Cripps's Corner. Forest-Row- Sussex.

Apr. 13. 29

My dear Fisher

I can now answer your two letters, and I will take the last point first. I think Lancaster's suggestion excellent. I had forgotten that you included it. I suppose it was at the back of my mind when I wrote. There are other points which may arise in, which I only mention for my own amusement. You try finding your way about in a dark room in competition with a blind man and you will be hopelessly beaten. Blindness may possibly be an advantage in some circumstances, & thus selected. Again imagine a struggle between which gave the fish eyes in the breeding season, making it seek a cave at that time. If in the cave, conditions were such that it could not produce 2 offspring, it would be uncomfortable. If practically unoccupied, it might produce many more, and then have a great advantage over the outside fish, which can only produce 2 or on emerging the average. Hence there would be a selective advantage to fish writing to penetrate the cave for part of the year. This is an example of the Law that "natural selection abhors a vacuum". Can I question the Origin of Species, I wonder?

Then as to my old friend free will, I am

afraid you don't help me. Eddington says we can foretell an average because it is an average. I don't agree. Take 2 squads of men firing at a target. The first lot's shots centre round a spot X, which is not the centre of the target. Why do we foretell that the second squad's shots will centre round X? Because the aim of every member in both cases is correlated with C., the centre of the target? It is nothing to do with the mere fact of it's being an average. It is a "statement of a probability", and it necessitates a rigidly fixed ~~correlation~~ correlation. If the men had free will in the second squad as to where to aim, your law of probability would help you not at all in deciding where the shots would centre round. If the first squad represents the parents and the second the offspring, you must assume the same fixed correlation in the 2 cases, if there is to be hereditary transmission. There may be no "force behind the monads, but there must be this fixed correlation, which is inconsistent with the one monad having any free will relatively to the other. You do not seem to me to get over the fact that determinism is a necessary postulate of Science, or to help.

, which bears a fixed relation to X.

me in believing this at the same time as free will. Possibly I misunderstand about probabilities, but so far it seems that a probability needs a force conclusion. If the conclusion is due to something internal to the mind, I cannot see that that helps. In so far as the choice is arbitrary, it cannot be inherited, or foretold.

Then as to my father's mind. I daresay I did overstress what I said in Organic Evolution, for I did not then realize the effect of the pressure to make one's meanings natural selection. What you propose now to say seems to me quite correct, i.e. "could not be merely discovered ...". You leave out the word "importance", which I believe constantly leads us into trouble, not being defined. Looking to the future one may say that the discovery of the methods of evolution are of far greater importance now than the fact of Evolution. But it would be hard to say exactly what was meant. Anyhow it would imply that the fact of Evolution was firmly established. If that is not admitted, then we should say that the loss of a belief in Evolution would be a more important

catastrophy to us. The loss of a belief in natural selection, the other being greater than the past.

I wonder if you can read all this which is rapidly written.

Hoping the family keeps flourishing

Yours truly

Leonard Darwin