

T. M. LA JORD.
SHIELD FOR MOUTHPIECES OF TELEPHONES.
APPLICATION FILED JULY 20, 1906.

905,330.

Patented Dec. 1, 1908

Fig. 1.

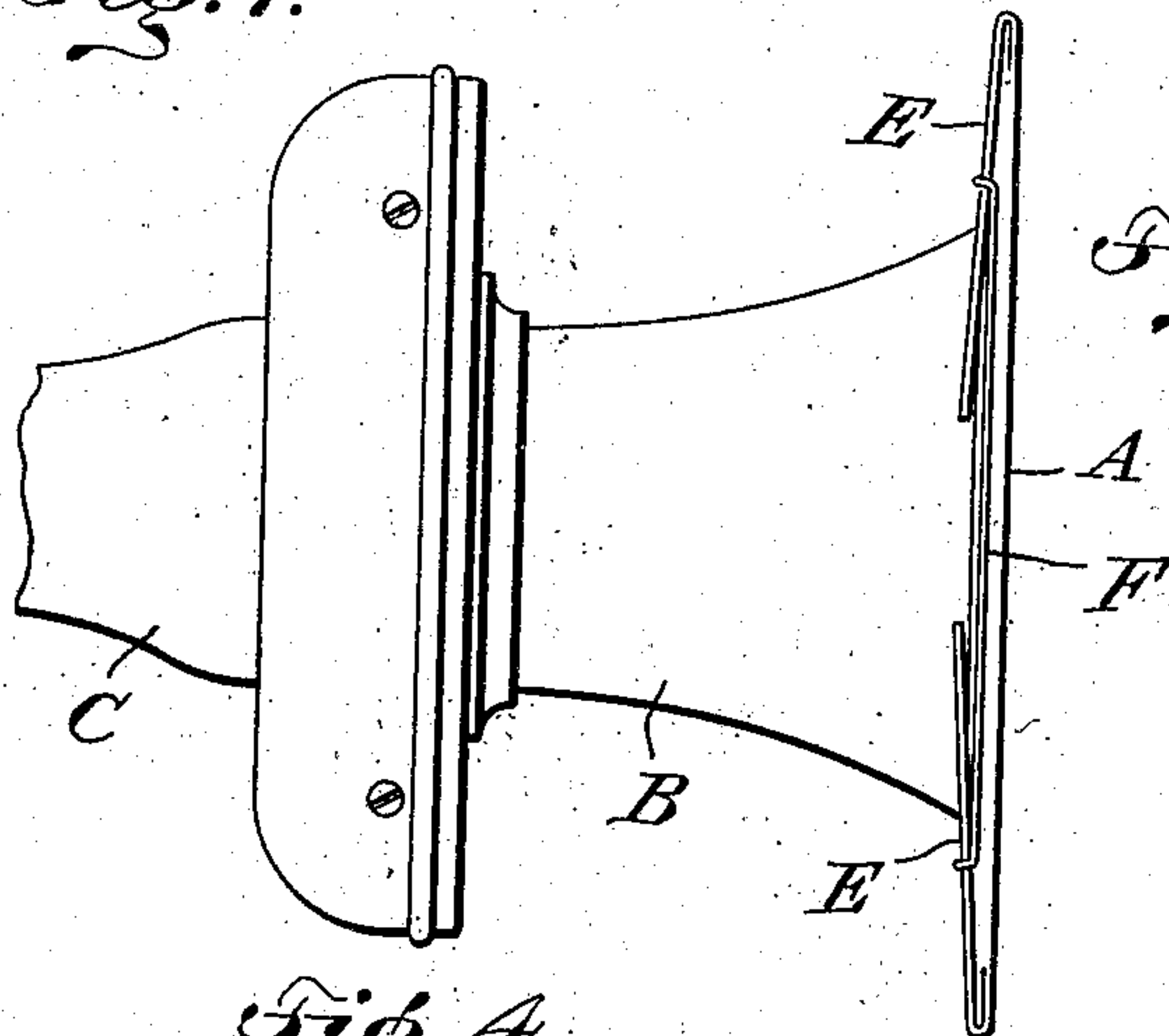


Fig. 2.

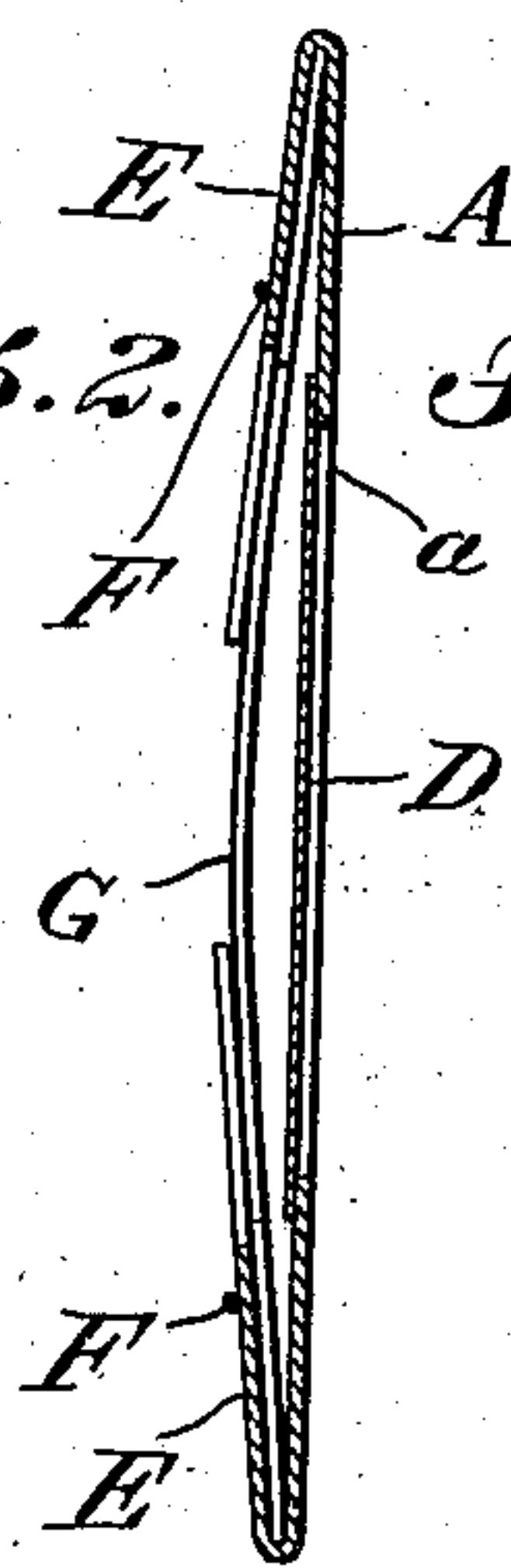


Fig. 3.

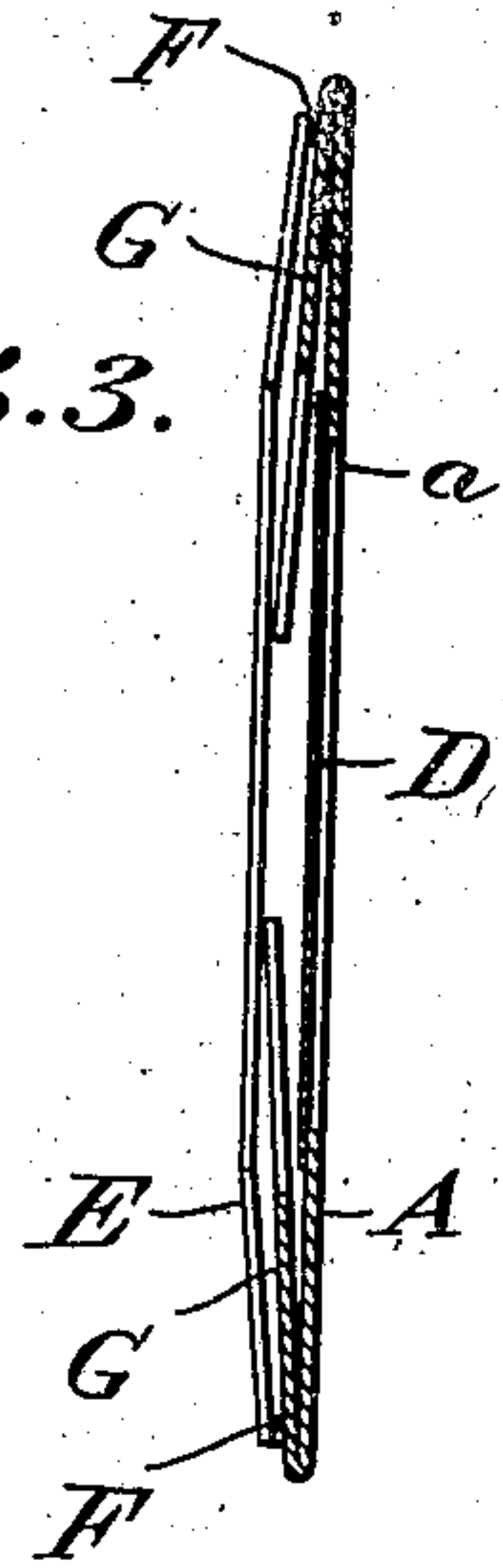


Fig. 4.

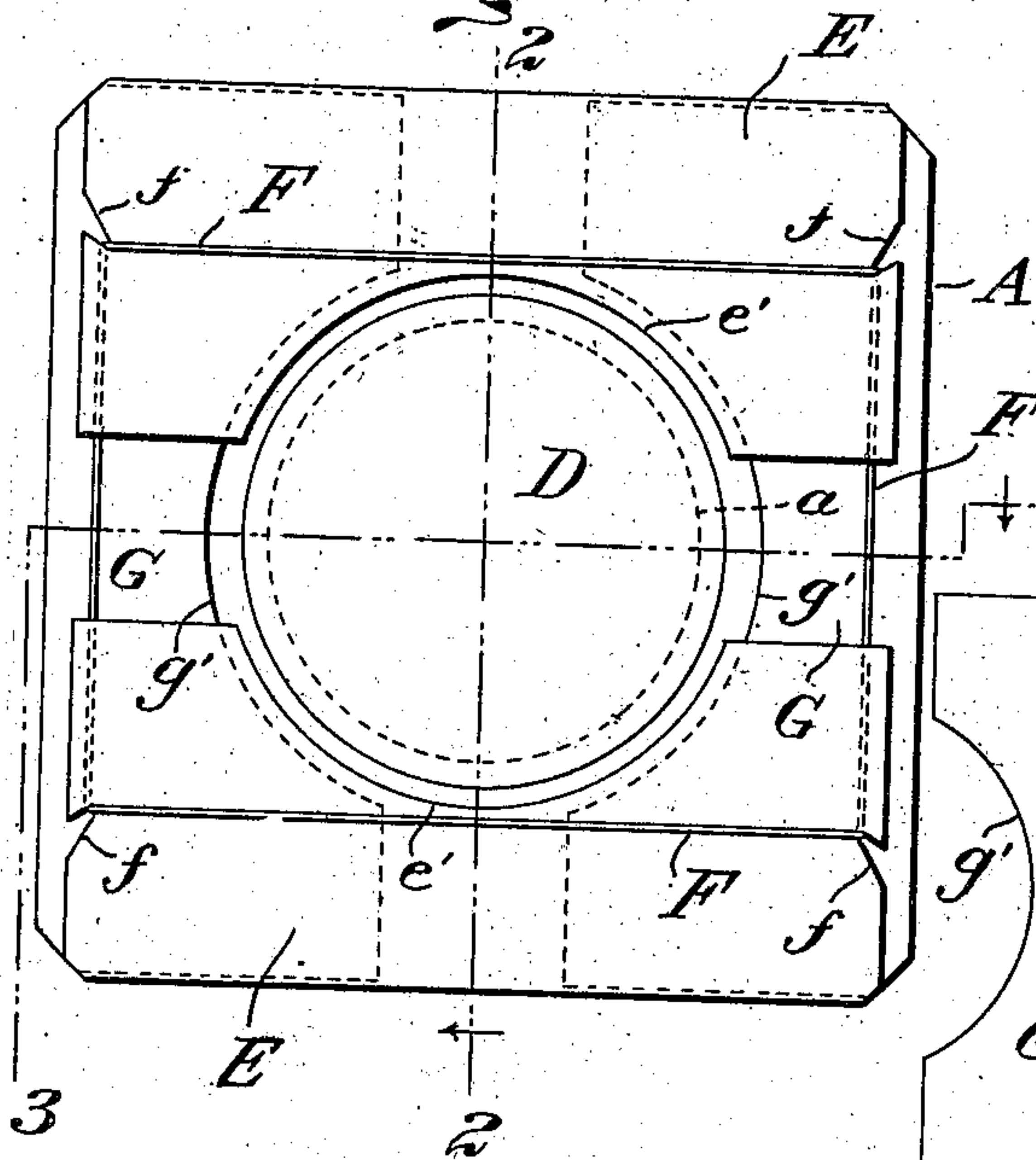
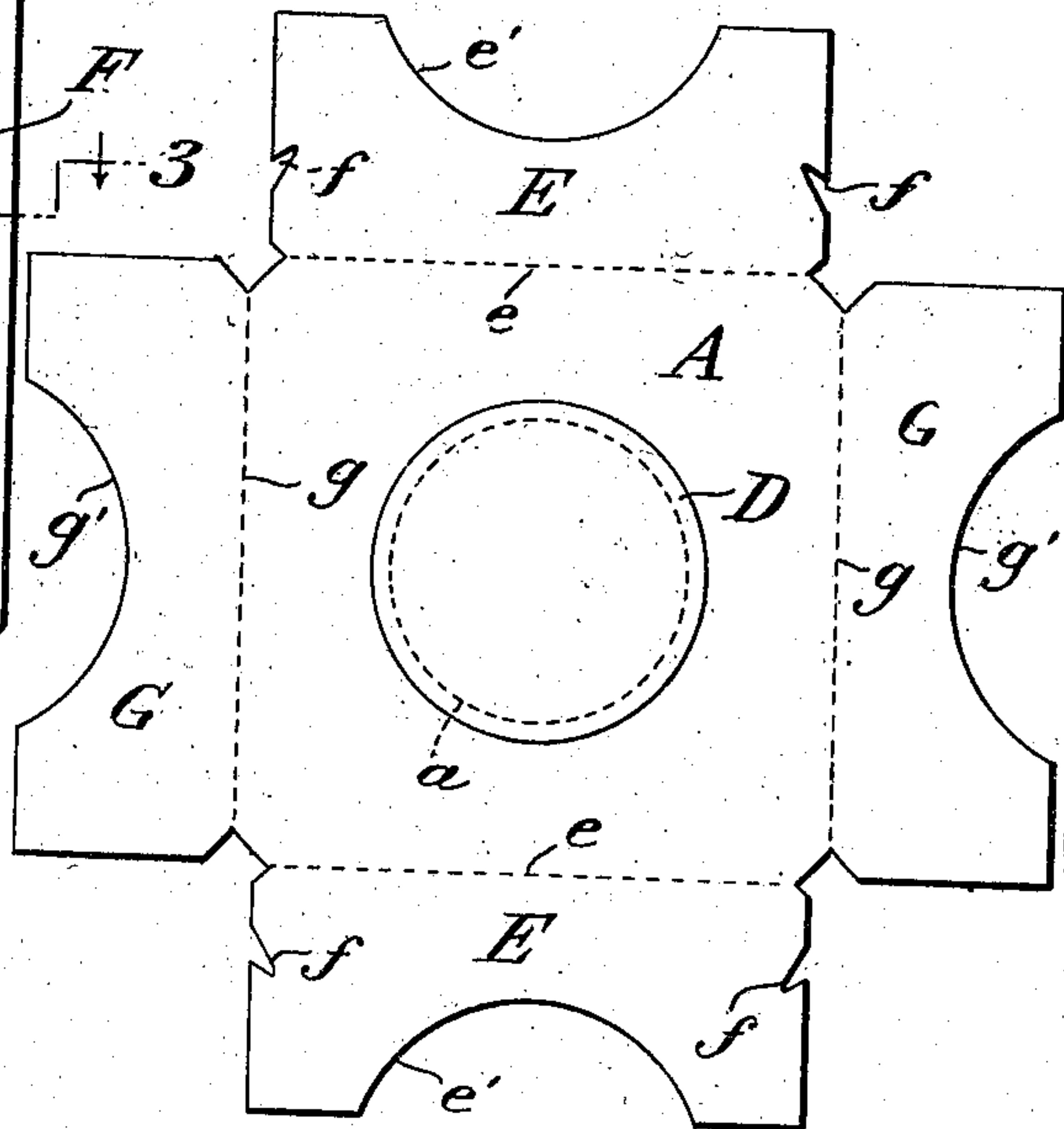


Fig. 5.



WITNESSES

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SHIELD FOR MOUTHPIECES OF TELEPHONES.

No. 905,330.

Specification of Letters Patent.

Patented Dec. 1, 1908.

Application filed July 20, 1906. Serial No. 326,965.

To all whom it may concern:

Be it known that I, THURSTON M. LA JORD, a citizen of the United States, residing at the city of New York, borough of Manhattan, in the county and State of New York, have invented a certain new and useful Shield for Mouthpieces of Telephones, of which the following is a specification.

This invention is a sanitary shield especially intended for use on the mouth piece of a telephone, and the object in view is the provision of a cheap device adapted to hold itself securely in place on the mouth piece.

An uncovered or open mouth piece of a telephone affords a chamber for the lodgment of dust, dirt, and disease germs from the breath of the users thereof.

Many persons object to the use of insani-
tary telephones, and to overcome such ob-
jections, I have devised a novel construc-
tion of sanitary shield which is so cheap
that it may be supplied to each individual
using a telephone; in fact, the shield is well
adapted for use as an advertising novelty.

Prior devices of the same general charac-
ter as my invention are so constructed that
the individual device does not hold itself
securely in place; in fact, the device is liable
to become displaced by moving the tele-
phone over a desk, table, or other surface,
or by touching the shield with the lips or
the face in the act of talking into the mouth
piece. Furthermore, such devices are com-
paratively more expensive than the device
of my invention, owing to the use in the
former of fastenings which attach certain
holding flaps to the body or front of the
shield. This is due to the fact that after
stamping the shield out of paper or card-
board, it is necessary to fold certain flaps
on the shield and thereafter fasten the
flaps by staples, such mode of procedure re-
quiring a certain number of operations
which, of course, involve time, labor, and
consequent expense.

My new shield is characterized by three
advantages which are of prime importance
in a device of this character; first, it is con-
structed for holding itself securely in posi-
tion on the mouth piece so that it cannot be
displaced or knocked off accidentally under
ordinary conditions of use of the instru-
ment; second, the shield is so reinforced
that it will not bend or buckle when applied
to, and used for any considerable length of

time on, the mouth piece; and, third, the de-
vice is exceedingly cheap of manufacture, so
that it may be distributed gratuitously, as an
advertising novelty.

The invention consists of a shield pro-
vided with a film-covered opening, wings
on said shield, and means for connecting the
wings one to the other so as to hold them
under tension and in engagement with a
mouth piece. The aforesaid means for con-
necting the wings may consist of a single
elastic or spring, or a number of springs, or
of any appropriate yieldable connection for
holding the wings in engagement with a
mouth piece, one of the prominent features
of my invention consisting broadly of means
for connecting said wings.

Another part of the invention resides in
means for reinforcing the front or exposed
side of the shield. It is found in practice
that the shield when applied is liable to bend
or buckle, particularly when the wings are
elastically connected, and to overcome this
objection, I employ means for reinforcing
the shield so that it will present a flat front
side and effectually cover the open front
part of the mouth piece. One means for re-
inforcing the shield consists of flaps adapted
to be folded in different directions from the
wings and upon the shield, said flaps operat-
ing to hold the shield from bending in one
direction and the wings serving a like pur-
pose in another direction. Preferably, the
shield and the wings and flaps thereof are
stamped or cut by dies in a single piece
of cardboard, or other material, and at the
same time the material is scored or creased
to facilitate the operation of bending or
folding the wings and the flaps.

In the drawings, Figure 1 is a side eleva-
tion, showing my device applied to the
mouth piece of an ordinary telephone; Fig.
2 is a vertical cross-section on the line 2—2
of Fig. 4; Fig. 3 is a horizontal cross-section
on the line 3—3 of Fig. 4; Fig. 4 is a view
in rear elevation of my new shield discon-
nected from a mouth piece; and Fig. 5 is a
plan view of the shield as cut or stamped,
and with a film attached to an opening of
the shield.

A designates a shield provided with an
opening *a*, said shield being preferably flat,
and of such a size as to cover the mouth
piece B, of an ordinary telephone C, sub-
stantially as indicated by Fig. 1. Any

suitable material may be employed in the manufacture of said shield, but, for economy and for advertising purposes, I have found that a comparatively stiff sheet of cardboard is well adapted to the purposes of this invention, although it will be understood that I do not desire to limit myself to this particular material.

The opening *a* of the shield is covered with a film D, of very thin material which is sensitive so as to vibrate or respond readily to the action of sound waves thereon. The film D is applied or secured to the inner or rear surface of the shield A by any suitable means, such as by an adhesive or cement adapted to securely attach the film at its edge to the shield. The film may consist of a thin pliable sheet or layer of paper which is preferably not treated to render it antiseptic, although I may employ any material suitable for the purpose. A very thin sheet or layer of untreated tissue or parchment paper has been found to answer the purpose exceedingly well.

As shown by Figs. 4 and 5 of the drawings, the shield A is approximately square, and on two of the edges of said shield are provided wings E. It is preferred to make the wings integral with the shield A, and to bend or double said wings on the score or crease line *e*, whereby the wings may be folded upon the shield and into lapping relation thereto. The wings are provided with recesses *e'*, which conform to the shape of the mouth piece B, and are adapted to fit snugly thereto, as presented by Fig. 1, and as will be understood readily by reference to Fig. 4.

An important feature of the invention consists in the employment of means for yieldably or elastically connecting the wings E one to the other, and independently of any attachment of the wings to the shield. Various devices for thus yieldably connecting the wings may be employed, such as springs, a yieldable or spring wire hoop or band, or equivalent devices, but in the embodiment shown by Figs. 2, 3 and 4 of the drawings, I employ an endless elastic connection F, the latter being shown as a rubber band. For the purpose of connecting the elastic F to the wings in a manner to overcome any accidental separation, said wings are provided with notches *f*, see Figs. 4 and 5. The recesses *e'* of the wings E, are made in the side edges thereof, while the notches *f*, are provided in the respective end edges of said wings, whereby the recessed edges of the wings engage with the mouth piece, and the band F may have proper engagement with said wings, substantially as shown by Fig. 4. The shield is, furthermore, provided with the flaps G, which extend beyond the edges not occupied by the wings E, said flaps extending outwardly

from the shield on two of the edges thereof, while the wings extend outwardly from the two remaining edges of said shield. The flaps G are adapted to be folded on the score or crease line *g*, (see Fig. 5,) and said flaps are provided with recesses *g'*. The flaps are adapted to be folded inwardly toward each other and upon the shield, while the wings fold in a similar manner upon the shield, and, also, upon the flaps. This construction is advantageous because the flaps G, when folded reinforce the shield to prevent it from bending or buckling in one direction, while the wings fold at right angles to the flaps, and thus reinforce the shield in a manner to restrain it from bending or buckling in another direction. It will be seen that the flaps and the wings thus cooperate in holding the shield in a flat condition, when applied to a mouth piece, and that the parts wholly overcome any tendency of the shield to buckle, even under the tension of the elastic connection.

For economy in manufacture, it is preferred to cut or stamp the entire device, with the exception of the elastic band F and the film D, from a single piece of paper having a certain amount of pliability, and in Fig. 5, I have shown the shield A, its wings E, and the flaps G, as cut to the required form and creased or scored at one operation, whereby the shield may be manufactured rapidly and with great economy. It will be understood that after cutting the article, it is only necessary to attach the film D, after which the articles may be packed in a flat condition for shipment and storage. Owing to the cheapness of manufacture, the device is well adapted for use as an advertising medium, and it is evident that any advertising or other matter may be printed on the exposed side of the shield for the purpose of displaying such matter to the public. When it is desired to use the article, the operator bends the flaps G on the creased lines *g*, and afterwards folds the wings E on the creased lines *e*, the wings overlapping the shield and the flaps, and the latter lapping the shield, substantially as indicated by Figs. 2, 3 and 4. The shield may now be applied to the mouth piece B, by slightly opening the wings and the flaps, and slipping the device upon said mouth piece, the recessed edges *e'*, *g'*, of the wings E, and the flaps G, engaging with said mouth piece. Finally, the elastic F, or its equivalent, is distended and adjusted into engagement with the notched edges *f* of the wings, whereby the elastic operates to draw the wings E firmly into engagement with the mouth piece. The elastic, or its equivalent, yieldably connects the wings for the purpose of holding them firmly on the mouth piece, and thus overcome any tendency of the shield to become displaced on said mouthpiece.

The shield, when applied, wholly covers the open end of the mouth piece, but owing to the sensitive character of the film D, the use of the shield does not in any way interfere with the transmission of speech through the telephone. The film and the shield effectually prevent the lodgment of dust, dirt, and disease germs, in the mouth piece, and the shield is so cheap, and can be applied so readily, that the individual users of telephones may be supplied with shields for temporary use on the mouth piece.

Although I have shown and described my shield as especially adapted for the mouth piece of telephones, it will be understood that the invention is not strictly confined to use on this particular instrument, because I may employ said shield on the mouth pieces of other instruments, machinery or apparatus.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:—

1. A shield for telephone mouth-pieces comprising a body portion, members folded upon said body-portion, said members being adapted for engagement with a mouth-piece, and means elastically connecting said members, said means being independent of the mouth-piece to which the shield is adapted to be applied.

2. A shield for telephone mouth-pieces comprising a body portion, means for reinforcing said portion, whereby it is precluded from bending when applied to a mouth-piece, members folded upon said body portion and adapted for engagement with a mouth-piece, and an elastic connection between said members for retaining the latter firmly in engagement with a mouth-piece.

3. A shield for telephone mouth-pieces comprising a body portion provided with a diaphragm, members folded upon said portion and into overlapping relation thereto, said members being adapted for engagement with a mouth-piece, and an elastic connection uniting said members and operating to place tension thereon, whereby the shield is adapted to be retained firmly in position on a mouth-piece.

4. A shield for telephone mouth-pieces comprising a body portion, wings integral with said body-portion and folded into overlapping relation thereto, said wings being adapted for engagement with a mouth-piece, and elastic means connecting said wings for retaining them in position on the mouth-piece, said elastic means being free from engagement with the mouth piece when the shield is applied thereto.

5. A shield for telephone mouth-pieces comprising a body-portion provided with a diaphragm, notched wings folded upon said body portion, and into overlapping relation thereto, said wings being adapted for en-

gagement with a mouth-piece, and an elastic connection fitting in said notches and adapted to be retained thereby normally in cooperative engagement with said wings.

6. A shield for telephone mouth-pieces comprising a body-portion, flaps which are foldable into overlapping engagement with the body portion, and wings also foldable into overlapping relation to the body portion, said flaps and wings being adapted for engagement with a mouth-piece.

7. A shield for telephone mouth-pieces comprising a body-portion, flaps overlapping the body-portion, wings overlapping the body-portion, and means for retaining the wings in position, said flaps and the wings being adapted for engagement with a mouth-piece.

8. A shield for telephone mouth-pieces comprising a body-portion, flaps overlapping said body-portion, wings overlapping the body portion and also overlapping said flaps, and elastic means connecting said wings.

9. In a device of the class described, a shield provided on a plurality of its edges with flaps which are foldable relative thereto, and also provided on other edges with a plurality of wings which are also foldable on the shield, the flaps and the wings being foldable in different directions.

10. In a device of the class described, a shield, flaps foldable relative to the shield, and wings also foldable relative to the shield, said wings and flaps being foldable into lapping relation.

11. In a device of the class described, a shield, foldable flaps, and wings foldable into lapping relation to the flaps.

12. A shield for mouth pieces of telephones comprising a body having wings and flaps which are folded into lapping relation to the body and to one another.

13. In a device of the class described, a shield provided with lapping flaps and wings, and means yieldably connecting the wings.

14. In a device of the class described, a shield provided with lapping recessed flaps and wings, and means connecting the wings independently of the flaps.

15. A shield for telephone mouth pieces comprising a body provided with a diaphragm, wings folded on said body and adapted for engagement with a mouth piece, and a separate elastic tension member engaging said wings and adapted to draw the latter into engagement with said mouth piece.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THURSTON M. LA JORD.

Witnesses:

SCHUYLER S. HAMPTON,
E. LEE.