August 13, 1942

Dear Dr. Fisher:

I want to thank you for your kind remarks about my book.

You will be interested to know that a small group of statisticians working together here is having considerable success using your methods on a wide variety of problems coming to us from the Army and from plants which furnish the Army with supplies. Some of these problems afford good tests of the usefulness of certain statistical methods. For instance, in a recent experiment in an arms factory the persistent significance of an interaction term told us what was wrong with a defective machine; the engineers accepted our finding, changed a certain piece-part and the machine proceeded to work perfectly. A smoothly working machine in place of a breakdown constitutes a tribute to the method used which not even the worst sceptic can deny.

We have had many such experiences and our success seems to be proportional to our understanding of your researches. We have one problem that stumps us and I wonder if I could ask for your advice. We have a collection of data on the movement of a pressure high. We suspect that the motion is random subject to one restriction, namely, that when the pressure high reaches the circumference of an ellipse its next motion is inwards. Thus
We wonder what would be the right way to test the stated hypothesis.

Sincerely yours,

H A Fireman