

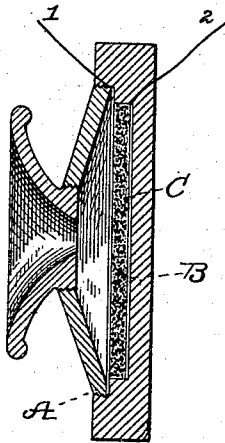
(No Model.)

T. A. EDISON.

TELEPHONE.

No. 329,030.

Patented Oct. 27, 1885.



ATTEST:

*E. Rowland*  
*T. G. Greene Jr.*

INVENTOR

*Thomas A. Edison*  
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*attys*

# UNITED STATES PATENT OFFICE.

THOMAS A. EDISON, OF MENLO PARK, NEW JERSEY.

## TELEPHONE.

SPECIFICATION forming part of Letters Patent No. 329,030, dated October 27, 1885.

Application filed December 15, 1884. Serial No. 150,344. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS A. EDISON, of Menlo Park, in the county of Middlesex and State of New Jersey, have invented a new and  
5 useful Improvement in Telephones, (Case No. 636,) of which the following is a specification.

In the use of loose granulated carbon or other divided conducting material in tele-  
10 phones such material is liable to shift its position and become packed, and the instrument be thereby made to fail in its operation. This renders it necessary to fix the position of such instruments, which is not desirable, and even  
15 when their position is fixed the difficulty is not wholly overcome, since external vibrations serve to produce the same result. I have found, however, that by coating to the minimum extent the carbon or other granules with an adhesive substance—such as an oil or other  
20 viscous material—the effectiveness of the instrument is not injured, and the granules will retain their relative positions without packing. This discovery is applicable to any form of telephone in which granulated carbon or  
25 other material is used, and hence I wish it understood that my invention is not limited to any particular construction of instrument.

In the accompanying drawing, to which ref-

erence is now made, there is shown, for illustration, a sectional view of a conventional 30 form of telephone.

A is a metal diaphragm, between which and a metal back plate, B, is located a body, C, of loose granules of carbon or other conducting material. These granules are coated with an  
35 adhesive substance, as already explained. The circuit-connections 1 2 are made with the diaphragm and back plate, the body of granulated carbon or other material being interpolated in the circuit between those parts. 40

What I claim is—

1. A telephone having in circuit a body of granulated material, the granules being coated with an adhesive substance, substantially as  
45 set forth.

2. A telephone having in circuit a body of granulated carbon, the carbon granules being coated with an adhesive substance, substantially as set forth.

This specification signed and witnessed this 50 3d day of December, 1884.

THOMAS A. EDISON.

Witnesses:

THOS. G. GREENE, Jr.,  
EDW. C. ROWLAND.