

Cripps's Corner. Frost Row. Sunday. Nov. 1930

My dear Fisher.

Many thanks for your letter about family allowance. It is all very puzzling, and I feel that you may be right on all points. In short, these psychological problems are so difficult that I must be content to leave the solution to those who will come after me. Anyhow I shall be very ready to back you ^{up} in any movement to get contributory f.a. ~~may~~ adopted, as the only satisfactory financial method of aiding parenthood. I shall make no complaint however hardly you fight against state systems; but shall continue to believe that to point out the best safeguards in advance might be useful.

I have been reading your Domesday paper, and though it is rather ^{too} technical for me, yet I gather that it is an admirable example of a theoretical forecast being verified. I think I shall send it to my nephew Charles, in the hope of maintaining his interest in these problems. I said in a paper in our Review that "the normal aim of natural selection would be to produce" a stable differentiated series. You have proved, I take it, that considerably differing forms can remain in equilibrium as regards survival value; and, if so, is it not probable that

this is a very common phenomenon with slightly divergent forms?

I wonder what you feel about Fraser Roberts's paper in our Review. The title is bad, as Mendelism underlies all these questions. Anyway I am glad that he backs up the "Progeny Test"; for I take it this is what I have advocated for long.

I think I do not attach quite so much importance as I did to the "evaluation of the parts played by heredity and environment". If the progeny of f. m. parents are proved to be of such inferior quality on the average that, for the sake of that generation only, they ought to be kept out of the world, this is a conclusion independent of causation. F. R. speaks of it being unfair to draw certain distinctions. This is a bad term. We want to know how much suffering we may inflict on our generation for the sake of those who will come after us. Now if we knew that mental defect was entirely due to environment, we should search for the causes with great persistence. But till they were found, our policy would be the same, if only looking to the next generation, whether defect was entirely due to heredity or to environment.

The more the defect is due to heredity, the more we should strive to eliminate ^{it} for the sake of subsequent generations. But I don't know that this ~~should~~ ^{would} alter our practical policy greatly. If not, it is these crude conclusions that we mainly want for purely practical purposes.

Some time ago you asked if you could see my copy of Pigeon's big book, with my notes thereon. I find my notes amount to nothing. But it is a book I should like you to have by you, in case you liked to look at it at any time. To read it is rather a fearful job, but you might like to dip sometimes. The biology and heredity chapter is bad, and ought to have been pitched into by us. And it is no doubt unsifted. Drage's last book seems to me to go about as much wrong on the other side, in neglecting all the good done by old age persons, &c. Now I am venturing to send you both these books as an early Xmas present. Remember I got a request from Twitchin, and these little odds to Eugenius J, in imagination, take out a first request.

Yours sincerely

Samuel Darwin

Please accept this little gift in the spirit it is sent.

the next succeeding generation, and this without reference to any theories concerning natural inheritance. We know for certain that many good and bad qualities observed in parents are apt to appear again amongst their children, though we can give no complete explanation of this re-appearance; and on this fact can be based a strong argument in favour of endeavouring to reverse the existing differential birth rate. If we can get social reformers to acknowledge the benefits which could be derived from changes in the fertility of the different types of human beings, without necessarily convincing them that their views in regard to the effects of environment are mistaken, we shall have gone more than half way towards winning them over to our side. Here is a line of advance which has been too much neglected in the past.

The publication of an outline of a practical Eugenic Policy by our Society constituted, in my opinion, a very notable step in advance in regard to our eugenic propaganda. Having said this much, I should, however, like to add that I most certainly do not look upon this Outline as constituting the articles of a eugenic faith, nor do I hold that all our members should be expected to toe this line. Individual differences should always be admitted and even welcomed. All that is desirable is that there should be a pronouncement concerning our aims sufficiently definite to act as a flag around which we can rally as an efficient fighting force and then all advance together in the same general direction. I trust that this Outline will always be kept up to date, but only by the adoption of well-considered changes, and also that opportunities will constantly be taken for making it widely known. Having said so much, perhaps I may state that, whilst fully admitting that birth control is to be advocated in certain circumstances, as set forth in the present Outline, I should have liked also to have seen included an emphatic assertion as to the incalculable harm that has been done by the comparative decrease in the fertility of the best types since the middle of the nineteenth century, however brought about.

Moreover, systems of family allowances, provided that they are organized like insurance systems, the payments out being proportionate to the individual subscriptions, might also have been declared to be the best financial method of promoting fertility. These two points were, however, rightly not included in the Outline, for in these respects I was in a minority.

RESEARCH AND REFORM

Turning from practice to theory, it has been suggested that eugenics should be divided into two sections, under the headings of research and practical reform; and the question has been raised as to which is the more important. To this we may reply, as we did in regard to heredity and environment, that both are absolutely necessary if progress is to be made, and that to contrast their importance is generally a waste of time. On the one hand, the advocacy of eugenic reform, if founded on a false scientific basis, might have disastrous results. On the other hand, except for the highly important effect of stimulating the imagination, scientific research will only benefit mankind if it is followed up by the practical application of the discoveries thus made. The demand that we should seek truth for truth's sake is generally made by those who wish to save themselves the trouble of seeking to ascertain what should be the ultimate aim of scientific research. The fate of science is no doubt to keep digging away more or less blindly into the mountain of ignorance, and then quite unexpectedly to strike on some rich vein of knowledge. The wise man of science will, however, first learn to recognize the golden treasure when it is seen, and then dig by preference in those strata where it is most likely to be found. Nevertheless, looking to our own *Society* only, I suggest that we should devote our energies almost exclusively to the propaganda side of the question; because I believe that the ways of science will always prove to be so far more pleasant than any attempt to force unpalatable truths on an unwilling public that, if

both are admitted, the propaganda side of our work will not survive in the struggle for existence within the *Society*; just as, according to Gresham's Law, light money, being generally preferred by purchasers in times gone by, always tended to drive heavier coin out of circulation; if I may, for this purpose only, compare science to an inferior currency.

SCIENTIFIC RESEARCH

Nevertheless, I should like here both to mention a few of the less obvious lines of research which seem to me at the present time to be especially desirable in order to strengthen our eugenic foundations, and to express the hope that they will be undertaken at some university or other institution. First of all, may I make a strong plea for a psychological and physical examination of a large number of children, all of the same age, of women who have been actually certified as being mentally defective? This would give us one of those crude correlations which, I have suggested, might often be of great value in the advocacy of practical social reforms; for, anyhow, we should thus learn what kind of children would be prevented from entering the world in the immediate future by the prevention of parenthood among the types of defectives now most often certified. We could not, it is true, thus at once disentangle the effects of heredity and environment, which should no doubt be our aim, especially in the scientific study of causation. The simplicity and intelligibility of these crude correlations, as I have called them, nevertheless make them facts of great practical value. Another investigation much needed is a systematic inquiry into the various methods of sterilization, including the use of X-rays and also of injections, if this latter method can be made really effective. The whole question of human sterility is indeed in great need of further investigation; for we all know of cases when a child was desired but when for some unexplained reason none appeared. It may here also be noted that, from the point of view of

pure science, though it would be of doubtful direct value to eugenics, the effect of X-rays on the range of distribution of qualities in the next succeeding generation of animals or plants should be studied, the object being to ascertain if small mutations are promoted by this process in the same way as are large ones. The heredity of stupidity and also as far as possible of temperamental inferiority, together with the relationship between the I.Q. and the size of the family in the various social strata, are also subjects greatly needing further inquiry. Turning to reforms of greater magnitude, the whole system of registration in this country ought to be completely remodelled, for the sake both of efficiency and of economy. The merits of our fellow citizens are never intentionally hidden, and if the registration records included as far as possible all human defects, the tracing of pedigrees of scientific value would thus be greatly facilitated. Most important of all would be the establishment of some system of human stocktaking, such as that so ably advocated a year ago to-day by Dr. Bond.

One of the many ways in which Sir Francis Galton showed his genius was by his selection of the study of twins as a method of research in human heredity, a field of inquiry by no means yet exhausted. I should especially like to see this line of research pursued in the following manner. By means of all the best-known psychological, temperamental, scholastic, and medical tests, a considerable number of twins should be examined, all of them being what are known as 'identical' twins; that is to say twins of the same sex and very much alike in physical features. Now, it is generally held that the similarity between such twins is due to a similarity between the hereditary ingredients, call them what you like, of the germs from which the two individuals originated. May we not, therefore, assume that those tests in which the twins showed the greatest degree of similarity would also be those in which heredity counted for most? A number of sibs not twins should also be examined in the same way for the purposes of control; that is, in