

No. 608,504.

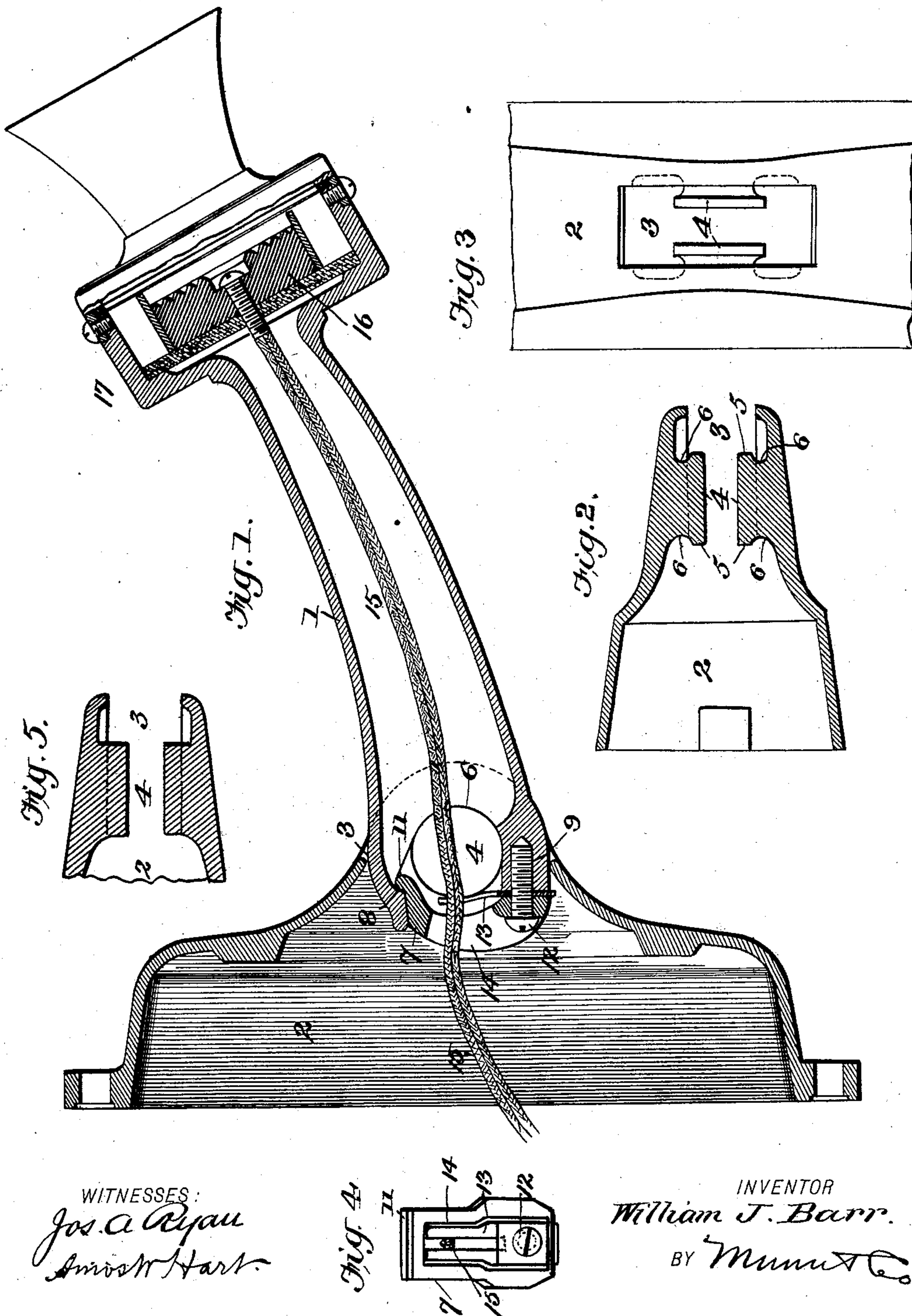
Patented Aug. 2, 1898.

W. J. BARR.

TELEPHONE TRANSMITTER ARM AND ITS ATTACHMENT.

(Application filed Oct. 30, 1897.)

(No Model.)



UNITED STATES PATENT OFFICE.

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TELEPHONE-TRANSMITTER ARM AND ITS ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 608,504, dated August 2, 1898.

Application filed October 30, 1897. Serial No. 656,899. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. BARR, of Ashtabula, in the county of Ashtabula and State of Ohio, have invented a new and useful Improvement in Telephone-Transmitter Arms and Their Attachments, of which the following is a specification.

Telephone-transmitter arms have been pivoted or hinged to a base adapted to be secured to a wall or other fixed support. My invention is an improvement in such attachments. I provide the base with one or more integral trunnions and secure the transmitter-arm thereto detachably by means which insure a firm joint at all times and yet permit easy disconnection of the arm when required. I also attain an economy in manufacture and provide a more ornamental attachment than the usual one. I also construct the transmitter-cup integral with the arm.

My invention is shown in accompanying drawings, in which—

Figure 1 is a longitudinal section of my invention, the transmitter-arm being shown raised. Fig. 2 is a horizontal section of the base. Fig. 3 is a front view of the base. Fig. 4 is a rear view of the cap or device for securing the arm to the base-trunnions. Fig. 5 is a section showing a modification of the base-trunnions.

The hollow transmitter-arm 1 and hollow conical base 2 are formed of cast metal and in practice will be made ornamental exteriorly by nickeling, bronzing, or equivalent method.

The base 2 has a vertical open slot 3 at its apex, which is adapted to receive the slightly-enlarged inner end of the arm 1. The latter is hung and adapted to swing vertically on horizontal pivots or trunnions 4, Figs. 2 and 5, which are formed integrally with the base 2 and project inward from opposite sides of the mouth 3 of the latter and at a point just back of or inward from the apex. These trunnions 4 may be cylindrical, as shown in Fig. 5, or undercut, so as to provide flanges or enlarged heads 5, as shown in Fig. 2.

The inner end of the transmitter-arm 1 is so constructed as to fit and rotate on the trunnions of either form. In other words, the arm 1 is cut out and provided with semi-circular grooves 6 in its sides, as shown in Fig. 2, which constitute bearings for the

trunnions 4. The other part 7 of the bearings constitutes the means for securing the arm 1 to the trunnions and consists of a device in the nature of a journal-cap, which is attached to the arm 1 as follows: The said cap 7 is curved lengthwise and provided on its inner side with transverse-semicircular grooves adapted to fit on the trunnions 4 or 5, as the case may be. The base end of the arm 1 is thickened, as shown in Fig. 1, the upper side having an internal shoulder 8 and the lower side being provided with a screw-threaded bore or socket 9. The cap 7 has a shoulder or claw 11 on its upper end to engage the aforesaid shoulder 8 of the arm 1, and its lower end is perforated transversely to receive a screw 12, which enters the socket 9. It is apparent that when the arm proper, 1, is placed in due engagement with the trunnions 4 and the cap or fastening device 7 is arranged and secured as shown in Fig. 1 the arm 1 will be held firmly and adapted to swing vertically on the trunnions.

To compensate for wear and insure a close contact or bearing at all times, I apply a short slotted spring 13, Figs. 1 and 4, the same being clamped between the fastening device 7 and socket portion 9 of said arm and its free end bearing on the trunnions, so as to tend to draw and hold the arm back against the latter.

It is apparent the arm 1 may be quickly attached to or detached from the base 2 by simply applying or removing the screw 12 and cap 7.

The construction of the contact parts enables them to be easily filed and smoothed, so as to fit and work with due accuracy. Furthermore, the entire attachment may be manufactured economically, since it is mainly composed of four parts, and the arm, the base with trunnions, and the cap being formed of cast metal.

As shown in Fig. 4, the cap 7 is provided with an opening 14 for passage of the conductor 15, which extends between the trunnions and through the arm to the carbon element 16 in the cup 17, applied to the free end of the arm. The said cup 17 is cast integral with the arm proper, 1, by which construction I attain greater solidity, strength, and durability, as well as economy in manufacture, as

compared with the old method, which consists in screwing a spun-brass or hard-rubber cup onto the arm. Another advantage is attained by reason of the fact that each integral cup
5 is bored or turned by a suitable tool to a certain depth and width, so that all are precisely alike in these dimensions, thus making the fitting and adjustment of parts accurate and uniform.

10 What I claim is—

1. The combination, with a base having a slot or mouth, and one or more trunnions arranged within and on the side or sides of such mouth, the transmitter-arm whose inner end
15 is adapted to fit and work on such trunnion or trunnions, and a fastening device which is in the nature of a cap adapted to be secured to the arm and completing the bearing, substantially as shown and described.

20 2. The combination, with the base having its apex provided with a vertical slot or mouth, and trunnions which are formed integrally therewith and project horizontally from opposite side of such mouth, of the transmitter-
25 arm whose inner end is adapted to fit loosely in such mouth and on the aforesaid trunnions, and the cap or fastening device adapted to fit on the opposite side of said trunnions, and secured to the arm, substantially as specified.

30 3. The combination, with the slotted base having one or more trunnions as specified, and the transmitter-arm having a shoulder and screw-socket, of the cap or bearing-piece adapted to fit on the trunnions, and for en-
35 gagement with the said shoulder, and a screw

for securing the free end of the cap, substantially as shown and described.

4. The combination, with the base having a mouth and trunnions, the transmitter-arm and a bearing-cap, of a spring secured be- 40
tween said cap and arm, and bearing on the trunnions, substantially as shown and described.

5. The combination, with the base having a mouth provided with trunnions, and a hol- 45
low transmitter-arm fitted and adapted to swing on said trunnions, of a fastening device or journal-cap having an opening, and a conductor passing through such cap, and between
the trunnions, and through the arm, substan- 50
tially as shown and described.

6. A base for a transmitter-arm having a slotted apex or open mouth, and provided with trunnions for such arm which are arranged
interiorly and oppositely in said mouth and 55
have enlarged heads or circumferential flanges, as shown and described.

7. The combination, with the base, having an open slot or mouth provided interiorly with
opposite trunnions whose heads are enlarged 60
as specified, of the transmitter-arm having its inner end cut out or grooved transversely to fit on said trunnions, and a cap or fastening
device applied on the inner side of the trun-
nions, as shown and described.

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Witnesses:

G. W. BELKNAP,
EDWARD A. GRIMM.