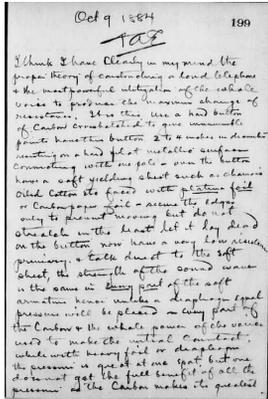


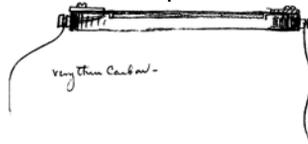
[New York,] Oct. 9, 1884

Notebook Entry:
Telephony¹



I think I have Clearly in my mind the proper theory of constructing a loud telephony & the most powerful utilization of the whole voice to produce the maximum change of resistance. It is this. Use a hard button of Carbon crosshatched to give innumerable points have this button 2 to 4 inches in diameter resisting on a hard flat metallic surface connecting with one pole— over the button have soft yielding sheet such as a cham-ois Oiled Cotton etc faced with platina foil or Carbon paper foil— secure the edges only to prevent moving but do not stretch in the least let it lay dead on the button. now have a very low resistance primary & talk direct to the soft sheet, the strength of the sound waves is the same in every part of the soft armature hence unlike a diaphragm equal pressure will be placed in every part of the Carbon & the whole power of the voice used to make the initial Contact, while with heavy foil or diaphragm the pressure is great at one spot, but one does not get the full benefit of all the pressure as the Carbon makes its greatest Change on the first part of the wave doubling the pressure scarcely makes 1/5 change further & so on while with my arrangement the initial sensations of the Carbon only is used.

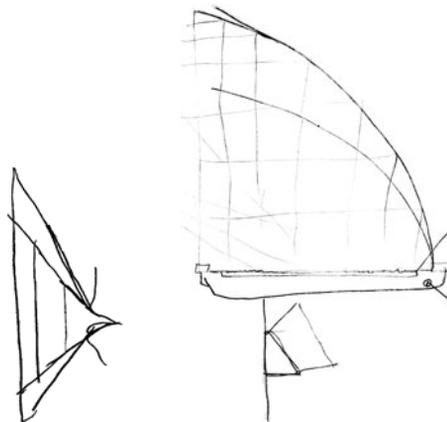
⟨Didnt turn out so well as expctd Oct 11 1884⟩

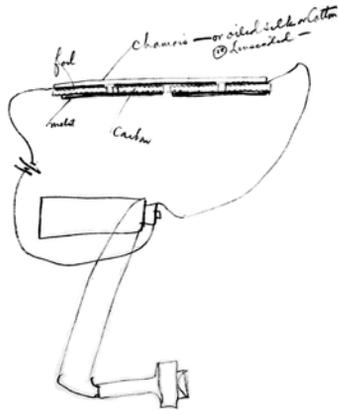


very thin Carbon—

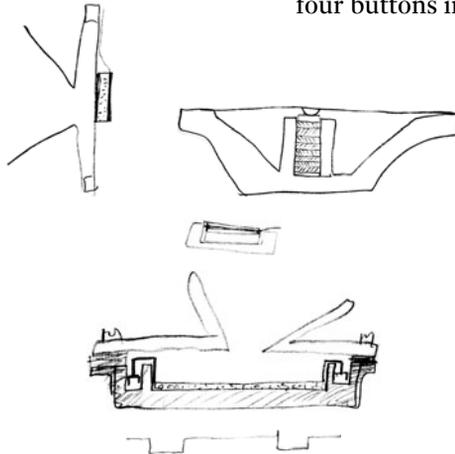


much finer than this 80 @ 100 to inch.





four buttons in Series—²



TAE

J. F. Ott

X, NjWOE, Lab., N-82-05-15:199 (TAED N203199). Document multiply signed and dated.

1. See Doc. 2743 (headnote).
2. Figure labels are “foil,” “chamois— or oiled silk or Cotton i.e. Linseeded—,” “metal,” and “Carbon.”

—2745—

Boston Oct. 15th 1884^a

*Theodore Vail
Memorandum to
American Bell
Telephone Co.
Executive Committee¹*

Gentlemen,

In accordance with your wishes, I had an interview with Mr. Edison when last in New York. After a long consultation, Mr. Edison finally agreed to the following as an arrangement that he would be willing to make:—

He would give about half of his time to the Co. to be paid therefor \$6000.00 per annum. He has a Laboratory, the expense of which is as follows:—