

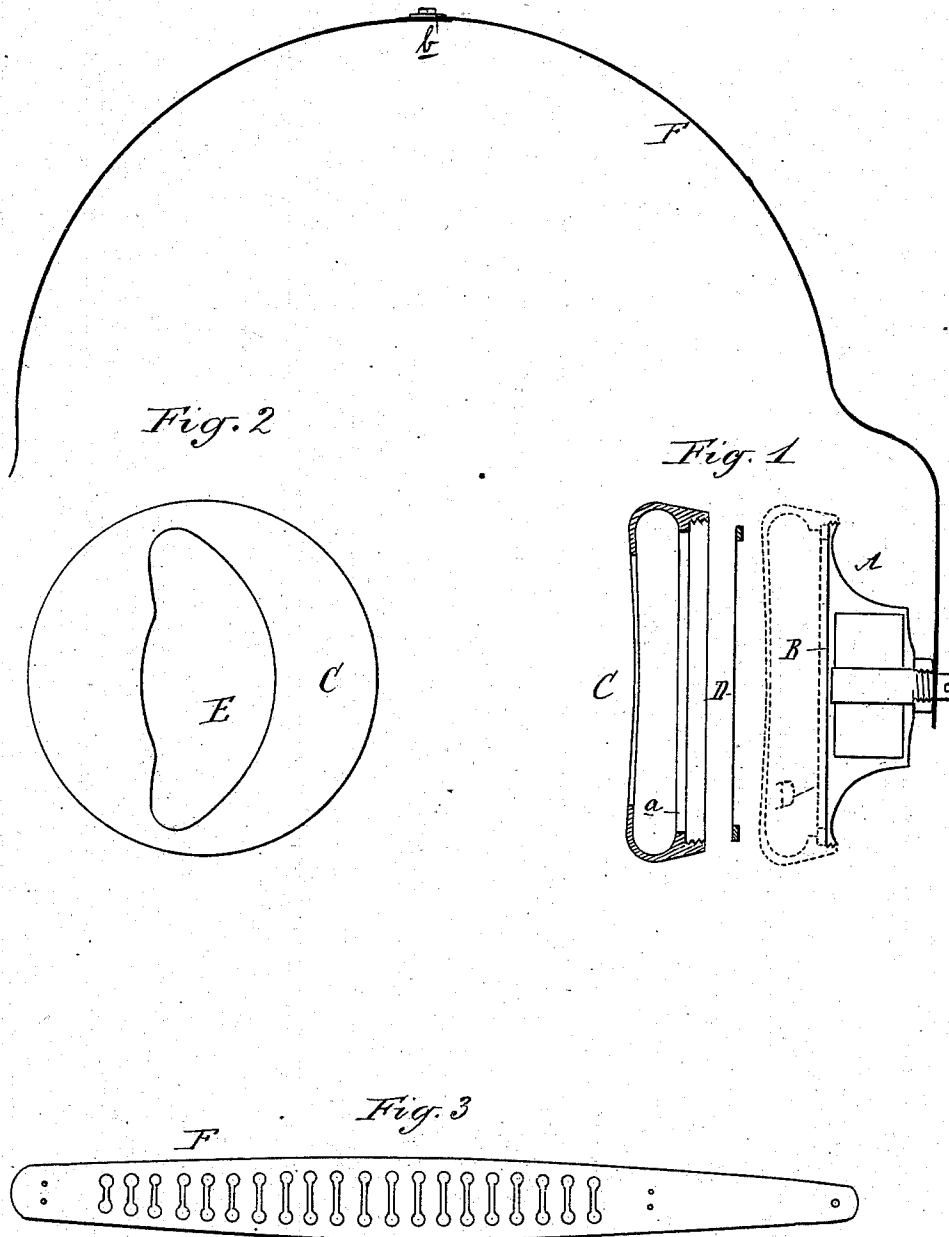
(No Model.)

F. B. COOK & F. F. GRAVES.

TELEPHONE.

No. 295,983.

Patented Apr. 1, 1884.



Attest:

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Att'y

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UNITED STATES PATENT OFFICE.

FRANK. B. COOK AND FRANK F. GRAVES, OF TOLEDO, OHIO.

TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 295,983, dated April 1, 1884.

Application filed July 14, 1883. (No model.)

To all whom it may concern:

Be it known that we, FRANK. B. COOK and FRANK F. GRAVES, of Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Telephones; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to certain new and useful improvements in the construction of attachments to telephone-receivers, by means of which such receivers are adjustably secured to the head of an operator at a central station or home office.

The invention consists in the peculiar construction of the device and its adaptation for the purpose of securing the receiving-instrument to the head and ear of the operator, to the exclusion of external sounds from the ear to which the device is attached, and in the combination of parts, as more fully hereinafter set forth.

Figure 1 is a vertical central section through the receiver and attachment. Fig. 2 is a top plan view of the attachment, showing the opening designed to engage with the ear. Fig. 3 is a top plan of the spring by means of which the device is supported upon the head of the operator.

In the accompanying drawings, which form a part of this specification, A represents a telephone-receiver of any of the known and usual constructions, except that the ordinary bell-mouth is removed, leaving the diaphragm B of such implement in its regular position. C is a cap provided with suitable threads and flanges, as shown in Fig. 1, where the parts are shown in position and detached, and adapted to be screwed onto the end of the receiver, there being interposed between the flange *a* of said cap and the diaphragm B a supplemental diaphragm, D, of thin mica or other suitable substance, which is secured in place outside the regular diaphragm of the device by such cap. The outer face of such cap has cut in it a hole, E, of proper size and shape to readily allow the implement to be slipped over either ear of the operator through such hole, and in this position it is supported by the strap-spring F, one end of which is secured to the receiver, as shown in Fig. 1, or at any other suitable point, and passes over the

top of the head of the operator. Although not an essential feature in our invention, as heads vary in size, this spring may be made in two pieces, as shown in the edge view in Fig. 1, such pieces being adjustably secured together, as at *b*.

To prevent the ear coming in contact with the diaphragm B, the supplemental diaphragm D is employed; but it is obvious that this, although much preferable, is not essential, for if the ear lies close to the head or the ear-cap C is made very deep the ear will not touch the inner diaphragm.

By the employment of this device the telephone or receiver is readily attached to the ear of the operator and secured in place by the spring over the head, thereby relieving both hands of such operator, which may be employed on the switch-board or in performing any other required service.

We are aware that various devices are in use as attachments to telephone-receivers for this purpose, and we do not claim any of such devices; but

What we claim as our invention is—

1. A telephone receiving implement provided with a cover in front of the diaphragm, adapted to receive and embrace the ear of the operator, substantially as described.

2. In combination with a telephone receiving implement provided with a cover adapted to receive and embrace the ear of the operator, a supplemental diaphragm adapted to prevent said ear from coming in contact with the acting diaphragm, substantially as described.

3. In combination with a telephone receiving implement, a cap adapted to be detachably secured to such implement, and provided in its outer end with an opening adapted to embrace the ear of the operator, substantially as and for the purposes set forth.

4. In combination with a telephone receiving device provided with a supplemental diaphragm, and the cap having an opening to receive and embrace the ear, as herein described, a spring secured to such receiver, adapted to support the same upon the head, substantially as set forth.

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Witnesses:

U. C. CLEVELAND,
DECLAU ALLEN.