

(No Model.)

C. L. PEIRCE.
SPEAKING TUBE.

No. 486,682.

Patented Nov. 22, 1892.

Fig. 4.

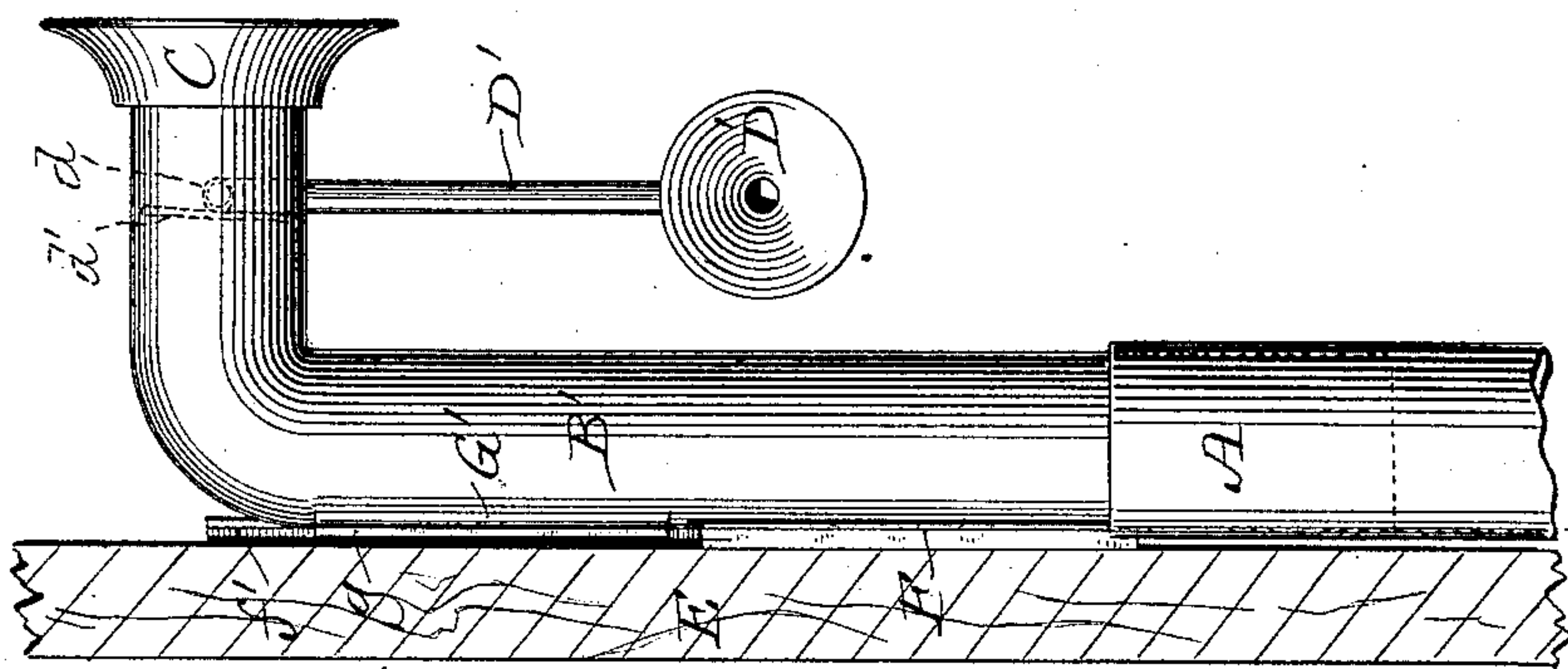


Fig. 2.

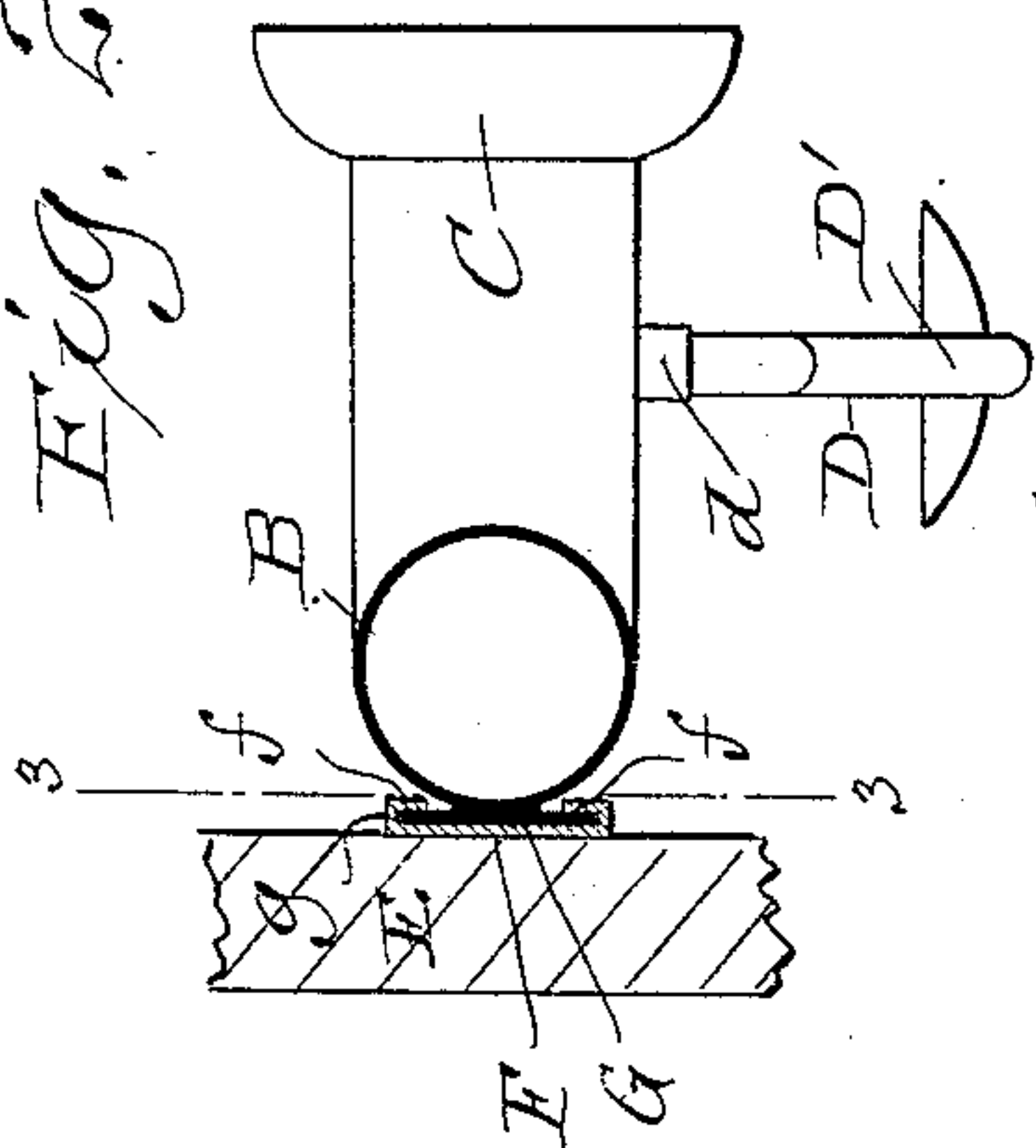
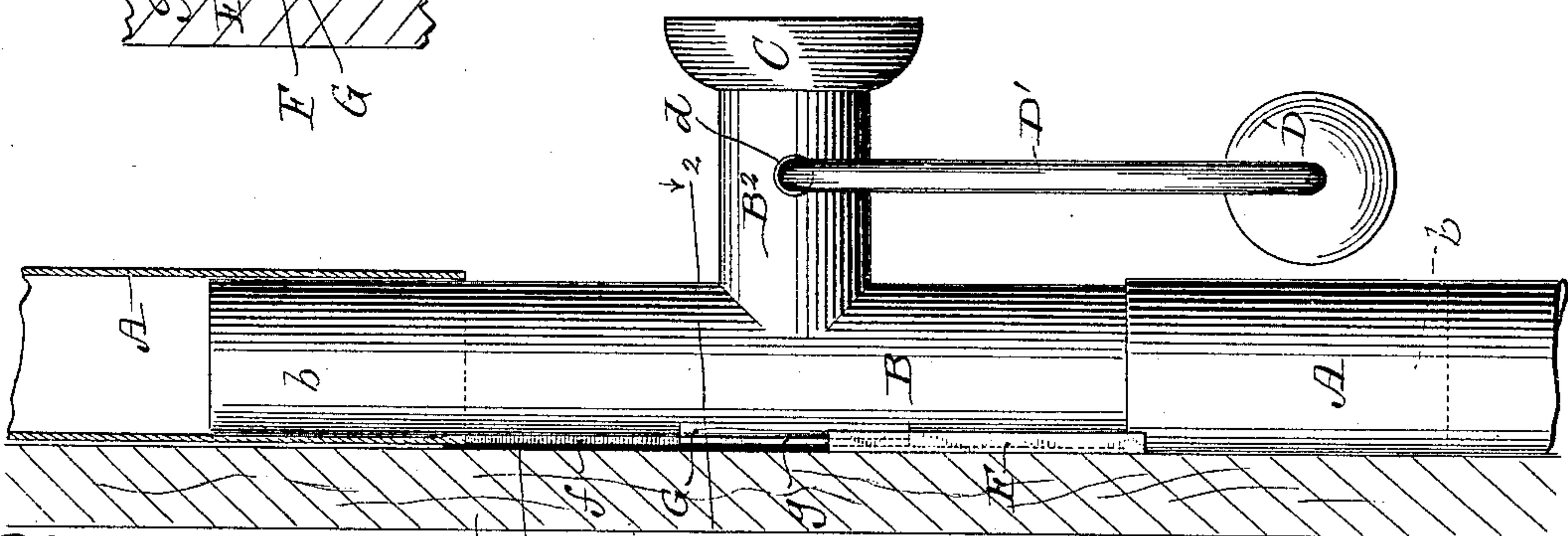
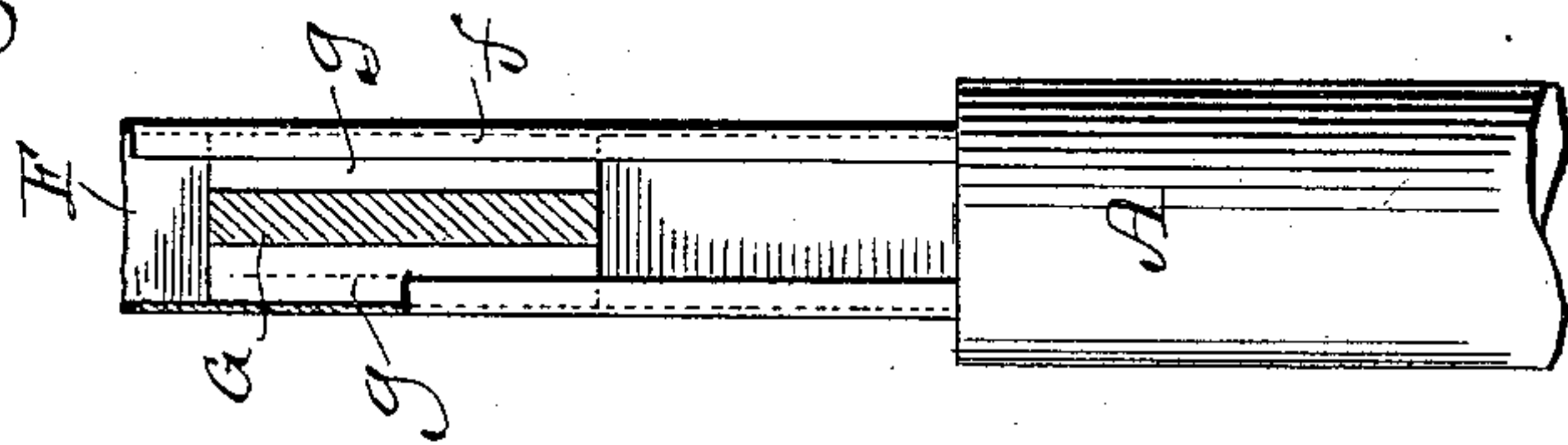


Fig. 3.



Witnesses
Geo. W. Young,
N. E. Oliphant

Fig. 1.

Inventor
Charles L. Peirce,
By H. G. Underwood,
Attorney

UNITED STATES PATENT OFFICE.

CHARLES L. PEIRCE, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO DAVID S. WEGG, OF CHICAGO, ILLINOIS.

SPEAKING-TUBE.

SPECIFICATION forming part of Letters Patent No. 486,682, dated November 22, 1892.

Application filed February 5, 1892. Serial No. 420,435. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. PEIRCE, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Speaking-Tubes; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to certain new and useful improvements in speaking-tubes; and it consists in the matters hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a side elevation of my device, showing the same applied to a line of speaking-tube at a point intermediate of the extremities of said tube, portions of the tube being broken away to illustrate details of construction. Fig. 2 is a horizontal sectional view of the same, taken on line 2 2 of Fig. 1. Fig. 3 is a view, partly in elevation and partly in section, on the line 3 3 of Fig. 2. Fig. 4 is a side elevation illustrating my improvements as applied to one of the extremities of the line of speaking-tube or to a branch of the same.

In said drawings, A represents the main portion of the speaking-tube, permanently secured to the wall or other support and extending from story to story of a building or from one portion to another of the same story of the building, as may be desired. Where the line of speaking-tube extends from one story of a building to another and it is desired to provide one or more intermediate branches communicating with the main tube, the form of construction illustrated in Fig. 1 of the drawings is preferably employed. This form of my improvement comprises a section of tubing B, slidingly engaged with the main tube A and provided with a suitable mouthpiece C. In the particular form illustrated in Fig. 1 of the drawings the main tube A is severed at the points where it is desired to provide the branches, and the ends of said main tube are adjusted to a suitable distance apart, as shown. The section B of tubing is of a diameter to enable said section to be slipped within the open ends of the main tube A and to fit snugly

therein, thus rendering the said section with its mouthpiece C adjustable as to height. As a further support for the adjustable section B, a suitable guide-plate F is secured to the wall or other support E, to which the main tube A is attached, said guide-plate being provided with inwardly-folded edges *ff*, and the sliding section B of the tubing is provided with a rib G, having laterally-projecting flanges *gg*, adapted to engage with said guide-plate F beneath said folded edges *ff*. At the ends of the main tube, or when said main tube is arranged to extend horizontally from one portion to another of the same story of a building and provided with one or more vertical branches, the form of construction illustrated in Fig. 4 is preferably employed. This construction comprises a section B' of tubing, arranged to slip into the open end of the tube A or one of the said branches and provided with a mouthpiece, as in the form first described. Adjacent to the end of the tube A or of the said branch a guide-plate F' is provided upon the wall or other support, said plate being provided with folded edges *f'f'*, and the sliding section B' of the tube is provided with a rib G', having lateral flanges *g'g'*, adapted to engage with the folded edges of the guide-plate F', as in the form before described.

In the form of construction first described the sliding section of the tube B is provided with a short section B², to which the mouthpiece C is secured, which section projects laterally from the sliding section B and in the form of construction last described the upper end of the sliding section B' is turned outwardly at an angle, as shown. I also prefer to provide upon the branch B² or the outwardly-directed end of the section B' a short sleeve *d*, with which is pivotally engaged a tubular branch D, which is provided at its free end with an earpiece D', said branch being arranged to be swung into position to fit over or against the ear of the user when the device is in use and to swing down into the position indicated in the drawings when the device is not in use.

If desired, a suitable cut-off valve *d'* may be secured to the end of the branch D within the branch B², said valve being arranged to

move with the said branch, so as to stand across the bore of said branch B² when the device is not in use and the branch D is in the position shown in the drawings, and to
 5 swing into a position at right angles thereto when the said branch D is raised to place the earpiece D' to the ear. By this construction the branch tubes are automatically closed by the release of the branches D when
 10 the user is through talking and opened again by the adjustment of the same into position for use.

By the construction of the sections of the speaking-tube to which the mouthpieces are
 15 secured to move vertically the said sliding sections may be readily moved up or down, so as to bring the mouthpieces into the proper position to suit the convenience of the user, thus enabling a very short person to
 20 bring the mouthpiece and the earpiece as well within his reach, or enabling a very tall person to raise the said section so as to enable him to use the device without stooping.

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

1. A speaking-tube comprising a stationary portion and a portion provided with a mouthpiece and movably engaged with said sta-
 30 tionary portion, said movable portion being also slidingly engaged with a suitable guide

upon the wall or other support to which the stationary portion is secured, substantially as described.

2. A speaking-tube comprising a stationary 35 portion, a movable portion provided with a mouthpiece and adjustably engaged with said stationary portion and having a sliding engagement with a guide located upon the wall or other support to which said stationary por- 40 tion is secured, and a branch communicating with said movable portion and provided with an earpiece, substantially as described.

3. A speaking-tube comprising a stationary 45 portion, a portion movably engaged with said stationary portion and having sliding engagement with a suitable guide upon the wall or other support to which said stationary portion is secured, a sleeve communicating with the 50 bore of said movable portion, a branch provided with an earpiece and revolubly engaged with said sleeve, and a valve in said movable portion operatively engaged with said branch, substantially as described.

In testimony that I claim the foregoing I 55 have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

CHARLES L. PEIRCE.

Witnesses:

H. G. UNDERWOOD,
 JOHN E. WILES.