

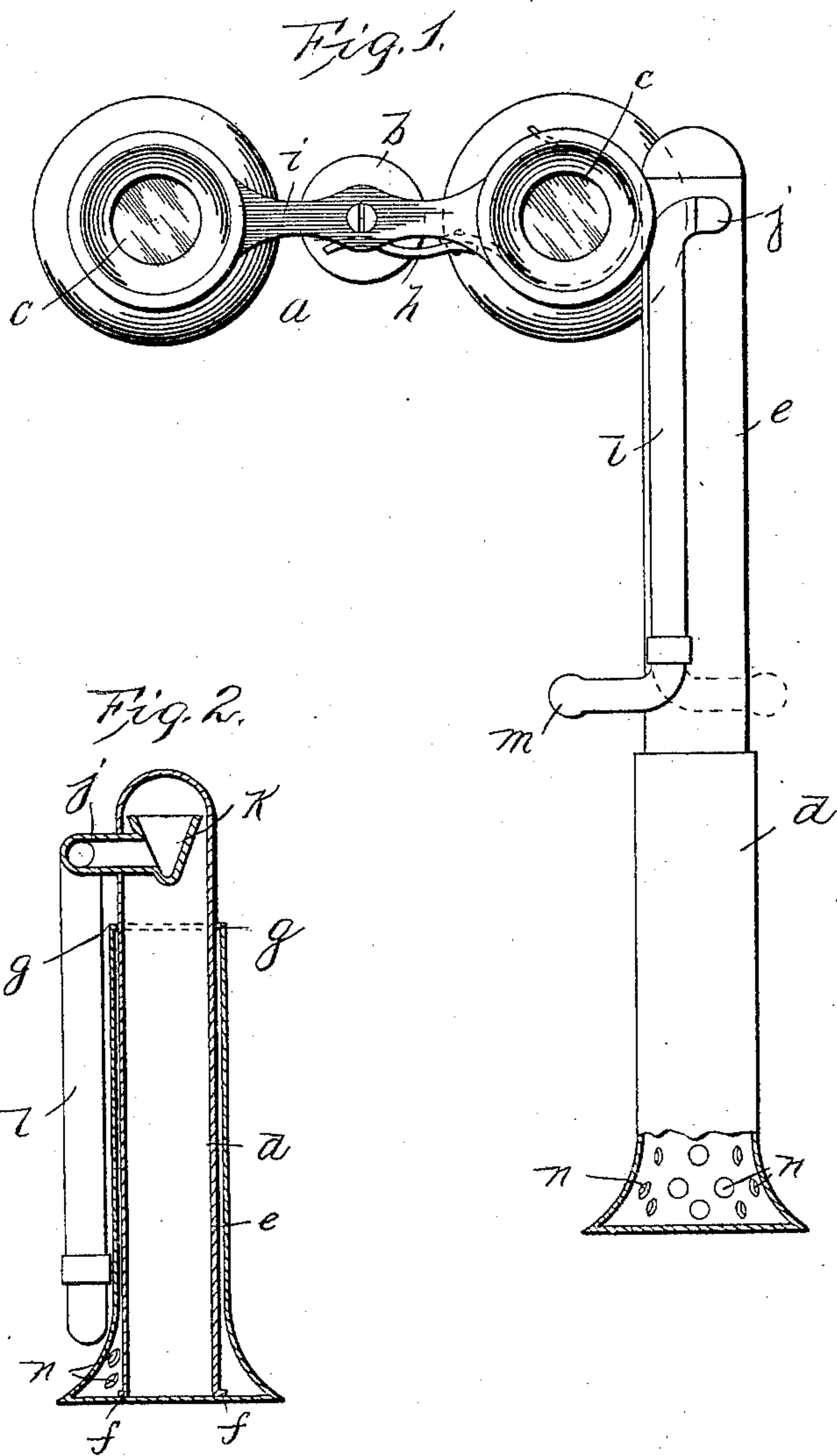
(No Model.)

G. J. WAINWRIGHT.

HANDLE AND PHONE ATTACHMENT FOR OPERA GLASSES.

No. 574,125.

Patented Dec. 29, 1896.



Witnesses
E. C. Ruff
Chas. M. Werle

Inventor
Geo. J. Wainwright
per [Signature]
Attorney

UNITED STATES PATENT OFFICE.

GEORGE J. WAINWRIGHT, OF NEW YORK, N. Y., ASSIGNOR TO WALTER JAMES WAINWRIGHT, OF SAME PLACE.

HANDLE AND PHONE ATTACHMENT FOR OPERA-GLASSES.

SPECIFICATION forming part of Letters Patent No. 574,125, dated December 29, 1896.

Application filed December 16, 1895. Serial No. 572,269. (No model.) Patented in France February 7, 1896, No. 253,778.

To all whom it may concern:

Be it known that I, GEORGE J. WAINWRIGHT, of New York, in the county and State of New York, have invented certain new and useful Improvements in Phone Attachments for Opera-Glasses, (for which I have obtained Letters Patent in France, dated February 7, 1896, No. 253,778;) and I do hereby 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in phone attachments for opera-glasses and the like.

The invention consists in a simple and inexpensive phone made in sections and telescopically joined, provided at its lower end with a sound-wave-receiving chamber and at its upper end with a transmitting-chamber through which the sound is transmitted by a suitable tube to the ear, so that the volume of sound is controlled, intensified, and regulated by the elongation of the sections, so that persons of varying degrees of deafness may use the same instrument and adjust it to suit their hearing or the distance to be heard from.

The invention further consists in certain novel features of construction and in combinations and arrangements of parts more fully described hereinafter and particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a side elevation of the complete device, and Fig. 2 is a longitudinal section thereof.

Like letters of reference mark the same parts throughout the views.

a is the usual opera, field, or marine glass, made in telescopic sections and provided with the ordinary adjusting means *b* and the lenses *c c*.

d indicates a hollow support or phone permanently closed at its upper and lower end. This phone is made in telescopic sections, as shown, so that its length can be increased or diminished at will. The upper section *e* at

its lower end is provided with outwardly-extending projections or lugs *f f*, so that when said section reaches its limit of upward movement the lugs or projections *f f* will bear against the shoulders *g g*, formed by the upper edges of the lower section being turned inwardly, so as to prevent the upper section being entirely withdrawn. The support is provided near its top with spring clamping-arms, (shown in dotted lines,) adapted to embrace the barrel of the opera-glass, the lower arm being provided with an auxiliary strengthening-arm *h*, which, after being inserted under the cross-bar *i*, acts as a brace in supporting the glass.

j indicates a section of tube opening into the hollow upper section at a point directly below the upper closed portion thereof. The inner open end of this section of tube enters the sound-collecting chamber *k*, here shown as an inverted cone, this cone-shaped sound-collecting chamber being formed on the interior of the upper section of the hollow support directly below the closed end thereof.

l is the sound-conveying tube, one end of which is suitably connected with the section of tube *j*, so as to be freely movable at that point, the object being to have this tube so connected that it can be turned in any direction desired to accommodate a right or left hand person or either defective ear.

m indicates the ear piece or tube.

n n are the sound-receiving openings or perforations, preferably located on one side of and above the closed bottom of the hollow lower section *d*.

The operation of my device is as follows: Supposing a person to be of defective hearing or having a back seat in a place of amusement or elsewhere and he desires not only to hear what is going on upon the stage, but also to obtain a good view, the phone is attached to the glass and the glass raised to the eyes and the tube *m* inserted in either ear. The sound-waves on entering the openings *n* pass up through the hollow phone-sections which form the receiving instrument and around the inverted cone-shaped sound-collecting chamber *k*. They then come in contact with the dome or closed end of the upper section

of the phone. After coming in contact with the inner surface of said dome the sound-waves are deflected against the walls of the interior of the inverted-cone-shaped sound-collecting chamber *k*, the same thereby forming a transmitter, as such sound-waves after striking said walls will enter the tube-section communicating with the tube *l*, and will convey the sound to the ears of the person using the device.

It is evident that the phone attachment forming the sound conveying and transmitting instrument can be used independent of the opera or field glass, and that various changes might be made in the forms, constructions, and arrangements of the parts described without departing from the spirit and scope of my invention. Hence I do not wish to limit myself to the exact construction herein set forth, but consider myself entitled to all such changes as may fall within the spirit and scope of my invention.

Having thus fully described my invention,

what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A handle for opera-glasses forming an ear-trumpet comprising a sound-receiver in its lower portion, a sound collector and transmitter in its upper portion, ear attachments, and a clamp to embrace the barrel of the glasses, as set forth.

2. An attachment for opera or like glasses comprising a handle made in telescopic sections and adapted to be used as an ear-trumpet, said handle being provided with a clamp to grip the barrel of said glass and having a reversible support whereby either hand may be used to hold the glass to the eye substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GEORGE J. WAINWRIGHT.

Witnesses:

O. E. DUFFY,
C. M. WERLE.