

August 21, 1939

Dear Bliss,

I have consulted Yates about your suggestions, which were in themselves very welcome, as to tables in your letter of July 12th.

It is a matter of great difficulty, owing to the diversity of computing practice used by different people, to judge how wide will be the utility of any expansion which may suggest itself. Personally, I never use anti-log tables, preferring to use the log table inversely. When I was teaching I found that one of the commonest sources of numerical error arose from using anti-log tables by mistake for log tables, or vice-versa. This type of error is largely eliminated when students are taught to use a single table for both purposes. Yates, who has much experience with routine computation in the Survey service, apart from his later experience in agriculture, does, I know, use anti-log tables; but he says he does not see any sufficient point for including these in our book.

As to the probit tables, there is no doubt of the utility of a fuller table for the very few people engaged

in making really fine adjustments. I think it would be important to arrange such a table so that the weighting coefficient, maximal probit and range to be used together should be found in close proximity. This presents some difficulty, but I have no doubt that something useful could be developed in about three of our pages. At present I doubt whether there are enough workers using the method to justify this expansion. I hope, however, that the numbers will increase, and the emphasis we already lay on probit computations will encourage it to do so.

Yours sincerely,