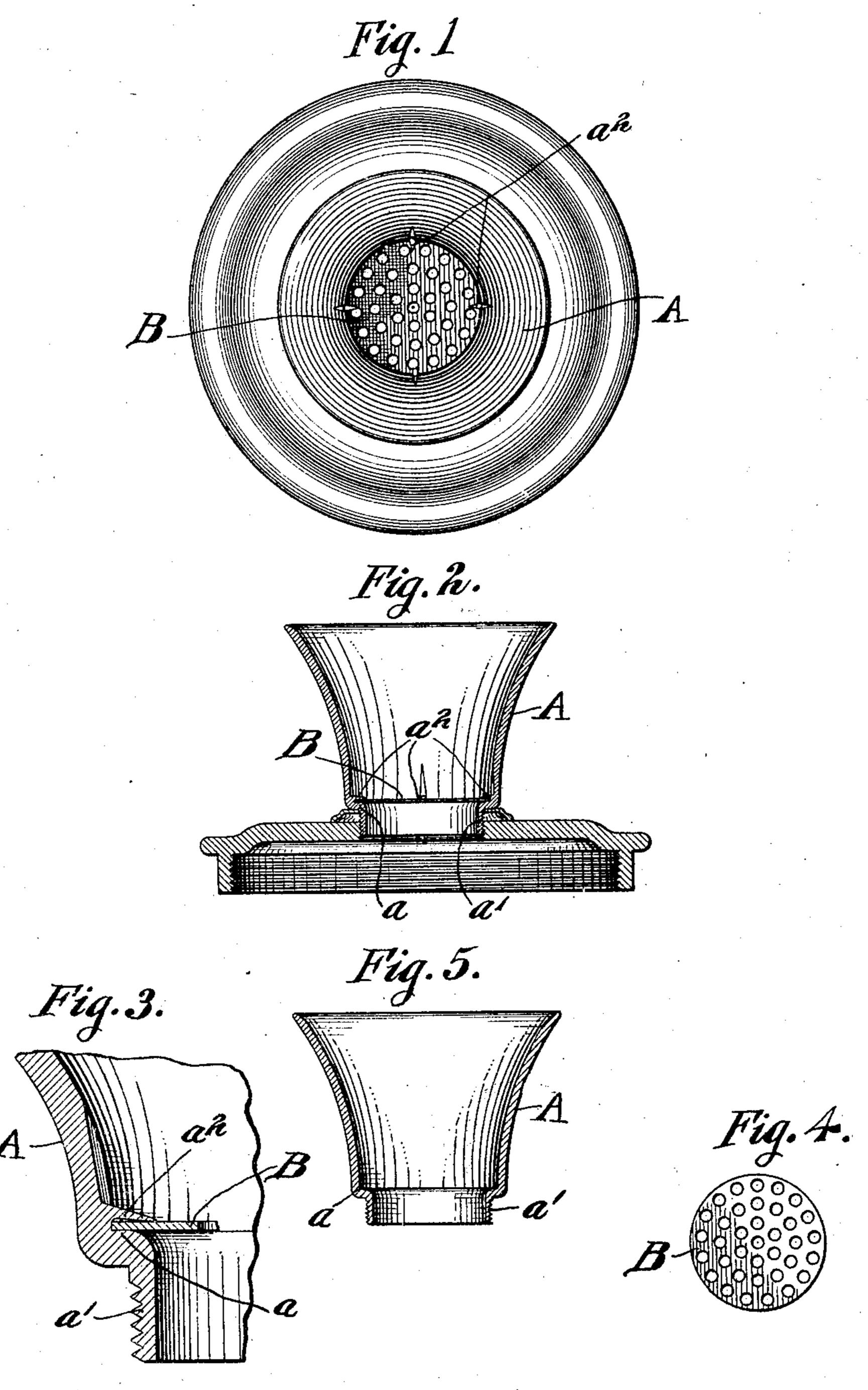
PATENTED MAY 1, 1906.

No. 819,059.

H. J. GUTTMAN. MOUTHPIECE FOR TELEPHONE TRANSMITTERS. APPLICATION FILED OCT. 21, 1904.



Witnesses.

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UNITED STATES PATENT OFFICE

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MOUTHPIECE FOR TELEPHONE-TRANSMITTERS.

No. 819,059.

Specification of Letters Patent.

Fatented May 1, 1906.

Application filed October 21, 1904. Serial No. 229,390.

To all whom it may concern:

Be it known that I, Harry J. Guttman, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Mouthpieces for Telephone-Transmitters, of which the following is a specification.

My invention contemplates certain improvements involving a threaded and externally-shouldered transmitter-mouthpiece made of drawn steel. It may of course be made of any other suitable metal; but I find that steel is preferable. In use a transmitter-mouthpiece of this character is strong and serviceable and fills the desired requirements without being liable to break or crack.

Furthermore, my invention contemplates a drawn-steel transmitter-mouthpiece provided with a perforated steel diaphragm fastened into place by means of lugs bent outwardly from the interior surface of the base portion of the hollow mouthpiece. In this way the mouthpiece is preferably made in two pieces and then assembled together for use. Obviously a transmitter-mouthpiece of this character is not only more satisfactory in use, but is also cheaper and more economical to manufacture.

In the accompanying drawings, Figure 1 is a face view of a transmitter provided with a mouthpiece embodying the principles of my invention. Fig. 2 is a section longitudinally through the mouthpiece and front plate of the transmitter. Fig. 3 is an enlarged sectional view of a portion of the mouthpiece. Fig. 4 is a face view of the perforated diaphragm of the mouthpiece. Fig. 5 shows the mouthpiece before the diaphragm is inserted and before the lugs are formed.

As thus illustrated, my improved transmitter-mouthpiece comprises the hollow body portion A and the separately-formed perforated diaphragm B. The said body 45 portion A is made of drawn steel and is preferably formed with a bend or deflection a, providing internal and external shoulders, and a reduced or externally-threaded base portion a'. The perforated diaphragm B is 50 adjusted into position on the internal shoulder provided by the bend or deflection a and is then secured in place by lugs a². These lugs are cut from the inner surface of the side

walls of the base portion of the mouthpiece and are then bent outwardly and into firm 55 contact with the outer surface of the said diaphragm. With this construction the threaded portion a can be screwed into the front plate of the transmitter until the said external shoulder is engaged by some part of the 60 transmitter, as shown in Fig. 2. It will be understood that the perforated diaphragm protects the internal parts of the transmitter against injury.

Being made of a tough quality of steel, the 65 mouthpiece may be thin enough to be quite light and is at the same time not liable to crack or break. The threading of the base portion of the mouthpiece is practically the only machine-work involved in the process of 70 manufacture, and consequently the cost of manufacture is comparatively small. In this way my improved transmitter-mouthpiece is not only more satisfactory to manufacture, but also gives better and more satisfactory results in use.

What I claim as my invention is— 1. As an article of manufacture, a mouthpiece for telephone-transmitters, said mouthpiece consisting of a hollow body portion of 80 drawn steel, having a bend or deflection in the metal providing external and internal shoulders, and a separately-formed perforated diaphragm secured within the base of said hollow body portion and against said in- 85 ternal shoulder, the said hollow body being externally threaded between its external shoulder and its smaller end, said threaded portion being cylindric and internally smooth, and means integral with the said bend or de- 90 flection for holding the diaphragm in place against the internal shoulder.

2. As an article of manufacture, a drawn-steel mouthpiece for telephone-transmitters, said mouthpiece consisting of a hollow body 95 portion and a separately-formed perforated diaphragm, said hollow body portion being provided with internally-arranged lugs bent into position to hold the said diaphragm in place.

3. As an article of manufacture, a metal mouthpiece for telephone-transmitters, said mouthpiece consisting of a hollow body portion provided internally with a shoulder, and a perforated diaphragm seated against said 105 shoulder, the said hollow body portion being

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provided internally with lugs bent into position to hold the diaphragm against said shoulder.

4. As an article of manufacture, a drawnsteel mouthpiece for telephone-transmitters,
said mouthpiece consisting of a hollow body
portion and a separately-formed perforated
diaphragm, said hollow body portion being
provided with internally-arranged lugs bent
into position to hold the said diaphragm in
place, the said hollow body being provided
with a screw-threaded attaching portion.

5. As an article of manufacture, a metal mouthpiece for telephone-transmitters, said mouthpiece consisting of a hollow body portion provided internally with a shoulder, and a perforated diaphragm seated against said shoulder, the said hollow body portion being provided internally with lugs bent into posiprovided internally with lugs bent into position to hold the diaphragm against said

shoulder, the said hollow body being provided with an externally-screw-threaded attaching portion.

6. As an article of manufacture, a steel mouthpiece for telephones, said mouthpiece 25 being of thin steel and provided at one end with an externally-threaded attaching portion, and having an internal annular shoulder, together with a perforated or reticulated diaphragm having its marginal portions resting upon said shoulder, and means integral with the mouthpiece for fixedly securing the said diaphragm upon the said shoulder.

Signed by me at Chicago, Cook county, Illinois, this 12th day of October, 1904.

HARRY J. GUTTMAN.

Witnesses:

CLARENCE M. THORNE, JENNIE NORBY.