

SCIENCE

VOL. 89

FRIDAY, APRIL 21, 1939

No. 2312

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SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. McKEEN CATTELL and published every Friday by

THE SCIENCE PRESS

New York City: Grand Central Terminal

Lancaster, Pa.

Garrison, N. Y.

Annual Subscription, \$6.00

Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary in the Smithsonian Institution Building, Washington, D. C.

THE OPPOSITION TO EUGENICS¹

By Professor S. J. HOLMES

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THE sanguine eugenicist looks upon the improvement of the inborn qualities of the race as an end so obviously worthy that he has difficulty in understanding how any intelligent and normally constituted person can fail to share his own enthusiasm for this cause. Even the man in the street must be aware that it is one of the greatest misfortunes to be ill-born, especially if this should cause one to be hopelessly deformed, blind, idiotic or insane, and that, on the other hand, it is one of the greatest blessings to be well born, to inherit a fine endowment of physical, intellectual and emotional characteristics.

Obviously, people differ in a large number of hereditary traits that profoundly affect their happiness and their value as members of society. It follows inevitably that the race would be much better off if we

¹ Presidential address before the American Eugenics Society, New York, November 30, 1938.

could eliminate the inherited factors that contribute to fill our asylums with morons and lunatics, and if the race were propagated by those of its members who are above the average in physical vigor, intelligence and emotional traits that make for sound character and a normal happy existence. Here is this race of ours carrying its burden of hereditary defects so numerous that a mere inventory of them would not be possible in the time allotted to this address. In this race of ours are also the genetic factors that afford the physical basis for the development of outstanding personalities whose achievements may be of incalculable service to their fellowmen. How, then, can any one fail to be in fundamental accord with the chief aims of practical eugenics, however great may be the differences of opinion as to how these aims may best be brought about? It seems, therefore, very simple and obvious to the enthusiastic eugenicist that racial improvement is

not only feasible, but that it should at once enlist the whole-hearted support of every well-informed and public-spirited person. If the eugenist is a simple-minded sort of individual, as eugenists are sometimes accused of being, and as in fact a good many of them are, he may be disposed to wonder why others do not find his mistress so fair as she seems to him.

Unfortunately, most people in this world, even educated and cultivated people, are little concerned about eugenics. There are many persons entirely wrapped up in their own affairs who naturally adopt the view-point of the man told about by Mark Twain who did not see that he should do anything for posterity because posterity never did anything for him. Some degree of unselfish interest in the welfare of future generations is required if any kind of eugenic doctrine secure approval. There are probably few, let us hope, who would be entirely indifferent to the welfare of posterity if their thoughts were once directed to the subject, although their interest might never be stimulated to give the matter more than a mild and perfunctory approval. Another reason for this indifference is that many people do not possess the knowledge of heredity required for a proper comprehension of eugenics, simple as the elements of this subject are. The only cure for this is, of course, education. But the task of the eugenist is not accomplished simply by the dissemination of knowledge of the elements of his subject, important as this is. The eugenist faces not only a formidable mass of ignorance and indifference, but also a considerable degree of positive hostility. We as eugenists must reckon with the fact that there are many people who do not like us at all. It is to this aspect of our subject that I would invite your attention this evening.

In seeking for the reasons for the opposition to eugenics it is important to bear in mind that the idea of improving the inborn qualities of man is, for the great mass of humanity, of relatively recent origin. To be sure, race improvement through selective breeding had been advocated by Theognis, Plato, Campanella and a few other lonely voices, but their doctrines were regarded more in the light of curiosities of philosophical speculation than as feasible measures for practical application. It was only after the doctrine of evolution came to be finally accepted in the scientific world that eugenics was brought clearly before the reading public as a subject to be seriously reckoned with. It was inevitable that the notion of hereditary variability and change through selection should be applied to man as well as to lower organisms, and that the possibility of further development of the human species should present itself to all who indulge in evolutionary speculation. The thought that man can determine the direction of his own evolution presented a novel and some-

what revolutionary view-point. Now the reception of any new point of view is profoundly influenced by the way in which it fits into the system of ideas already accepted. People are wedded to various brands of political, economic, social, moral and religious doctrine, and their reactions are antagonistic to any new ideas that threaten to unsettle their convictions in any of these fields. Often people scent a danger from afar and become prejudiced against ideas which are not so incongruous with their settled beliefs as they are prone to imagine. This, I believe, is particularly true with regard to the mental reaction of people to eugenics. Let us consider some of the sources of antagonism.

Eugenics is founded upon the doctrine of the natural inequality of man. The extent to which men differ by nature is a question upon which people are inclined to have different opinions on the basis of their political or social philosophy. Those of aristocratic leanings like to think that distinctions of rank and station go along with rather marked differences in hereditary endowment. Champions of equal rights, those who do battle against the powers of vested privilege, take comfort in the thought that the native qualities of the privileged classes are no better than their own, if as good.

There is a wide-spread prejudice in favor of egalitarianism, that tends to cause a reaction against any doctrine which threatens the security of convictions on this score. Nothing, of course, is more obvious than that human beings differ both in physique and mentality. But if these differences are environmentally caused through accident, disease, poor education or economic misfortune, they are, from the racial point of view, relatively superficial and largely remediable; whereas if they result from heredity they might, it is feared, be more difficult to overcome and would also afford a dangerous concession to the claims of aristocracy. If these inequalities can be attributed to the oppression of the prosperous and ruling classes, the moral appeal of the egalitarian gains thereby in strength. In his deservedly famous poem, Edwin Markham asks concerning the man with the hoe:

Who made him dead to rapture and despair?
Who loosened and let down this brutal jaw?
Whose breath blew out the light within this brain?
. . . Oh, masters, lords and rulers of all lands,
Is this the handiwork you give to God?
This monstrous thing distorted, and soul quenched?

The man with the hoe, as Markham pictures him, is a product of the iniquities of his fellowmen, the victim of oppression which has molded him into his repulsive shape. The wide-spread antagonism to the rich and successful classes creates a proneness to minimize their inherent endowments and gives a feeling of satisfaction

in laying at their door the imperfections and failures of the downtrodden and oppressed. This attitude is heightened by a feeling of sympathy for the underdog, the championing of whose cause naturally appeals to our generous and chivalric impulses. The eugenists come in for a good deal of bitter invective because they are charged with teaching that poverty is, *ipso facto*, a proof of biological inferiority. In the class war the eugenists are often represented as arrayed against the exploited workers, whom they are accused by one writer at least of wanting to sterilize *in toto*.

Now, I am not condemning or criticizing these emotional attitudes, nor am I here concerned with how far class distinctions of any kind are founded upon a genetic basis. I am simply concerned with the reasons for a wide-spread emotional attitude toward eugenics. People do not like to believe that large numbers of their fellow creatures are to be branded as inferior physically or mentally as a result of their heredity. They much prefer to attribute the injustices of inequality to man than to nature.

Naturally, the attitudes of people on this subject are determined to a large extent by their political and economic views. This comes out clearly when we consider the prevailing opinion of socialists, communists and radicals of various brands. One finds all sorts of opinion on eugenics among the adherents of all these groups, but one can not fail to sense the prevalent emotional reactions I have mentioned in many adherents of these groups who deal with the human aspects of biology.

The influence of emotional bias in determining opinion comes out even more conspicuously when we consider the problem of the native endowments of different races. One needs only to point to the different attitudes on this subject prevailing in Russia and in Germany in order to show how profoundly views upon what is essentially a problem of genetics are determined by the dominant forces controlling public opinion in these countries. Rarely is the problem discussed anywhere without a tinge of bias one way or another, and these emotional attitudes carry over to a certain extent and influence the opinions of persons as to inequalities within the several races. Pride of race naturally arouses a resentment against the imputation of inferiority of the race to which one happens to belong. On the other hand, there is another emotional attitude that is noticeable in this connection, namely, a desire to take the generous and broad-minded view, to magnanimously concede to other races an equal or even superior endowment to one's own. Often, by way of good form, this is associated with a certain good-humored disparagement of one's own group. Unquestionably this attitude, which is sometimes merely a pose, is conducive to the maintenance of friendly race

relations and helps to get rid of some uncomfortable problems. How far it has contributed to bring about the growing sentiment in favor of race egalitarianism it would be difficult to say. It has come to be the fashion to refer to race differences in mentality as if it were now demonstrated that no such differences exist, or, at least, that they are negligible in extent. In the light of our meager and unsatisfactory knowledge and the alternative possibilities of interpretation which existing data permit, this is, I think, a very unscientific position. Certainly a rigid demonstration that races differ in temperament and capacity for intellectual achievement is by no means so easy as it was formerly regarded. But the question is still an open one. Even relatively small average differences, and especially differences in the distribution of mental traits within a race, may be exceedingly important. Concerning the latter topic especially our information as to many racial stocks is very inadequate and we must patiently await further critically tested evidence before coming to final conclusions.

Opinions on the innate capacities of different races and peoples, like those on many other problems, are by no means free from the bias of financial interest. This has shown itself especially in relation to the regulation of immigration. The United States always faces the concrete and intensely practical problem of how to control the influx of aliens who would gain admission to our shores. The immigration of stocks affording a plentiful supply of cheap and tractable labor has been strongly supported by powerful financial interests. The argument that the admission of hordes of cheap laborers would work dysgenically in lowering the average level of our population is naturally countered by the declaration that the disabilities of these stocks are solely the result of their poor education and inferior economic status. Not wishing to incur the opprobrium attaching to the charge that they would sacrifice the future welfare of the country for the sake of securing gain, the promoters of free immigration are led to the egalitarian standpoint as a defense reaction. Considerations of monetary gains may, however, influence opinions as to the innate capacities of different stocks in diverse ways. They may lead to a defense of racial and class equality or to the justification of class distinctions. More frequently it is the latter for which the eugenist is berated as an ally of the capitalist in the endeavor to exploit and oppress mankind.

In this discussion I would emphasize the fact that I am not defending any doctrine concerning the extent to which either races or individuals differ in their endowment of genes. What I wish at present to call attention to are some of the emotional reactions and incentives that tend to shape opinions on these problems. Since very different views on these problems are com-

monly adopted in different regions and by members of different groups, one can not help thinking that the opinions of most people in regard to the natural equality of both individuals and races are determined, like their views on politics and religion, much less by the evidence of facts than by influences of their social environment, and especially by the political and economic theories to which they are wedded.

Another fertile source of opposition to eugenics is the fear that applied eugenics would involve a sacrifice of fundamental human rights which might lead eventually to an intolerable system. Mr. Darrow, for instance, declared: "In an age of meddling, presumption and gross denial of all individual feelings and emotions, the world is urged, not only to forcibly control all conduct, but to remake man himself! Amongst the schemes this [eugenics] is the most senseless and impudent that has ever been put forward by irresponsible fanatics to plague a long-suffering race."

Mr. Chesterton, for whom eugenics means marriage by the police, has worked himself up into a still greater fury than has Mr. Darrow. Eugenics in Chesterton's opinion is an intolerable menace to freedom, a thing to be destroyed root and branch, "a thing no more to be bargained about than poisoning." Mr. Chesterton is opposed to eugenics as he is opposed to prohibition and any and every meddling kind of interference with human rights. He is persuaded that the eugenicist would ruthlessly invade the sanctity of the most intimate human relationships and direct the matings of human beings as he would breed live stock. Hence this doughty champion of personal liberty felt called upon to pour out his wrath in a fair-sized volume of mingled protest and vituperation.

A contributor to the *Living Age*, writing under the name of "Individualist," in commenting on the proceedings of the First International Eugenics Congress, expresses the fear that "I who write, and you who read, our brothers and our sisters, our children and our grandchildren, are all to be included in the proposed inquisition into the most sacred of our private affairs—an inquisition to be held apparently by self-appointed inquisitors obsessed by the dubious theories of an infant science. We might be chosen as fit, or dismissed as unfit, but we should thenceforward be labeled, classified, and without a rag of reticence left to us. Even were its knowledge of heredity absolute, the inquisition into the private lives of people involved in its proposals and the power it would place in the hands of the inquisitors would prove such a menace to personal liberty that I for one would gladly risk natural degeneration than be involved in an unnatural degradation so monstrous."

The solicitude for personal freedom expressed in the passages quoted is a sentiment which, in these days

especially, is worthy of all approval. I have some difficulty in understanding how the last writer could become so thoroughly alarmed from reading the proceedings of the First International Eugenics Congress, but be this as it may, his apprehension became voiced in many other quarters. When the idea of improving human beings by selective breeding first began to impress the public mind people immediately began to have visions of a system of controlled matings as affording the natural if not the only way in which the hopes of the eugenicists could be realized. Disparaging references to the methods of the stud farm and the breeding pen became very much in evidence. Unfortunately, some over-zealous enthusiasts gave a certain amount of color to this apprehension. Critics who like to represent the object of their attack in as unfavorable a light as possible raised the battle cry and took up arms in defense of human liberty, but the antagonism aroused proved to be all out of proportion to its justification.

The fear that eugenicists might succeed in arbitrarily mating selected human beings without regard to their protests or their attachments elsewhere has, I hope, completely subsided. There remains, however, a good deal of opposition to placing any restriction upon the mating of any one sufficiently sane to be safely at large. We have long prevented the propagation of mentally defective and diseased persons on other than eugenic grounds without creating any outcry over the essential injustice of such a procedure, or without arousing a fear that the restrictions would come to include a much larger proportion of the population. It was only when it was proposed to restrict the propagation of the defective classes on eugenic grounds that the clamor arose. Unquestionably a considerable part of the opposition grew out of a reaction against interference with human rights. This conclusion will be borne out, I am sure, by a perusal of the copious literature that has accumulated on this subject. It is manifestly true in regard to sterilization, especially since this involves a surgical operation which deprives another individual of an important vital function. The imposition of this mutilation against the will of an individual for the sake of protecting posterity from his progeny is naturally apt to arouse an unfavorable emotional reaction that is overcome, if at all, only by a consideration of the more remote benefits to society resulting from this procedure. The menace to personal liberty arising from the sterilization of the unfit is particularly apt to impress the legal mind, and it is not surprising, therefore, that sterilization laws have encountered no small amount of opposition from the legal profession quite apart from any religious or egalitarian bias. Although thirty-one of our states have passed sterilization laws, it is largely because of the sentiments to which I have alluded that these laws have been so little

enforced and in several states have remained practically a dead letter.

The opposition to eugenics on religious grounds springs from a number of considerations, although it can not be said that in general religion has proved to be inimical to the eugenic movement. Many persons believing that all human beings are of equal worth in the sight of God and that this world is merely a recruiting ground to furnish souls for the next, are apt to minimize the importance of human genetics in comparison with the concerns of eternal life. Even a low-grade imbecile, whatever his handicaps in this world, may be eternally blessed in his future existence; hence it would be wrong to prevent his coming into being through any arbitrary interference with the course of nature. Mr. Sommerville, in an article on "Eugenics and the Feeble-minded," published in the *Catholic World*, after condemning the segregation and sterilization of the feeble-minded on the ground that their progeny might become a social burden, declares that "that kind of outrage on human rights in the name of social benefit is what Christianity has fought against since the days of pagan Rome." Christianity has always championed the cause of the meek and lowly and hence it can not approve of any measures that would prevent them from inheriting the earth.

Although the Catholic Church has never opposed the eugenics movement as such, and although many of its official representatives and adherents have espoused the cause of eugenic reform, the Church has set itself strongly against sterilization and birth control by artificial methods as contrary to nature and hence to the law of God. The regulation of reproduction on eugenic and hygienic grounds is conceded as entirely proper in the Pope's Encyclical Letter on Chaste Marriage; the end to be attained by curtailing reproduction is justifiable; but artificial means of attaining it are condemned as sinful. The few voices among prominent Catholics which had been raised in defense of sterilization on eugenic grounds have apparently now been silenced.

One source of opposition to the conclusions of the eugenists voiced formerly more frequently than now is a certain repugnance to the thought that human qualities are transmitted like those of the lower animals, and especially that mental traits and peculiarities are handed on through the physical mechanism of the germ-plasm. Not infrequently we find genius referred to as something almost supernatural in its nature—a sort of God-given trait that transcends the mundane things with which science has to deal. Galton shocked a number of his contemporaries by dealing with genius from the standpoint of the naturalist. To bring genius under the ordinary laws of heredity was almost a sacrilege. But the doctrine of mental heredity in any

form was commonly held to have its dangers on account of its supposed materialistic implications. How can the soul, an immaterial entity temporarily associated with the body, be subject to laws of transmission determined by a physical mechanism? Theoretically, at least, any kind of a mind might be conjoined to any kind of a body. The prevailing outlook upon the mind-body problem, which was largely a development from primitive animistic concepts, naturally engendered a reluctance to carrying over to the mental realm the principles that applied to physical reality. The attempt to bring mind under the laws of heredity was to subject it to the laws of the material world and to deprive it of its freedom, its dignity, and even its prospects of eternal existence. The doctrine of mental heredity did not fit quite comfortably into the prevailing notions about mind and body, although there were various ways of harmonizing these view-points.

Although theological preconceptions have tended to influence opinions on the inheritance of mental traits, there are other forces that have apparently proven to be more potent. For a long time psychologists almost totally neglected the possible role of inheritance in the development of the mind. The experience philosophy, which would start the human infant with a *tabula rasa* at birth and explain the genesis of his faculties as a product of environmental contacts, had little use for heredity. Mr. J. S. Mill, who certainly can not be accused of any bias on theological grounds, declared that "of all vulgar modes of escaping from the consideration of the effects of social and moral influences on the human mind the most vulgar is that of attributing diversities of conduct and character to inherent natural differences." A similar standpoint has been expressed by Mr. Buckle, H. George and many other writers.

Adequate recognition of the role of heredity in psychology had to wait until the advent of the doctrine of organic evolution. Among the first to make much use of the concept of heredity in their psychological speculations were Lamarck and, more explicitly and logically, Herbert Spencer, the first edition of whose "Principles of Psychology" was published in 1855. Recognition of the important role of heredity in mental development has been growing for several decades. Many psychologists, on account of the influence which environment and experience obviously exert in the development of mental faculties, are still prone to minimize the role of genetic factors. Many educators and social reformers have apparently looked upon the inheritance of mental traits as affording a sort of challenge to the worth of their efforts. Being concerned with influences which affect the development of mind and character, they are rather dismayed by the thought that nature has set definite and very different

limits to the developmental capacities of different individuals. The doctrine that mental differences depend upon heredity has been condemned as fatalistic, as an obstacle to progress and as tending to paralyze efforts at improvement. It would be much more encouraging to think of all human beings as capable of being molded to the limits of human capacity if the right influences were brought to bear upon them. In his volume on "Education and the Heredity Spectre," a book profoundly influenced by the Herbartian psychology, Mr. F. H. Hayward asserts that "Our physical qualities are inherited from our parents; our mental and moral qualities, however, owing to our impressionability and educability, are mostly superimposed upon heredity." This standpoint is still widely prevalent, but less so than formerly. Out of the abundant investigations in psychology, and especially educational psychology, during the last few decades have come many convincing evidences of the genetic determination of levels of intelligence, and nowadays many psychologists, students of education and social scientists emphasize the effect of genetic differences in mentality to an extent that would hardly be conceded by a conservative and critical eugenist.

Among the emotions and sentiments that determine people's reaction to eugenics there is, especially among intellectuals who have limited their families to below the maintenance level, a certain aversion to admitting that such limitation is in any way racially harmful. Such an admission would tend to be more or less unconsciously suppressed by what Freud calls the Censor, and a very natural defense reaction is to find reasons for holding that there is no real need for alarm over the differential birth rate. In talking with various people on eugenics and endeavoring to sense the influences that have shaped their opinions I have come to the conviction that back of their arguments there is a certain unconscious effort at self-justification. I admit that this is a more or less intuitive judgment, but it is quite in accordance with what we know of human nature. We tend to adopt those opinions that afford us the maximum of self-approval. People who have a goodly number of fine children are usually proud of their contribution and sympathetic toward eugenics. If they have few children or none they are rather more apt to conclude that there are perhaps too many people in the world anyway.

I am sure that I have not exhausted the sources of antagonism to eugenics that have their real basis in emotions and preconceived opinions. Much of the opposition to eugenics is primarily a sort of defense reaction arising out of a concern for ideas or sentiments to which eugenics is felt to be somehow antagonistic. The emotions aroused by eugenic theory or by proposed eugenic practices are varied. Writers who

are alarmed over what the eugenists might do to us if they had their way commonly also attempt to minimize the influence of heredity in mental defect and disease, or even, in extreme cases, to deny such influence altogether. If one is prejudiced against legislative meddling in all personal affairs, he is apt to convince himself that adequate grounds do not exist whereby interference would be justified. If he is shocked by the mutilation involved in sterilization, he is apt to maintain that feeble-mindedness and insanity are usually not hereditary, and that sterilization would accomplish practically nothing toward their elimination if they were. If one has certain mystical notions about genius and likes to think that it is something that defies all analysis and explanation by scientists, he may persuade himself by some carefully selected instances and by neglecting all statistical investigations of the subject that genius is as apt to come from any one kind of parents as from another, and that heredity has therefore nothing to do with its origin. But I am not attacking these rationalizations. All of them raise definite scientific problems. Highly trained geneticists may, and in fact do, come to different opinions as to a number of the theoretical as well as practical problems of eugenics. They also differ, but less widely, over several problems of genetics. Fortunately, when one is dealing with the genetics of fruit-flies or garden peas different view-points can usually be brought to an experimental test and definitely settled. The geneticist is happily free from any kind of bias resulting from religion, race prejudice or Marxian economics, although I am not entirely certain in regard to the last-mentioned topic. The poor eugenist has to struggle against many difficulties in establishing incontrovertible conclusions, and the geneticist may therefore look down a bit condescendingly upon many of the results of eugenic research. The opposition to eugenics which arises from the inadequate support which the eugenists have adduced for their conclusions is not to be deplored but much of the opposition is ill-founded or based on misunderstanding or ill-grounded fears, and some of it is simply silly. The eugenist faces the task of making his basic theses so well-supported and convincing that they will simply compel acceptance by all qualified judges. These theses should be so solidly founded that even the most captious individual can not find a way of squirming out of conceding their validity. As a rule you can not convince a prejudiced opponent if you leave him the least loophole through which he can escape coming over to your side. Most of the conclusions of the eugenist, however probable they may be, can not be demonstrated with the rigidity of mathematical proof, or with the definiteness of many facts of genetics. In this the eugenist is in the position of the student of statecraft or economics, and I might

add, the practitioner of medicine. In these fields, in default of demonstrated truths for guidance, one must get along on the basis of the best judgments possible in the light of our present knowledge. Eugenic problems arise in which action one way or another has to be decided upon. As Galton pointed out, probability is the basis of eugenics, as in fact it is the basis of the much more exact science of genetics. I think that it may fairly be claimed that the scientific study of eugenic problems has yielded substantial support for several of the basic conclusions of the eugenicist. As the difficulties attaching to such research are overcome, we may look forward to the time when eugenics becomes more worthy of the dignity of a true science, and when much of the alarmist and ill-founded opposition to it will have melted away like fog before the rays of the rising sun. It must be conceded that not a little of the criticism directed against eugenics is a very natural reaction to the ill-founded utterances of the eugenicists themselves. The conception of eugenics burst upon the world suddenly. Some it inspired with enthusiasm to the point of intoxication and betrayed them, I am sorry to admit, into making many indefensible statements. Early in the history of the eugenics movement Galton stated that "the subject of eugenics is particularly attractive to cranks," and he expressed grave doubts as to whether the newly formed Eugenics Society was not doing more harm than good—doubts which I feel sure he would not have expressed could he have been acquainted with the present work of this organization. That object of Theodore Roosevelt's dread, the "fool reformer," has done eugenics a deal of harm. But writings on eugenics, I am convinced, are improving in quality. It should be the aim of the American Society of Eugenics to do everything in its power to place eugenics on a really scientific basis, to encourage research in this field and to disseminate only sound and sensible views on eugenic problems. The society should welcome members having wide differ-

ences of opinion. Sound progress in this field requires constant criticism, but while intelligent and constructive criticism is always wholesome, much of the opposition of the type I have discussed constitutes only an obstacle to progress. Misunderstanding, ill-grounded prejudice and antagonism based mainly on emotional complexes afford formidable impediments not only to carrying out practical eugenic reforms, but to the acquisition and dissemination of eugenic knowledge. These unfortunate impediments tend to deprive eugenics of the recognition and support required for its proper development. A great deal of the present opposition to eugenics has no real excuse for existing, but this opposition is a hard and obstinate fact which should be analyzed and understood if it is to be successfully overcome. I can not, of course, speak for all eugenicists, nor all members of the American Eugenics Society, but I may express the hope that this society will make it known that, as eugenicists, we are committed to no particular social, religious, political or economic creed, that we are no more concerned with the class war than the botanist or astronomer, that we are quite willing that Mary should marry Jack or any one else provided their progeny will probably not be imbeciles, lunatics or otherwise a burden to society; that we would like to have relatively more progeny from people with fine hereditary endowments, although we do not have the remotest intention of recommending any coercive measures for the attainment of this end; that we look to education and the development of eugenic ideals as affording the basic conditions for any noteworthy eugenic improvement; that we are desirous of encouraging the acquirement of sound knowledge of the biological factors of human evolution in the belief that the proper application of such knowledge will contribute fundamentally and fruitfully to promote the welfare of mankind. With these aims all intelligent and fair-minded people, I think, can not fail to be in accord.

OBITUARY

RAYMOND A. PEARSON¹ 1873-1939

DR. RAYMOND A. PEARSON, Scientist, Administrator, Educator, Planner, Builder, Statesman and Friend.

In a life span of less than the biblical threescore years and ten, Dr. Pearson earned the right to be designated as a leader in each of the six fields of agricultural activity set forth above. To few is it given to achieve that distinction.

Born in Indiana on April 9, 1873, he passed on at his home in Hyattsville, Md., on February 13, 1939, at

¹ Tribute presented to the National Capital Chapter, Iowa State College Alumni Association, Founders Day meeting, March 22, 1939.

the age of 66. In the meantime, he had served agriculture for seven years in the United States Department of Agriculture, ten years in New York State, fifteen years in Iowa, nine years in Maryland and, finally, again for three years and more in the Federal Department.

Scientist. While trained particularly in the science and art of dairying, Dr. Pearson spent most of his life in positions requiring administrative knowledge of many sciences and arts. It was his accomplished purpose to gain a personal knowledge of each of these sufficient to enable effective administration and presentation before legislative and administrative bodies.