(No Model.)

M. E. & E. C. CLARK.

TELEPHONE TRANSMITTER.

No. 576,551. Patented Feb. 9, 1897.

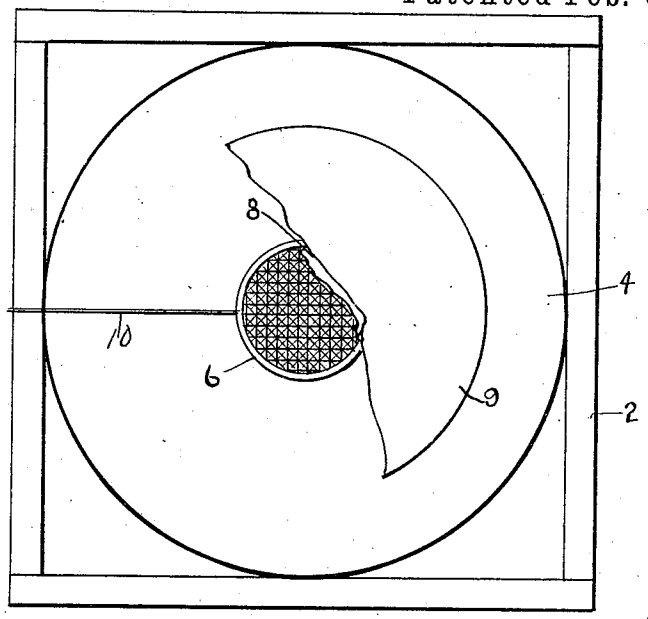

Fig. 2

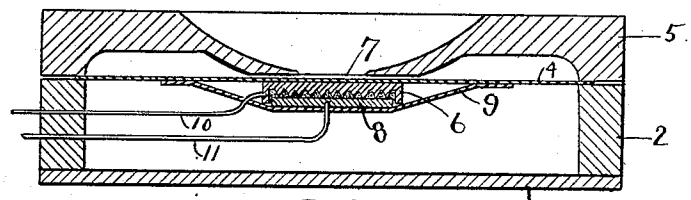

Fig. 1

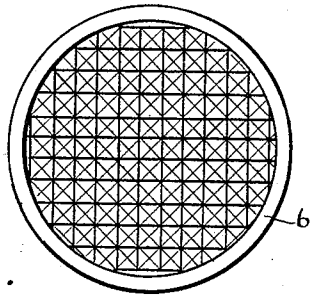

Fig. 3

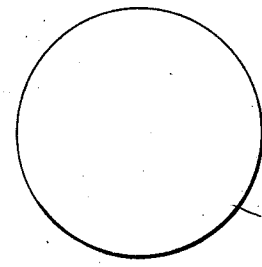

Fig. 4

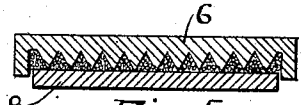

Fig. 5

Witnesses
B. P. Shepherd.
W. E. Gooley.

Inventors
Marion E. & Earl C. Clark
By Paul & Hawley
their Att'n'ys

UNITED STATES PATENT OFFICE.

MARION E. CLARK AND EARL C. CLARK, OF MINNEAPOLIS, MINNESOTA, ASSIGNORS TO THE CLARK TELEPHONE AND CONSTRUCTION COMPANY, OF MINNESOTA.

TELEPHONE-TRANSMITTER.

SPECIFICATION forming part of Letters Patent No. 576,551, dated February 9, 1897.

Application filed September 23, 1895. Serial No. 563,312. (No model.)

To all whom it may concern:

Be it known that we, MARION E. CLARK and EARL C. CLARK, of Minneapolis, Hennepin county, Minnesota, have invented certain new and useful Improvements in Telephone-Transmitters, of which the following is a specification.

Our invention relates to telephone-transmitters; and the particular object of our invention is to provide a telephone-transmitter of a very simple construction and one by which the conditions for talking are improved.

A further object of our invention is to provide a telephone-transmitter which will be extremely sensitive and which, moreover, will be of the constant-contact type.

Our invention consists in a telephone-transmitter of the construction and combination of parts hereinafter described, and particularly pointed out in the claim.

The invention will be more readily understood by reference to the accompanying drawings, wherein—

Figure 1 is a sectional view of a transmitter embodying our invention. Fig. 2 is a view from the rear thereof, showing the rear contact part removed. Fig. 3 is an enlarged rear view of the carbon-cup provided with the contact points or projections. Fig. 4 is a view of the contact disk or button. Fig. 5 is a sectional view of the contact devices placed in position and showing granular carbon or like material between the parts.

As shown in the drawings, 2 represents a small box having a solid back 3, while the front is closed by the diaphragm 4, of paper, parchment, or other suitable material stretched and secured firmly thereon. 5 represents a mouthpiece of suitable design. On the back of the thin sensitive diaphragm 4 we secure the carbon-cup 6. The bottom of the cup is taken up by a large number of points or projections 7, having the shape of small pyramids the tops or points of which are in the same plane. Contact is made with these by a flat disk or button 8 of carbon, which fits into the cup. The space between the projections in the cup may be and is preferably filled with granular carbon to provide a certain imperfect contact between the electrodes. The disk or button 8 is secured in place by a binding part 9, which may also be of paper or of any other material of which the disk 4 is made. The wires 10 and 11, leading to the induction-coil, are connected, respectively, with the cup-electrode and the disk-electrode 6 and 8. These lead through the side of the box and the openings around the same are preferably closed tightly, so that a substantially air-tight space is provided back of the disk and within the box, whereby an air-cushion is formed behind the diaphragm to prevent excessive vibration thereof.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination, with the diaphragm, made of an electrical insulating material, such as paper or parchment with a multiple contact device secured directly upon said diaphragm and provided with a large number of contact points or projections, a disk or button to engage said contact-points and a binding-piece of material similar to that of which the diaphragm is formed, and whereby said button or disk is secured upon the diaphragm and said multiple contact device, substantially as described.

In testimony whereof we have hereunto set our hands this 5th day of September, A. D. 1895.

MARION E. CLARK.
EARL C. CLARK.

In presence of—
C. G. HAWLEY,
M. E. GOOLEY.