March 15, 1960 W. MÜLLER 2,928,908

MICROPHONE WITH AN ADJUSTABLE ATTENUATOR

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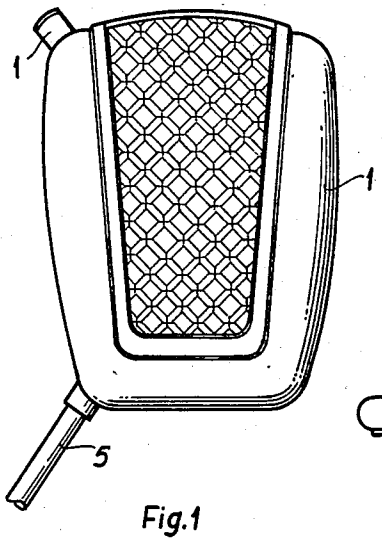


Fig.1

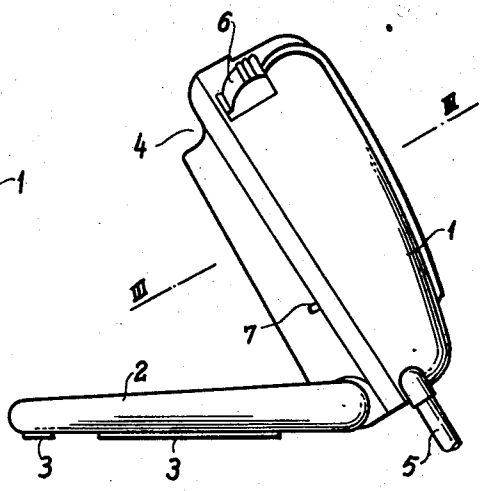


Fig.2

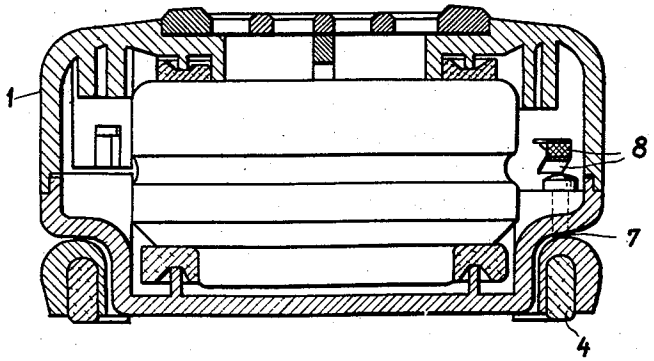


Fig.3

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MICROPHONE WITH AN ADJUSTABLE ATTENUATOR

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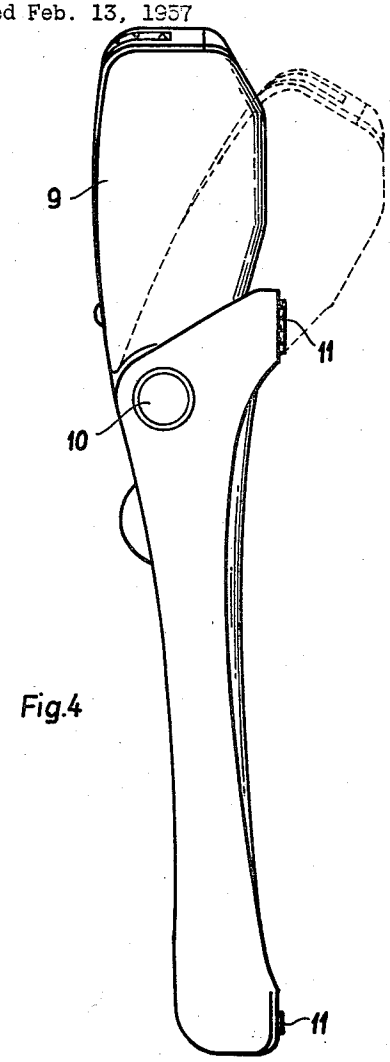


Fig.4

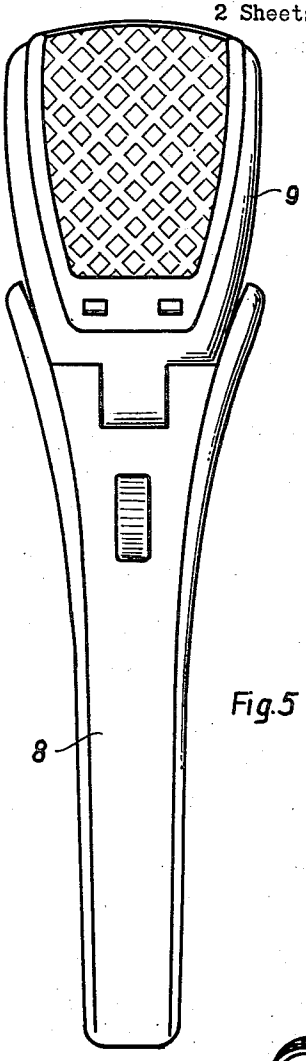
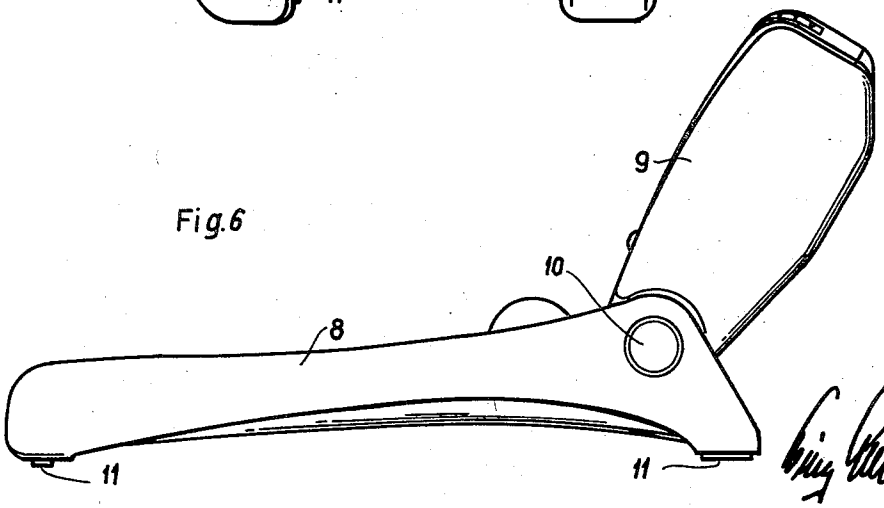


Fig.5

Fig.6



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MICROPHONE WITH AN ADJUSTABLE ATTENUATOR

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6 Claims. (Cl. 179—147)

It is known that in using dictating machines in noisy rooms, an abatement of the room noise as compared with the noise caused by speaking into the microphone can be achieved if an attenuator as supplemental equipment is provided for the microphone and the microphone is held close to the mouth. The attenuator, generally consisting of a resistor or of a capacitor is connected in parallel with the microphone by a tumbler switch, a sliding switch or a push-button.

It is, furthermore, known that microphones for dictating machines have been provided (for alternate use as table or hand set) with a stand which can be folded outwards for alternate use as a table or hand set.

The present invention is based on the concept that it is convenient to always cut in the attenuator if the microphone is used as hand set, whereas the attenuator may be kept out of operation if the microphone is used as a table set. Based on this idea, the switch for the attenuator is, according to the object of the present invention, operated by a folding lever, serving as a stand in such a manner, that the attenuator is cut out in the stand position of said foldable lever (conference connection) and is cut in by swinging said foldable lever out of its stand position (dictation connection). This arrangement obviates the provision of a special device for the manipulation of the attenuator and is considerably suited to facilitate the use of the microphone.

Two typical examples are represented here to illustrate how the invention works:

Fig. 1 is a front view of a microphone according to this invention shown in the position as table set,

Fig. 2 is a side view of Fig. 1,

Fig. 3 is a sectional view through III—III of Fig. 2 on a larger scale, but shown in hand set position,

Fig. 4 is a side view of a second typical example as hand set,

Fig. 5 is a front view of Fig. 4,

Fig. 6 is a microphone of the type shown in Figs. 4 and 5 used as table set.

The microphone represented in Figs. 1 to 3 with its casing **1** is fitted with a folding, stirrup-like, lever **2** which serves as a stand so as to enable the microphone to be used either as table or as hand set. This folding stirrup is pivotally secured to the lower edge of the microphone casing at its back. The stirrup can be swung about its pivotal axis to be held at any angular relation to the casing by means of frictional forces so that the microphone may rest securely at any angle on a table surface. In order to suppress the propagation of structural sound through the table sound-absorbing feet **3** of soft rubber are embedded in grooves made in the metallic stirrup.

For the use as hand set folding stirrup **2** is folded in towards the back of the microphone casing and is received by a marginal recess **4** provided in the microphone casing, which recess in shape and thickness conforms to the dimensions of the stirrup.

For starting and stopping the recording carrier of the dictating machine connected via cable **5** to the microphone, the latter carries a tumbler switch **6** in the upper left corner. Additionally, for cutting in an attenuator which may consist either of a resistor or of a condenser, not represented here in the drawing a circuit-closing and opening switch, operated by a simple push-button **7**, is provided, the latter extends through an opening in the casing and is positioned with its projecting end within the recess normally occupied by stirrup **2** in its folded position. The projecting end is positioned in such a manner that switch **8** of the attenuator is opened when using the microphone as table set (Figs. 1 and 2) whereas when used as hand set the switch **8** is cut in by moving folding stirrup **2** in towards the casing, thereby pressing down the push-button **7** (Fig. 3).

In the second typical example as shown in Figs. 4 to 6, instead of folding stirrup **2**, a grip **8** is provided, which for use of the microphone as hand set must be brought into the position shown in Figs. 4 and 5, in which position it lies in the extended or nearly extended (broken lines) longitudinal axis of the microphone **9**, when used as table set it is swung about the axis of the shaft **10**, which connects it with the microphone, into the position shown in Fig. 6. In this position it can be placed with its under face **11** on the table so that the microphone **9** stands with a slight inclination. The attenuator, not shown in Figs. 4 to 6, will be cut in or out by the to-and-fro-movement of the grip **8** in the same manner as shown in the first typical example.

The invention is not solely confined to the typical examples as shown in the foregoing but many modifications and other executions are possible. For example, the switch serving to operate the attenuator might be connected to the axis of rotation of the folding stirrup. Furthermore, the connection might be arranged so as to cut in or out the attenuator, independently of the folding stirrup.

I claim:

1. In a microphone adapted for use with dictating machines having attenuating means adapted to suppress background room noises, a stand pivotally interengaging said microphone and adapted to pivot toward and away from said microphone, and switch means adapted to operatively engage and disengage said attenuating means, said switch means positioned to be operatively controlled by the movement of said stand.

2. A microphone adapted for use with dictating machines including a casing, an attenuating means within said casing, designed to suppress background room noises, a support for said microphone adapted to serve as a stand, means pivotally securing said support to said casing for pivotal movement to and from said casing, switch means projecting partially through said casing and positioned to be operatively controlled by said pivotal movement of said support, said switch adapted to operatively engage and disengage said attenuating means.

3. A microphone adapted for use with dictating machines, including a casing, an attenuating means within said casing, designed to suppress background room noises, a stirrup-like stand having parallel legs, means pivotally securing said stand to said casing for movement of said legs in parallel planes from a position closely adjacent said casing to a position angular thereto, whereby said stand may be used to support said microphone on a horizontal surface, switch means projecting partially through said casing and positioned to be operatively engaged and disengaged respectively on movement of said legs to and away from said casing.

4. A microphone adapted for use with dictating machines, including a casing, support means for said casing, means pivotally securing said support means to said casing

for angular movement therewith, an attenuator within said casing, switch means adapted to operatively control said attenuator including a push button, said push button projecting through said casing and adapted to be operatively engaged by movement of said support means relative to said casing.

5. A device as set forth in claim 4, wherein said support means, when said microphone is used, as a hand set, is positioned closely adjacent and substantially parallel said casing.

6. A device as set forth in claim 4, wherein said support means, when said microphone is used as a hand set, is positioned in substantial longitudinal alignment with said casing.

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