Dear Prof. Fisher,

I have been asked to advise on a project for improving the milk production of Indian dairy cattle by cross-breeding between Sindhi and Jersey cattle, and we have come up against a point which we find it necessary to submit to a real authority.

Concurrently with the breeding of a new strain, it is proposed to attempt to improve the village cattle in the immediate vicinity of the farm by providing pure-bred bulls of the indigenous Sindhi breed. Later, cross-bred bulls will be provided. If a simple and reasonably efficient method of milk recording can be arranged, it will be possible to test bulls in this way, and to bring back the best of them into the herd. On account of very limited staff, the local habit of allowing calves to suckle, poor roads etc., it is quite out of the question to run a regular milk recording system in the villages, but it would probably be feasible to do a test milking once a month. I suggest stripping out the cows carefully in the evening, tying up the calves, and making a single test milking 12 hours later. Our problem is to determine the amount of information provided by a series of probably 10 test milkings taken monthly during a lactation which will probably last about 10 months. Milk yield reaches its maximum within a week of calving and then it is said to
increase approximately exponentially. To get complete figures for the milkings per day over whole lactation periods on which to work, if you will be so good as to tell me how to set about it.

Yours sincerely,

[Signature]

J.W.

JUL/25,

Prof. R. A. Fisher, Sc.D., F.R.S.,
university college,
London.

O. 8. The problem of estimating the curve, determining the variance appropriate to it, is more than I can face! But it seems to me that it should be not so difficult a question if I knew how to go about it.

This is quite very well, and shall have some much more difficult problems to start up to you shortly! Yours sincerely,

[Signature]