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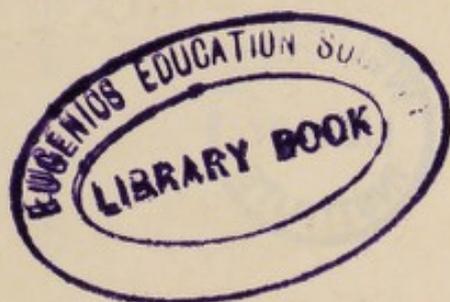
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# THE AIM AND SCOPE OF EUGENICS

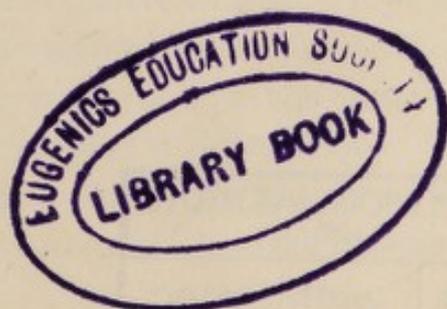


BY

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IN dealing with the broad outlines of such a comprehensive subject as Eugenics it will be perhaps well to adhere to the definition of Sir Francis Galton, the founder of the Eugenics Education Society, that "Eugenics is the study of agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally." If you treat the subject from the broad standpoint of National Eugenics, then every nation has largely the control of its own destiny, except for interference from its neighbours, and it is the duty of every nation to maintain its virility so that it may be able to meet its opponents and competitors on equal terms.

The subject of good breeding is one which has more or less engaged the attention of thoughtful people in all ages, and so far as the human race is concerned it received very practical consideration from the Spartans and many other ancient nations, and in more modern times from such a fine

warlike race as the Zulus. Among modern civilised nations until very recently the sexual relationship of the human species has been considered too delicate a subject for public controversy, and the propagation of the race has been largely left to fortuitous circumstances and religious customs. For many years a great deal of attention has been directed to the subject of improving the breed of cattle, cereals, fruits, and vegetables, and now thoughtful people are considering the advisability of devoting the same scientific principles to the improvement of the human breed.

There are at least three schools of thought who are considering the best methods of improving the human race. There is the Mendelian School, of which Professor Bateson of Cambridge is an able exponent; the School of Biometrics at University College, London, of which Professor Karl Pearson is the able head; and there is the practical Eugenics Society, which culls the best from all schools and tries to rouse public sentiment to the desirability of racial improvement. There are of course also the Neo-Malthusians, but their teaching is more social and environmental than racial, and I don't propose to touch upon it here. There never was a time perhaps when the struggle for existence, not only among individuals, but between nations, was keener than at present. This struggle will continue, and the nation which produces the best race will win in the long run. Hitherto national ascendancy has generally been attained by the arbitration of war, but as civilisation advances the ascendancy will be attained by intellectual and physical evolution; and in this racial evolution Britain should try to be first in the field, and if she is to be first, great efforts must be made to get rid of national decadency, which is patent on every hand.

The laws of Mendel show that the evolution of the race does not arise from any fortuitous concatenation of circumstances, but follows definite laws. Each individual, whether animal or vegetable, arises from the union of two organisms, male and female, or, as they are termed, gametes, and the

fertilised ovum or individual is spoken of as the zygote. Now, the great law of Mendel consists in showing that the character of the individual depends on the segregation or separation of the gametes of the parents and their union to form the offspring. It is highly probable that the determination of sex itself may eventually be found to be due to such segregation. Mendel first experimented on the edible pea (*Pisum sativum*). This plant is self-fertilised, but this is very easily prevented. He then crossed a tall pea with a dwarf pea, and found that in the first generation the offspring were all tall. This generation he allowed to fertilise itself, and of the next generation 25 per cent. were dwarfs and 75 per cent. tall; of this 75 per cent., 25 per cent. always produced tall, and the remaining 50 per cent. produced in the next generation 75 per cent. of tall and 25 per cent. of dwarfs. He therefore looked upon tallness as dominant to dwarfness. He spoke of the tall character as dominant, and the dwarf character as recessive. You can thus see what a simple matter it is to improve the breed of the pea. He and others also examined other characters of different plants, such as the branching habit, the straggling habit, hairiness, prickliness and smoothness of fruits, absence of glands in the leaves, rough and smooth foliage in wheat, lax and dense ears of wheat and barley, various characters of the seeds of cotton, susceptibility of wheat to rust disease, the two-celled type of tomato dominant to the many-celled, etc.; all these characters and many others conformed to the law of Mendel. We have all heard how agriculturists are improving the breed of their seed and so improving the yield of their crops.

A great deal has been done to improve the breed of horses. The colours of racehorses are recorded with great accuracy in Weatherley's general stud-book, and it has been found that chestnut is recessive to bays and browns, which are dominant. Chestnuts have no black pigment in their hair; bays have always black in the manes, tails, and fetlocks; browns have more or less black in the same parts, and generally black

pigment is distributed to some extent over the whole coat. Chestnuts being recessive will only breed chestnuts, but if you cross chestnuts with bays the first generation will be all bays, the next generation will be 25 per cent. chestnuts and 75 per cent. bays. In Professor Bateson's work on "Mendel's Principles of Heredity" you will find numerous such illustrations of Mendel's law. There are many affections of human beings which have been shown to be subject to Mendelian laws, such as colour blindness (which is dominant in males and recessive in females), deaf-mutism, the pigment of the eye, the stature (though there are many factors which play a part in this development), night-blindness, brachydactyly, many nervous diseases, etc.

The Mendelian law upsets the Darwinian conception of evolution as proceeding through the gradual transformation of masses of individuals by the accumulation of impalpable changes. The great advantage of the Mendelian system is that it is analytical and experimental, so that if the system were rigidly carried out you could breed whatever characters you wanted in a few generations. The difficulty is to know what characters lead to the elevation of the race; but if we do not know all the characters we want, we do know many of those which we do not want, so we should begin our campaign by eliminating the undesirables, the idiots, the imbeciles, the insane, the useless wastrels, the professional paupers, the habitual drunkards, the habitual criminals. There are of course certain criminals, such as the burglar, the highwayman, the forger, etc., who are very clever, and if we are breeding for intelligence it might not be well to exclude them. Many of these men are misdirected genii, much more clever and often more honest than your company promoter. Some of these men might make or produce an excellent Chancellor of the Exchequer, scarcely one of them would stoop to a hen-roost, and nothing short of a jeweller's shop or a bank would tempt some of them.

Jacob of old rather forestalled Mendel. He was a wily

old Hebrew, and anything which he did not know was not worth knowing in those days. Witness how he selected the dominant colours for himself, and all he had got to do was to put a few dominant striped bulls among the herd, and then there would be at most 25 per cent. for Laban. His striped rods were a make-believe unless they were used for driving away the recessive bulls. He also selected the black or brown sheep, and we know that black is dominant to white, so poor Laban who was then living three miles away had not the ghost of a chance with his wily son-in-law. In fact, as he confesses, Laban only got the weaklings. It would seem that the great financial ability of the Jews is inherited from this wily and unscrupulous Hebrew. No theory except that of Mendel would explain the origin of two such opposite characters as Esau and Jacob from the same parents, and they afford an excellent example of the difficulty which we have in arriving at the survival value of different characteristics. I imagine that most people would prefer the manly, independent, fearless, sportsmanlike character of Esau, but it would seem that the low, base, cunning, deceitful and cowardly character of Jacob had the best survival value.

We know how the old Zulu king improved the breed of his people, so that he had left one of the finest and most fearless fighting races in the world. We do not propose anything so drastic; we propose that the present race of undesirables should be well cared for, but that they should not be allowed to give any trouble in the next generation. We want not only to encourage the breeding of the fit, but as far as possible to discourage and prevent the breeding of the unfit. Seneca said: "No great genius is ever without some tincture of madness." Hence there are some who would not interfere with the insane in hopes that some day they may breed a genius, but we can do very well without such a genius. Moreover, the opinion of Seneca will not bear analysis, as no genius is ever insane except in the opinion of the dwarfed intellects of his contemporaries.

Sir Francis Galton promulgated his law of heredity in 1897, that of the total heritage of the offspring, the parents on an average contributed  $\frac{1}{2}$ , the grandparents  $\frac{1}{4}$ , the great-grandparents  $\frac{1}{8}$ , the great-great-grandparents  $\frac{1}{16}$ , and so on, the total heritage being taken as unity. This law was largely based on observations on the Basset hounds, the pedigrees of which were supplied by the late Sir Everett Millais. This law has been shown to be inaccurate in many particulars, and does not conform to the law of Mendel. Moreover, the School of Biometrics, whose work is largely drawn from statistics on similar lines, has I believe dropped it. Sir Francis Galton did much good work on human heredity and traced the genealogy of several notable families, *e.g.* the Cecil family has produced a large number of notable men, and the same can be said of the Darwins and the Galtons. Weismann is usually credited with the doctrine that acquired characters are not transmitted, but his conclusion was much less ambitious, as all he contended was that there is no evidence to show that the experience of the parents is transmitted to the offspring. This in the present day has almost developed into a law, though many would wish that it were otherwise.

The School of Biometrics, of which Karl Pearson is the very able head, is doing much excellent work, and there as much importance is attached to hereditary influences as is shown by the Mendelian School. The work of the Biometricians is statistical, their deductions are drawn from well-ascertained facts, and the results of all systems will in the long run have to be submitted to statistical examination. The Biometric School attaches even more importance to nature than to nurture, and that hereditary influences have quite as important, or even more important, effect than environment in shaping the character and health of the child. I am one of the admirers of the admirable work which is being carried on by Karl Pearson and his assistants, but I prefer the Mendelian School, as their work is experimental and they thus more quickly arrive at a conclusion; they make facts

from which the statisticians can afterwards draw their inferences.

In the present day this old country is largely resting, as Roosevelt would say, on that broken reed sentimentality, and we have got all manner of crack-brained schemes of tinkering with the constitution, but there are few who will lay the axe to the root of the rotten tree and plant a healthy sapling. Eugenists recognise the fact that the individual is not responsible for his appearance on this earth, hence they would take every possible care of the degenerate, and would only impose on him the restriction of not producing offspring who would have good reason to curse their parents if they had sufficient intelligence to do so. Eugenists wish not only to prevent the multiplication of the unfit, but also to encourage the propagation of the fit in all classes of society. If man be made in the image of God we wish to make him worthy of that image. We wish to ennoble man and to abolish ignorance and bestiality. The highest and noblest function of the human body should be exercised to elevate and not to degrade humanity. The advancement of the race largely depends on women, and therefore they should be educated in Nature's laws. If women were only a little more particular in the selection of the fathers of their families a rapid advance would soon be achieved. Some girls with a large amount of sentiment in their composition marry men to reform them, but if they were instructed in the Mendelian law they would soon learn how hopeless is such a task, and what misery they are apt to bring on the next generation. Some parents estimate the suitability of a suitor for their daughter's hand by the amount of cash which he has at command, without any regard to character or health. Such things ought not so to be.

Nature weeds out the unfit, but on account of our benevolence and charitable sentimentality the mental and physical weakling has often in the present day a better chance of survival than the strong and fit. The degenerate not only survive but they are more prolific than the intellectual; they

are not hampered by any economic laws, and they rapidly produce another generation more degenerate than themselves. The positive aspect of Eugenics is the more valuable because it would raise the race to a higher plane, while the negative aspect would merely prevent the race sinking to a lower level. Even the latter would be a great point gained, and could be easily attained if society would only wake up to a sense of its enormous responsibility. If we only stopped the reproduction of the unfit, the fit would then be able to look after themselves and the evolution of the race would go on rapidly. It is not now a question of the survival of the fittest. Your industrious, independent, hard-working man who is taxed to support the progeny of the degenerate does not live to eke out an existence with an old-age pension. It is your miserable degenerate who is assisted by charity from the cradle to the grave that often survives the longest.

Medical science is in no small degree responsible for the present state of matters, because the diseases which killed off the weaklings have been more or less successfully combated, and those who would have departed with the consolation that those whom the Lord loves die young, now live to produce a generation more degenerate than themselves. Nature's method of adapting the individual to the environment, which is the surest method of progress, has been reversed, and we now adapt the environment to the individual, temper the wind to the shorn lamb.

It is quite true, as the Committee on Physical Deterioration said, "that of all the discriminating agencies to produce the survival of the fittest, disease is the worst, for the injury to those which survive is so serious that all measures that tend to combat disease tend to improve the race." This is especially true of such diseases as consumption, malaria, small-pox, typhoid fever, diphtheria, syphilis, all forms of septicæmia, etc., but it is scarcely true of typhus fever, which has now been practically abolished from the country, but which, my old friend Sir William Gairdner used to say, was a most

gentlemanly disease, because if it did not kill you you were all the better for having had it, as you would then be immune to any future attack. There is no individual Providence in Nature: she is entirely concerned with the evolution of the race, and not with the perpetuation of the life of the individual. Her methods are slow but sure, and there is no doubt if her methods had free play she would in some centuries evolve a super-man, but the same end can be attained in a much shorter space of time by artificial selection. If the same care were taken in the selection of human parents as there is in the breeding of the lower animals, this country might be purified in less than a century. There is great rivalry between this country and Germany at present, and there is no doubt in my mind that the country which produces the finest race will win, and rightly win, in the long run. There is a great deal of virility in this country yet, so if we could only be induced to throw the broken reed of sentimentality to one side there may be yet time to save the nation.

The virility of the English-speaking races abroad is even greater, so whether this old country goes the way of all decadent races or not, I have no fear for the English language. If the English-speaking nations would only cultivate eugenic ideals they may yet rule the globe.

We may at present say with Emerson that "Man is physically, as well as metaphysically, a thing of shreds and patches, borrowed unequally from bad and good ancestors, and a misfit from the start," but the Eugenist wishes also to say with him, "Life must be lived on a higher plane; we must go up to a higher platform, to which we are always invited to ascend; there the whole aspect of things changes." We wish to evolve a higher, nobler, more moral, more intellectual, more vigorous, and a more healthy race: one which will not require to be purified by fire and the ravages of disease.

In the elevation of the race we are met with many difficulties, because in the present limited state of our knowledge we do not know all the factors best suited to raise and

perpetuate the race. Society is very composite, and it is necessary that it should be so; in nature we cannot have one dead-level of uniformity.

“Order is Heaven’s first law; and this confest,  
Some are, and must be, greater than the rest.”

There always have been exceptionally able individuals, and it is to be hoped that there always will be men and women who tower intellectually above their fellows. We want to raise as many of these intellectual giants as possible, and this can only be done by proper mating; the environment may improve the individual, but it cannot improve the race. As Weismann says, “there is no evidence to show that the experience of the parents is ever transmitted to the offspring.” The germ plasm must be pure if you are going to raise a pure breed, otherwise you get mongrels. You cannot gather figs of thistles, not even from Scotch thistles. We want to educate young people in the necessity for care in the selection of their mates for life; do not fall in love with any individual who turns up because he or she is of the opposite sex and may possess a certain amount of glamour for you. An old friend of mine always advises young men never to fall in love with a girl until they have seen her mother; if the mother be all right then you can fall in love with the daughter. The Eugenist would be inclined to examine the family tree for a generation or two further back, though this is not always easy, and if there be any black spots on the family escutcheon they are sure to be covered up.

I have a high opinion of the young women of the present day, the potential mothers of the next generation. They do not show so much deterioration, except in the lowest strata, as the men, and in the upper and middle classes the girls of to-day will bear a very favourable comparison with their mothers and grandmothers. It is largely with them that the future of the race depends, and to them I would say, do not fall in love with any man except you are convinced that

he would make a good father of your family, and do not marry any man unless you are in love with him. Women set a high moral standard for themselves—of course there are exceptions, vile exceptions; now I wish them to set a high moral standard for men, and that will go a long way towards reforming them. Unfortunately women are very emotional and readily forgive the weakness of others, but the woman who marries a man to reform him usually brings untold misery on herself and her offspring. Do not marry a man because he is wealthy—intellect is a long way ahead of wealth; but on the other hand, as Carnegie says, you need not reject a man because he is a millionaire. There is no objection to wealth if it be accompanied by intelligence, kindness, generosity, sobriety, morality, good health, vigour, energy, and self-reliance, and any other fine qualities which may appeal to your imagination. The maternal instinct is very deeply rooted in the female mind, but a woman should not only love offspring, but wish to have offspring of whom she would have reason to be proud, like the Roman matron who wished to be known in history as the mother of the Gracchi. Marriage is the most honourable state for woman, and maternity the exercise of her most noble function; but many a woman in her haste to get married, for fear she does not get another chance, often lives to regret the day, and would be much better single than unsuitably matched. It is often deplorable to see a fine handsome woman tied to a miserable wretch because he happens to be able to support her. Women often feel that there are not enough suitable men to go round, and so when they are getting out of their twenties they take any undesirable whom in earlier years they would have loathed. I have said that a woman should not marry a man unless she loves him, and love is not a thing which is advertised in the papers or given away with a pound of tea, and without mutual admiration and respect there can be no love. Many people mistake mawkish sentimentality and any kind of base sexual gratification for love. People who cannot live

happily together are better apart, but I have no sympathy for those who do not find out their incompatibilities before marriage: such people are of no value to the race. There is a society for promoting divorce started by Conan Doyle and others, but what racial advantage is to be gained therefrom I fail to see. Speaking from general impressions, I do not think the Scottish have relatively as many divorces as the English. The Scotchman is not merely very thrifty, but by nature very cautious, and unfortunately so very cautious that he won't take any risks, so he often spends the best years of his life courting. If during this long incubation period the woman's temper gets soured, he has only himself to blame, and I say, serve him right whenever the prize slips from his grasp. I should like to see every woman independent of marriage, and I should like to find for them less hysterical employment than the suffragette movement. I would do nothing which would prevent women from taking and maintaining her established place in nature and matrimony as the principal factor in the production and evolution of future generations. These women would become such highly prized individuals that they could demand their own terms in the form of devoted, loving, intelligent, energetic husbands, husbands who would think no sacrifices too great for their beloved ones.

In an article on Woman's Progress in relation to Eugenics, Dr Murray Leslie says: "There is no doubt that as girls go out into the world and mix more freely with men and women, each will have many more opportunities of meeting on an equal footing different types of men, and of recognising and differentiating the fit from the unfit, and will be less and less driven to the necessity of accepting the first socially eligible man who presents himself, whatever his character may be. Her strong, vigorous, intelligent personality will refuse to mate with the unfit, and will indignantly reject the vicious, the diseased, and the degenerate. She is becoming alive to the disastrous effects of immorality both in regard to degeneration

and fertility. Her influence will gradually level up men to her social standard, and it lies with her to say what that standard is to be."

The followers of Calvin and John Knox should all be Eugenists, because the teaching of those great men on foreordination and predestination fits in exactly with modern views on inheritance from the germ plasm. I was brought up in this school myself, but although I have shaken off the fetters attached to such stereotyped beliefs, I still retain my eugenic ideals. Men's and women's character and ability are just as much inherited as the shape of their noses or the colour of their hair. We are no doubt told that man is prone to do evil as the sparks fly upwards, but the ideals of the Eugenists is to get rid of the evil tendencies by a process of artificial selection, and to have the good qualities so ingrained in the germ plasm that there may be in time no regression, but a steady evolution of the higher and nobler nature of man. Eugenists attribute the predestination of the individual to the progenitors, and do not go so far back as a Great First Cause.

There are some individuals with superficial views on the laws of inheritance who are very ready to lay their misdeeds and misfortunes to the account of their progenitors. With such John Knox and Calvin would have dealt very summarily, and have told them that now we know you are damned already the sooner we get rid of you the better; but the Eugenist is much more humane. To such individuals we would say that we know you are not responsible for your appearance on this earth, you had no voice in the selection of your parents, but, now we know that you have inherited some very undesirable qualities, we will keep our eye on you, and prevent you from transmitting those qualities to another generation; so far as you are individually concerned, you will be well treated and well cared for, but with you your breed must come to an end: you will now and forever be denied the privilege of parenthood. It is entirely a question for society to determine what are to be the limitations of parenthood.

It is not advisable to compel a person to become a parent, but it is most assuredly advisable to determine who is not to become a parent. There is no encouragement to a healthy, industrious, energetic, hard-working man to have a large family; if he has, he is oppressed at every turn, he may find it more difficult to get constant employment, and if he is thrown out of work his anxiety is enormously increased; he has not only to support his own family but contribute to the support of the maimed, the lame, the halt and the blind, the criminal, the lunatic, the pauper, and the loafer. He has to bear his misfortunes in the solitude of his own family; he gets no sympathy from the Exeter Hall type of Christian who is imbued with a sickly sentimentality, who has no faith in robust manhood, whose sympathies only go out to the lost sheep of the house of Israel, the undesirable alien, or the criminal. Those who produce the physically and mentally unfit commit a crime against society, a crime which will be often repeated, until the body-politic becomes sufficiently evolved to regulate these matters.

We want healthy, vigorous manhood and womanhood; we want men and women who will hold their own in the battle of life with any other nation—we want a nation of stalwarts. This can all be rapidly attained by intelligent artificial selection, and the nation which will produce the finest and most intelligent race will win in the long run. Bacon said: "The principal point of greatness in any state is to have a race of military men." We are getting more peaceable since Bacon's days, and also more degenerate. Some are preaching peace, eternal peace, forgetting that there has been a constant and incessant struggle going on on the earth since the first appearance of life thereon, and the surest way of any nation preserving the peace is always to be ready for a fight. The health of a nation is its most valuable asset, and I should like to see every man between the ages of 20 and 60 able to handle a rifle and a bayonet, and if needs be take part in the defence of his country. I would encourage the military

spirit from early youth upwards as the best means of developing the physique and the moral and physical grit of the nation. As I said on a former occasion, some of the highest attributes of Christianity are love of country and kindred, obedience, faithfulness even unto death, for which we have been promised a crown of life, and all these qualities are developed by the military spirit. A nation in arms like Germany is not more pugnacious than we are. It is not the mastiff which starts the fight, but the yelping cur. Wars are not started by military men, but by politicians, and low-bred financiers, and some newspaper editors, who will never do any fighting themselves. Military men make peace, civilians make war. There are many with their insular pride and ignorance who will tell you that the nation is quite safe, and such preparation is quite unnecessary, as the English are essentially a fighting race, and one Englishman is equal to three or four Germans or Frenchmen. You will never hear a sailor or a soldier indulge in such twaddle, because he knows it is not true. It is only your lubbering landsmen who talk such nonsense, and you have only got to level a Mauser pistol at the head of any of these gentlemen, courageous on their own dunghill, to set them all of a tremble like the loafer at the sight of work. I advocate the cultivation of the military spirit to arrest the decadence of the nation whose virile sons are leaving the country, and whose shores are becoming the dumping-ground for the rubbish of Europe. There is still plenty of virility left in this country, and if we could only encourage its evolution and arrest the decadence which is seen on every hand, the nation might renew its youth.

None but the mentally and physically fit should be allowed to take part in the higher functions of reproduction and evolution. I am afraid there is too much truth in the words of Karl Pearson when he said: "Looking around impassionately from the calm atmosphere of anthropology, I fear there really does exist a lack of leaders of the highest intelligence, in science, in the arts, in trade, even in politics. I do seem to

see a want of intelligence in the British merchant, in the British professional man, and in the British working man. I believe we have a paucity just now of the better intelligence to guide us, and of the moderate intelligence to be successfully guided. The only account we can give of this is that we are ceasing, as a nation, to breed intelligence as we did fifty to a hundred years ago. The mentally better stock in the nation is not producing itself at the same rate as it did of old: the less able and less energetic are more fertile than the better stocks. The only remedy, if one be possible at all, is to alter the relative fertility of the good and bad stocks of the community."

We know how we would like to improve the race, but how is the remedy to be applied? In the present state of knowledge there is not much use in appealing to our legislators—I shall not offend their intelligence by calling them statesmen, as statesmanship seems remarkable for its absence from the present administration. "The statesman wishes to steer, while the politician is satisfied to drift." Very few of our legislators are versed in biological laws, and no one seems prepared to look beyond the present exigencies of political life and strife.

A good deal of the insane legislation and wasteful expenditure of recent years has arisen from the teaching of sanitarians and some leading medical men, that everything depended on environment, and heredity did not count. They were not guided by that far-seeing sanitarian William Farr, who in 1875 said: "The hygienic problem is how to free the English people from hereditary disease, hereditary consumption, cancer, syphilis, gout; hereditary insanity, hereditary vagrancy, hereditary criminality; and to develop in the mass the athletic, intellectual, æsthetic, moral, and religious qualities which have already distinguished some of the breed. There is a divine image in the future to which the nation must aspire. The first step towards it is to improve the health of the present generation; and improvement, if as persistently pursued as it is in the cultivation of the inferior species, will be felt by their children. A slight development

for the better in each generation implies progress in a geometrical progression, which yields results in an indefinite time that, if suddenly manifested, would appear miraculous." Not only the sins but the good qualities of the parents appear in future generations. Those, like myself, who attach a high value to heredity, are not likely to neglect the proper consideration of the environment in the evolution of the race. You can develop an intellectual giant and improve the conditions under which such an one is likely to be produced, but environment will not make one.

It would be difficult to find a more stupid class of people than the educational authorities of this country—from the highest to the lowest of them. Witness the wasteful expenditure in trying to educate the feeble-minded, and many of those a few stages higher in the scale of intelligence. What is the use of trying to draw out intelligence where there is none? If you wish to stretch a piece of wire you must first get the wire, and then its ductility will depend on the material; if it be composed of platinum or fine gold the ductility is extremely great, but where there is no tenacity there can be no ductility. These unfortunate individuals should be segregated for life in an agricultural colony, allowed to enjoy nature as far as they are capable of enjoyment, and by their work allowed to contribute towards their maintenance. A large agricultural colony in America of about 2000 inhabitants of this class only costs the State about 1s. 6d. a head per annum. A penal labour colony in Berne is self-supporting.

Education should be more technical and varied according to the capacity of the individual. Every intellect should have an opportunity for education, according to his or her mental capacity, and we should get rid of that dead-level of uniformity which does not exist in nature. Many beings have whatever natural intelligence they possess driven out of them by the time they leave school, and they soon find their way to lunatic asylums. We want a minister of education

with at least a modicum of common sense to set matters right.

The science of Eugenics labours under great difficulties at present, because it is popularly misunderstood. One hears it constantly stated that the Eugenist wishes to introduce to the human race the principle of the stud-farm and scientific breeding as carried out on the lower creation. We wish to do nothing of the kind; we tell you plainly that the factors which make for the higher evolution of the human race are extremely numerous, and not all well understood, so we only wish to educate the public in known facts, and then allow the fit to work out their own salvation in their own way. No responsible Eugenist has ever advocated the low, base morality promulgated by such men as H. G. Wells and Bernard Shaw. Their doctrines are only suited for the lowest type of socialism. The true Eugenist preaches a high morality, quite the opposite of the low, vile, sexual literature provided for the public in the present day. We discuss sexual subjects in a scientific spirit, and do not bury our heads in the sand until the storm has blown over. We do not mistake ignorance for innocence, and we know that you will hear more lewd ribaldry at a convivial gathering in one evening than you would hear at all the eugenic meetings in Britain in a year.

A reviewer of Havelock Ellis' work on *Sex in Relation to Society* says that "Humanity is at last raising itself out of that extraordinary slough of hypocrisy, pruriency, and obscenity which it has made the environment of its most sacred function. For the practical man who recognises this ascent, the discussion of wise and unwise eugenic methods will be instructive. A eugenic attitude, a eugenic spirit must be cultivated and strengthened before any legal or authoritative experiments are tried." Professor Arthur Thomson says that "Man has thrown off the bondage of natural selection, and insists on saying, and saying successfully, 'I will live,' when every natural chance is against him." . . . "What the children

die of is, to a large extent, their parents, and the only thing a nation dies of is lack of men." He fully recognises that the nation which first subjects itself to rational eugenic discipline is bound to inherit the earth.

Dr D. S. Jordan, President of Stanford University, says, "where the weakling and the coward survive, there the human harvest is bad, and it can never be otherwise. A reversal of selection is the beginning of degradation. It is degradation itself. Breeding from an inferior stock is the sole agency in race degeneration, as selection natural or artificial along one line or another is the sole agency in race progress."

Mental and physical defects are readily transmitted to the offspring, but for many years medical men have been neglecting heredity and devoting their attention solely to environment. This has chiefly occurred since the discovery of the tubercle bacillus, and in the present day you may hear the blatant proclamation of many medical men that consumption is not hereditary, but is entirely due to the tubercle bacillus. They make so much noise over the matter that you might almost think they had made a new discovery. Everyone knows that the tubercle bacillus is not, except perhaps on extremely rare occasions, transmitted in the germ plasm, but the long, narrow, flat chest and delicate lungs are undoubtedly inherited, and so the soil is laid and only wants fertilising. The tubercle bacillus transmits its virulent qualities undiminished from generation to generation, and finds plenty of soil within human beings and the lower animals. Consumption is diminishing, insanity is increasing rapidly, and one alienist physician has gone so far as to say that in the present state of society he would look upon the abolition of the tubercle bacillus as a positive calamity to this nation. It is highly probable that the *Spirochaeta pallida* is often transmitted in the germ plasm, and so syphilis is a true racial poison. The same has been said of alcohol, but this has not been proved to the satisfaction of any independent and unbiassed mind.

You will find an excellent article on Heredity and Insanity in the January number of the *Eugenics Review* by Dr Mott, Pathologist to the London County Asylums, and a great authority on the subject. There are many forms of insanity markedly hereditary, and in many of these cases the diseases occur earlier in the offspring than in the parent, so that the child may reach the asylum before the parent. It is very difficult to deal with those cases eugenically, for all the children may be born before the parent shows any signs of insanity. We can only rouse up an enlightened public opinion, and then it is to be hoped that people with such blemishes in their family will themselves abstain from parenthood. There is no use in bringing children into the world to be a curse to their parents, themselves, and the community. The weak-minded and imbeciles are often very prolific and very irresponsible individuals, so they should be segregated in colonies, no matter to what class of society they belong. This breed, as well as the hereditary criminal and the hereditary pauper, should be weeded out.

Colour-blindness is a good example of Mendelian inheritance, and although, like hæmophilia, it is often transmitted through the female line, very few females are affected. Many of the ocular defects in children are hereditary, and this is a very good instance where, if natural selection had had free play, such defects would have been gradually weeded out. You do not find many short-sighted persons among such a fine race as the Zulus, but in civilised society these individuals are provided with glasses and so their handicap is at once removed; in fact, they should often be placed behind scratch, as a pair of spectacles gives a blooming fool an air of intelligence and education which he does not possess. These short-sighted people have frequently mated together, and during the last two or three generations have been very prolific. You know what good sight birds have got, and you can readily imagine what would happen to a seagull which required a pair of spectacles. These ocular defects are now so numerous that

they are causing the educational authorities throughout the country a good deal of anxiety. I have not troubled to inquire how the educational authority in this city is constituted, or of whom it is composed, but judging from the manner in which they are handling this subject, I do not think they have shown any greater intelligence than the higher authorities in London, and that is not saying very much. The fact that a person is a member of an educational authority may, by many, be considered evidence of superior intelligence, though more probably, like a pair of spectacles, it may obscure a great deal of ignorance.

