thereto by screws, so as to admit of being readily detached therefrom, carries the mouth-piece and the slide for opening and closing its aperture, and a tell-tale automatically closed by the movement of the slide, as hereinafter described.

In the accompanying drawings, Figure 1 is a transverse sectional view of one form of my improved mouth-piece and annunciator, taken on line *x x* of Fig. 2. Fig. 2 is a top view of the same. Fig. 3 is a front view of a modification thereof, with the front or covering plate removed. Fig. 4 is a side elevation of said modified form.

H is a short cylindrical case, closed at one end by a centrally-perforated plate, into which is secured an outwardly-projecting cylindrical tube, *g*, to facilitate the connection

of the device to the end of the speaking-tube. The case H is adapted to be secured not only to the speaking-tube by means of the tube *g*, but is perforated near its outer edge to permit its being securely fastened to the wall by means of the screws F F.

To the open end of the case H is fitted and secured by suitable screws, E E, a centrally-perforated plate, A, the central opening in which is provided with an outwardly-projecting conical mouth-piece, R. Upon this inner face of the plate A a plate, K, is mounted upon an arm, K', which is pivoted at *c* to vibrate freely over the plate A, and whose outer end, projecting through a suitable opening in the case H, terminates in a handle by which the lever and its sliding plate K may be operated. The plate is made to drop automatically over the opening in the plate A by means of a spring, D, and is arrested by a stop-catch, B, which engages the inner end of the lever K', and is beveled inwardly to operate to draw the plate K closely against the face of the outer plate, A.

A whistle, H, is formed or attached to the central portion of the plate F, so that it is brought into position before the opening of the mouth-piece when the plate F is drawn down by the spring D. (See Fig. 1.)

An opening, L, is made through the upper side of the case A, over which is placed a small tell-tale plate, M, hinged at one end to the periphery of the case H, and which, when a current of air is forced into the case, will be forced upward by the air escaping through the opening L and thrown backward past its pivotal point, where it will remain until replaced in its proper position. This replacement is accomplished automatically by a pin, *f*, upon the end of the lever K', which, when the lever is thrown up to lift the plate and its whistle from before the mouth-piece, will project through an opening in the case H, (see dotted lines, Fig. 1,) and force the tell-tale plate so far over past its pivotal point as that it will fall by its weight and cover the opening L.

As a modification of my device, instead of attaching the sliding plate K to a swinging arm or lever, it may be mounted between suitable guide-strips, N N, (see Fig. 3,) which allows a free vertical or longitudinal move-

ment thereof. A stop, S, prevents its falling below its proper position, and it is drawn down automatically against this stop by a spring, D'. In this case the sliding plate projects out beyond the case and terminates in a handle, T, (see Fig. 4,) by which it is operated, and which also serves to replace the tell-tale when it has been thrown back.

I claim as my invention—

10 The combination, with a speaking-tube and with a stationary mouth-piece therefor, of an interposed cylindrical chamber, H, adapted to be supported independently of the connected tube, a spring-actuated slide, K, work-

ing therein to open and close the mouth-piece, 15 an alarm-whistle, K², inserted in and carried by the valve-slide, and a pivoted tell-tale, M, operated to swing in one direction by a current of air escaping through an orifice in the outer wall of the cylindrical chamber, and in 20 the opposite direction by the movement of the slide-valve to open the mouth-piece, all substantially as and for the purpose set forth.

ROBERT MAY.

Witnesses:

M. BRADSHAW,
MARTHA HARKINS.