

amplifier of a capacitor microphone embodying the invention;

Figure 2 is a section through an attenuator of the microphone; and

5 Figure 3 illustrates a microphone capsule of the capacitor microphone.

In cases for which attenuation is not desired or necessary, an amplifier 1 and a microphone capsule 2 are mechanically joined together directly in a unit by means of screw or plug connections 7, 8, the electrical connection being established by way of an electrical socket 9 of the amplifier 1 and an electrical plug pin 10 of microphone capsule 2.

10 However, if an attenuator is to be put in circuit, microphone capsule 2 and amplifier 1 will be disconnected and spaced apart as illustrated in the drawing and attenuator 3 inserted between them. Part 8<sup>1</sup> of the attenuator housing engages in connection 7 of the amplifier 1 and part 7<sup>1</sup> receives the connection 8 of the microphone capsule 2. Thus, after amplifier 1, attenuator 3 and microphone head 2 have been connected together, they again form a single unit.

The end of the attenuator 3 which engages the amplifier 1 is provided with an electrical plug pin 5 adapted to co-operate with socket 9, whilst the end which engages microphone capsule 2 comprises an electrical socket 9<sup>1</sup> for receiving pin 10 of the microphone capsule. If the attenuator which is to be connected in parallel with the capacitor microphone is merely a capacitor, pin 5 and socket 9<sup>1</sup> may form an unbroken connection. On the other hand, where an RC network is to be inserted, the electrical connection between socket 9<sup>1</sup> and the plug 5 will be interrupted by an intermediate insulating element 11. The RC network may be printed on a board 6, for instance, in the form of a circular disc, interchangeably disposed in the attenuator housing.

45 WHAT WE CLAIM IS:—

1. A capacitor microphone comprising a microphone capsule, an amplifier and an

attenuator detachably connected together, wherein complementary electrical and mechanical connectors are provided on the microphone capsule and the amplifier whereby the microphone capsule and the amplifier may be directly connected together without the attenuator, and the attenuator comprises an attenuating element mounted in a housing provided with electrical and mechanical connectors mating with the connectors on the microphone capsule and the amplifier whereby the attenuator is detachably connected between the capsule and the amplifier.

2. A capacitor microphone according to claim 1, wherein the attenuating element is a capacitor which shunts the capacitance of the microphone capsule.

3. A capacitor microphone according to claim 1, wherein the attenuating element is an RC network connected in the electrical path which connects the microphone capsule to the amplifier.

4. A capacitor microphone according to claim 3, wherein the RC network is printed on a board mounted in the housing.

5. A capacitor microphone according to any preceding claim, wherein the exterior surface of the attenuator housing is provided with a tell-tale mark to distinguish it from the microphone capsule and amplifier housing.

6. A capacitor microphone substantially as hereinbefore described with reference to, and as illustrated in, the accompanying drawing.

FORRESTER, KETLEY & CO.,  
Chartered Patent Agents,  
Jessel Chambers,  
88/90 Chancery Lane,  
London, WC2A 1HB,  
and  
Rutland House,  
Edmund Street,  
Birmingham 3,  
Agents for the Applicants.