

WAR DEPARTMENT  
OFFICE OF THE CHIEF SIGNAL OFFICER  
WASHINGTON

28 November, 1919

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My dear Colonel Fabyan:

Your letter of November 17th has just reached me due to the fact that you had the letter addressed to 1202 - 18th Street, N. W., instead of my present address, 1725 Connecticut Avenue, N. W.

Wednesday I received and shipped to you two of the tubes you desired, with the understanding, of course, that these are simply loaned for government experimental purposes. The patent situation on these confounded tubes is such that we have to be very careful that they do not get into unauthorized hands. 'Nuff said.

Your second paragraph was typically "Fabyan." You know I never have admitted that you had any method for solving this cipher, and, as in the case of all these academic debates, you will have to produce the proof!!! I am sorry that I cannot get a chance to watch your work as it goes because no doubt you have perhaps reached other methods of suggested attack than those you have already described. No doubt you have tried and discarded what might, perhaps, have some bearing on other work. As you recognize, the by-products of this investigation are highly worth while even though there never was, as there never will be, a real solution.

However, don't let me discourage you from making any further attempt on this cipher. In fact, I want to encourage you, so I am going to do what you ask me to do in your last paragraph, that is, produce some more tapes of the same "confounded mean variety" as the last ones, which, however, you are informed are not according to what the Signal Corps has been advised to use as standard practice. That is, we are not going to introduce the feature of coding the key settings. We will give you just as we did before, messages enciphered in accordance with the letter of instruction of which you have a copy. I suppose you will want about another

hundred messages, and as soon as the officer-in-charge of the system gets back from New York City, which will be Monday, we will start on the work of fixing up these messages in our spare time. I think that without doubt these messages will reach you within two weeks because there isn't quite as much spare time in which to prepare them as we would like.

With reference to this cipher, you, of course, know that it is quite possible to use only one of the two transmitters, in other words, only one cipher tape of such length that it will never repeat itself. This cipher tape can be prepared from letters chosen at random and I am rather curious to know what your force has to say about the use of such a tape which will not result in any sort of a cycle such as given by the addition of two or three or more cipher tapes. A few words about what they think of the possibilities of deciphering the messages enciphered by this method will be of interest.

With warmest regards,

As ever

*J. M. Mauborgne*

Colonel George Fabyan,

Riverbank Laboratories,

Geneva, Illinois