FEEBLE-MINDEDNESS

ITS CAUSES
AND CONSEQUENCES

BY

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AT VINELAND, NEW JERSEY, FOR FEEBLE-MINDED
GIRLS AND BOYS

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To

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SUPERINTENDENT OF THE TRAINING SCHOOL
AT VINELAND

FRIEND AND CO-WORKER, WHOSE DEVOTION TO THE INTERESTS
OF THOSE WHOSE MINDS HAVE NOT DEVELOPED
NORMALLY PROMPTED THE ESTABLISHMENT
OF THIS DEPARTMENT
OF RESEARCH
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CHAPTER IX

EUGENICS

The large share of attention which has been given to the new science of eugenics, or race betterment, shows conclusively that society is intensely interested in this problem of the improvement of the race. This being the case, the discovery of the high percentage of hereditary feeble-mindedness seems to present a natural point of attack.

The feeble-minded person is not desirable, he is a social encumbrance, often a burden to himself. In short it were better both for him and for society had he never been born. Should we not then, in our attempt to improve the race, begin by preventing the birth of more feeble-minded? This is a program which is attracting much attention.

The eugenist proposes to work along two lines; first, to restrain the ignorant and unintelligent from such matings as will surely result in defective offspring; second, to appeal to the reason of intelligent persons not to marry into families where there is any hereditary taint whereby their offspring may be affected.

Let us consider the second of these plans first. In the light of what has been discovered from this study, can any directions or suggestions be given that shall serve as a guide to persons about to marry? Apparently the facts warrant the drawing of conclusions of profound interest.

We must emphasize first the difference between the hereditary and the non-hereditary cases. According to the most universally accepted biological principles of to-day, conditions that are
acquired by the individual in his lifetime are not capable of being transmitted to his offspring.

There are two parts to a human being, the body or soma, which is individual, and the germ cell which is racial. All traits that are transmitted must come thru the germ cell. Nothing which affects only the body can be transmitted to the offspring. It is still a mooted question whether there is anything that acts upon the body that can get down to the germ cell and affect it. If this can happen then that influence is transmitted. If it ever happens, it is in such unusual and obscure ways that it has not yet been demonstrated. Yet we know the race has developed, which means that somehow various influences and conditions have reached the germ cells and have been transmitted from father to son.

As applied to our problem this means that if a person is feeble-minded because of spinal meningitis he could not possibly transmit his defective condition since it has affected the body only and not the germ cells. There would be no objection eugenically to marrying a person who was mentally defective thru meningitis or any other of the supposed “causes” which are grouped under the head of accidents. No argument is necessary to show that a person feeble-minded from whatever cause is not a desirable mate, but if for any reason such a marriage should be consummated there would be no possible fear of any of the children being mentally defective unless there was some taint of defect in the germ cell. So much for the cases that come in our Accident Group.

Suppose we apply our question to the group of neuropathic ancestry; that is to say, should a high grade feeble-minded person, whose condition is ascribed to neuropathic ancestry, be allowed to marry? and secondly, should a normal person, a brother or sister it may be, of such a defective be allowed to marry? The question is one that lies between the accidental and the truly hereditary cases. In the former we can plead the law of the non-transmissibility of an acquired character; in the
latter we can apply the Mendelian hypothesis and so far as we can see the consequences, we can make fairly definite predictions.

In neuropathic ancestry the case is different. If we are correct in ascribing the feeble-mindedness of these cases to the neuropathic condition of the ancestors then there is probably no danger of the feeble-mindedness itself being transmitted. Nevertheless the fact that the neuropathic condition is so prevalent in these families makes it exceedingly doubtful whether any member of them should marry. Undoubtedly an ideal eugenics would say that they should not. On the other hand, there are in these families many members who are apparently perfectly normal, who have transmitted apparently normal minds and bodies to their offspring. The defect which appears all about them in the other branches does not show in their line. It therefore becomes unsafe, if not impossible, to proscribe marriage for such persons. At some future time a better psychology and a more highly developed biology will perhaps enable us to give a more definite answer to such questions. At present it will depend upon the knowledge, and shall we say, courage, of the persons who propose to marry. As long as they are ignorant of all the problems of which this book treats, they will marry just as such persons always have married. To those who know the difficulties, the probabilities, it will be the question of how much they dare to take the responsibility, coupled with how keenly they feel that responsibility.

In the present state of our knowledge, neither the nearest friend nor the expert can go further than to give to a person from such a family, who suffers from any of these disabilities, more or less urgent advice that he should not marry. If he does not suffer in this way we cannot even give this advice but must admit the possibility that, since he himself shows good mentality and good physical constitution, it is entirely possible that he may have escaped all the taints that are found in the family.

In the case of hereditary feeble-mindedness the situation is quite different. It is clear from the data already presented that
feeble-mindedness is hereditary in a large percentage of the cases, and that it is transmitted in accordance with the Mendelian formula. The significance of this second conclusion lies in the fact that, knowing the method by which it is transmitted, we are able to predict the consequences of any mating providing we know all of the conditions. The case may be made concrete and definite by taking the different possible combinations and considering the consequences in each case.

First: if both parents are feeble-minded all the children will be feeble-minded. It is obvious that such matings should not be allowed.

Second: when one parent is duplex normal and the other feeble-minded all the children are normal but all are capable of transmitting feeble-mindedness, — we say technically they are simplex.

It would seem that it ought to be unnecessary to urge that no normal person should ever marry a feeble-minded person, but this sometimes happens, it is therefore a matter for society to consider. The fact that all of the children of such matings appear normal has undoubtedly contributed to the argument for such matings. In the past, being ignorant of the Mendelian formula in its application to this problem, we have not realized that it is the second generation, not the first, that shows the evil effects of such matings. For the sake of the illustration let us assume that such a mating has been made. A normal person from normal ancestry on both sides, in other words a duplex normal man or woman, mates with a feeble-minded person, all the children will be normal but simplex, as above stated. That is, they will have inherited normality from only one of the parents, and will have inherited feeble-mindedness from the other. Let us suppose that these children marry; what will be the consequence? There are three kinds of marriages open to them: these normal but simplex persons may marry feeble-minded persons, simplex normal persons like themselves, or duplex normal persons. Consider each one of these separately.
First: this simplex normal person marries a feeble-minded person, then according to the Mendelian hypothesis, half of the children will be feeble-minded, half will be normal, but simplex.

It is necessary to reiterate at this point one of the peculiar limitations when we attempt to apply the Mendelian formula to human heredity. In plants and in many animals the offspring are sufficiently numerous so that the proportions of the formula are easily demonstrated in any mating. In the human family the offspring, being born one at a time, may number anywhere from one to many. Usually, as we know, in modern times the families are relatively small. When we say that if a simplex normal person marries a feeble-minded person half of the children will be simplex normal and half will be feeble-minded, we mean that in the long run this ratio will hold. We do not mean that if there are four children two of them will be feeble-minded and two normal. If there were only four children it might happen that they would all be feeble-minded, or it might happen that they would all be simplex normal. In other words we are dealing with the doctrine of probability and in order to give that doctrine a chance to be demonstrated there must be a large enough number of cases. It is like pitching pennies, we know that a penny thrown in the air will come down half of the time heads up and half of the time tails. If one throws a penny only half a dozen times he may get all tails or all heads or any other combination. If he throws it a hundred times he will come very near to getting fifty heads and fifty tails. According to the doctrine of probabilities there is an even chance that the first child of such a mating would be either feeble-minded or simplex normal. If it were normal, there would be only one chance in four that the next child would be normal. If that one happens to be normal there would be one chance in eight that the third child would also be normal. Finally, if this happened also to be normal there would only be one chance in sixteen that the fourth child would likewise be normal.
REGARDING MARRIAGE

Consider the next kind of mating that is open for this simplex normal child of our original couple. He may marry a simplex normal person like himself; the result here will be the Mendelian ratio of three to one, that is, there will be three normal children to one feeble-minded; but of these three normal children only one will be duplex normal, the other two will be simplex and capable of transmitting the defect just as their parents did. It is in this case and the following one that we get the greatest difficulty and also the greatest help from an understanding of Mendelism. Since both these persons are apparently normal, even if they are conscious of the eugenics problem at all, they are apt to conclude that because they are normal their children will be normal. The fact is, that only one child in four will be duplex normal, and one child in four will be feeble-minded. How then shall normal people know whether it is safe for them to marry? The answer is — thru a study of their ancestry. Taking the assumed case as an illustration — the man was the child of a feeble-minded father and a normal mother; therefore, he was not a duplex normal man; he marries a wife that is also a child of parents one of whom was feeble-minded and the other normal. Such persons should know the nature of their parents and therefore know whether they should marry or not. The rule here is simple and easily followed. No person who knows that he is simplex in regard to intelligence should marry a person who is also simplex.

Consider the last possibility for this simplex person; he may marry a duplex normal person; the result here will be that all of the children will be normal but half of them will be simplex, the other half being duplex. From his own standpoint, this simplex person has done the one wise thing; this is what Dr. Davenport means by insisting that weakness should marry strength. From the standpoint of the normal person whom he marries the case is quite different; it then becomes strength marrying weakness and the bringing in of weak-
ness to at least half of the children. These simplex children may marry duplex normals as their simplex parent did and so the defect may remain dormant or recessive as long as weakness marries strength, but whenever any descendant of this family who is simplex marries a simplex person the defect may reappear.

These constitute all of the possible combinations of simplex with simplex, with duplex or with feeble-minded.

There is a much more difficult problem which may be discussed in this same connection. The thoughtful, intelligent person who considers the laws of eugenics for his own case has, in what has already been said, a very definite guide. When he has decided that he wishes to marry and is satisfied to marry a particular person, the next question to be considered is, does he wish and is he content to marry into a particular family. He needs to know his own condition, whether simplex or duplex, and the condition of his proposed mate even when she is normal. He knows that if either her father or mother was feeble-minded that she at best is only simplex. But if her father and mother were each simplex then there is one chance in four that she is duplex normal. And still further, if one of her parents was duplex normal and the other simplex then there is one chance in two that she is duplex and one in two that she is simplex. It is a question of chance; in the one case there is one chance in four that she is normal, and assuming that he himself is duplex normal their children will all be normal. Or in the other kind of family there is one chance in two that she is normal and their children will be normal.

Among several normal children, is there no way of telling which are duplex and which are simplex? In the case of the typical Mendelian formula where a simplex man marries a simplex woman and the children are in the ratio of three to one — or more strictly, one normal duplex to two normals simplex to one feeble-minded — is there no way of telling which is the
one that is duplex and which are the two that are simplex? There is no way.

In certain fowls white color is dominant; if these are crossed with a brown variety, three of the offspring are white and one is brown. Of the three whites one will produce white offspring, the other two are simplex and will produce white and brown. In this case there is a way to tell the one which will produce the white chick. This duplex fowl is absolutely white while the two simplex have a few colored feathers, known technically as "ticks." It is a very tempting notion to conceive that human beings might manifest some "ticks"; that a simplex normal person would not be quite as intelligent as a duplex normal person; or that the simplex person would have some physical deformity or abnormality or peculiarity which may be taken as indicating the simplex character. Tempting as this view is and reasonable as it might be, there is at present little or no foundation in fact for it. It may be that in the future such a thing will be demonstrated.

One thing seems fairly obvious, a person whose family is tainted with defectiveness should not take any chances by marrying into a family that is also tainted. If a man knows that he and his family are entirely free then it is a problem as to whether he will take the chance of one in two or one in four, or whatever it may be, by marrying into a tainted family. This is all that the student of eugenics can propose at the present time.

We return now to the first part of the eugenist's program — the control by society of the matings of those people who have not intelligence enough to control themselves. It is perfectly clear that no feeble-minded person should ever be allowed to marry or to become a parent. It is obvious that if this rule is to be carried out the intelligent part of society must enforce it. There is to-day a goodly quota of people who have so great faith in law that they believe that if we can only get marriage laws on the statute books our problems are largely solved. A
little that shows that this is an unusually fruitless procedure in the case of the feeble-minded. They are not only lacking in control but they are lacking often in the perception of moral qualities; if they are not allowed to marry they are nevertheless not hindered from becoming parents. So that, if we are absolutely to prevent a feeble-minded person from becoming a parent, something must be done other than merely prohibiting the marrying. To this end there are two proposals: the first is colonization, the second is sterilization.

Colonization is efficient and does not offend any of our sentiments but as a solution of the entire problem it is impracticable. That is to say, we cannot possibly colonize all of the feeble-minded persons. First, because it takes too long to provide the colonies, even tho we were willing to provide the money; second, a large part of these people are in childhood under the control of their parents and their parents will not consent to their being colonized. When they become adults we have no hold upon them until they commit some crime; and they can do a vast amount of mischief without ever getting into the hands of the law.

Sterilization, even in the form of vasectomy, is violently opposed by many people whose sentiments are offended; even if all were satisfied with the practice, it could not under any laws as yet passed, or any that have so far been proposed, reach any considerable percentage of the defectives. It may be made very useful in a large number of individual cases but as for solving the problem of feeble-mindedness it has practically no effect.

The opponents of eugenics claim that nature will take care of the whole matter. It is often asked — does not feeble-mindedness tend to run out? Could not the stream purify itself? A study of the charts here presented will hardly be found reassuring in this direction. Yet if the situation were controlled by high eugenic ideals there is no doubt that there would be a strong tendency toward purification of the stock. If a simplex person,
for example, always married a duplex, in which case half of the children would be duplex, there would certainly be cases in which only the duplex children would be born, and so the simplex condition would be eliminated. That this does actually happen sometimes seems to be shown on the charts, altho of course there is no proof of this. Even where there are three or four generations of normal people one can never be sure that the feeble-minded taint is not recessive and only waiting for a proper mating to reappear.

It must be remembered that in all of this we have been considering only feeble-mindedness. The question of insanity, epilepsy and other heritable traits do not concern us here except in so far as it is a question of whether the marrying into families tainted with these conditions has any peculiar effect upon feeble-mindedness. From a study of the insanity recorded on our charts it does not appear that a person who marries into a family where there is insanity would be in any especial danger of having feeble-minded children. Insanity itself may be hereditary and enough to bar such a marriage, but the question of feeble-mindedness hardly enters unless it is a thoroly neuropathic stock.
CHAPTER X

PRACTICAL APPLICATIONS

First has been considered the various social problems and the probable relation of these to feeble-mindedness. Then were presented the data which have been collected at the Vineland Research Laboratory. These have been studied and arranged so as to present as clearly as possible whatever conclusions could be logically drawn from them. It remains now to consider what practical use can be made of such facts as have been deduced.

What is to be Done? We have already seen that a large percentage of paupers, criminals, drunkards, prostitutes, and other ne'er-do-wells are mentally defective. A study of the family history of feeble-minded persons shows that at least two-thirds of feeble-minded people have inherited their feeble-mindedness, and that this feeble-mindedness is transmitted in accordance with the Mendelian formula. It has also shown that the size of families among these defectives is at least twice as great as among the general population. In other words the feeble-minded population contributing largely to our pauper, criminal, drunkard and prostitute classes is growing rapidly. It would seem from this that society cannot attack these problems in any more successful way than to attack one of the fundamental causes of the problem, namely: feeble-mindedness. And we must attack this from the standpoint of inheritability. It might be a defensible position to propose to go on as we are doing with the pauper and criminal, drunkard and prostitute, taking care of them until they die, if the present group were the end. But the instant we realize that these groups are continually being replenished,
that our problem instead of growing less is actually growing
greater, we discover how hopeless is the situation, unless we can
accomplish more in the future than we have in the past. More
than half of the states have given some attention to the question
of feeble-mindedness, to the extent at least of building an Institution to care for them. But very few, possibly none, have as
yet caught up with the problem, that is to say, they have not
done enough to take care of the natural increase to say nothing
of reducing the source of supply. The problem is a large one
and the difficulties are great, but it would appear that we have
not taken advantage of those things that are actually within our
control.

**Paupers.** The paupers in our almshouses are under our con-
trol. Probably half of them are feeble-minded; and many of these
feeble-minded paupers are continuing to propagate feeble-minded-
ness. One of the first places to begin therefore in attacking this
matter, is in the almshouses. Every inmate of every almshouse
should be examined as to his mentality and as to his family
history. In every case where it is discovered that there is feeble-
mindedness, or that the individual belongs to a mentally defect-
tive family, everything possible should be done to prevent the
further propagation of that stock.

**The Criminal.** In the case of the criminal we are not only neg-
lecting an opportunity but we are committing an injustice. If half
of the criminals in our jails and prisons and reformatories are feeble-
minded, they are irresponsible. Shutting these people in a jail is
as great an injustice as the punishment of any innocent man.
Society may be forgiven for its past action in this matter for it
knew no better; but now that we know the facts, not neces-
sarily the exact proportions, but the general fact that large
numbers of these people are mentally incompetent, it is our
duty to act. Every penal institution must be examined and
the number of its defectives determined; then these defectives
must be cared for, not as criminals, but as feeble-minded.
The Drunkard. The drunkard presents a peculiar problem in connection with which we have acted most irrationally. We have attempted to punish him because he is a nuisance but our pity is so strong that nowhere is the law enforced in regard to such cases. We arrest them and fine them and then let them go so that we can arrest and fine them again, still hoping in spite of all our experience that somehow the arresting and fining will have a curative effect.

A large proportion of the drunkards are feeble-minded and neither responsible for their drinking nor for what they do when intoxicated. As with the others, so with the drunkard; there should be a careful mental examination and treatment in accord therewith. If it was understood that this would be the procedure it would doubtless be easy to have nearly all of the drunkards arrested. We should in this way get hold of a large number of mental defectives that we cannot touch by any other method.

Prostitutes. And what of the prostitute, that committer of a crime that is considered as so peculiarly offensive in human society? Let a man seduce a 14 or 15 year old girl and we punish the man, we extend our pity and sympathy to the girl, we call her a child who has been abused and mistreated. More than half of the prostitutes are more truly children than a 15 year old girl; they are more like children of ten or eleven in their mentality, altho adults physically. These people need protection not punishment nor preaching. They should be taken into custody by the officers of the law, not necessarily for punishment, surely not to be fined and sent out again to do the same thing over, but to be treated, to be examined as to their mentality. All those who are found to be feeble-minded should be cared for as feeble-minded.

Ne'er-do-wells. I have alluded in an earlier chapter to the person who is called the ne'er-do-well and it has been suggested very often that he too is a feeble-minded person. What shall we do with him? Under our present ideas we can do nothing officially. He commits no crime, he is not a nuisance in the real definition of that
term, and there is no way in which society can arrest him; but much can be accomplished by recognizing him. Now that we know what feeble-mindedness is, and we have come to suspect all persons who are incapable of adapting themselves to their environment and living up to the conventions of society or acting sensibly, of being feeble-minded, we are ready to think of all these ne'er-do-wells as possible defectives. Doubtless the more familiar we become with defectiveness the better we shall be able to judge by such observation as we can give of the truth of our diagnosis. What then? If we can do nothing more, at least the mere knowledge of the condition will protect us to a large extent. That is to say, once being conscious that these people are defective we shall protect them against themselves in many ways; not officially by arresting them, but by refusing to place responsibilities upon them, and by exercising as much control over them as we do over normal childhood.

In looking at the problem of feeble-mindedness itself we are often confronted with the difficulty of getting hold of the cases. There are so many feeble-minded persons, especially if we include this high grade, that we cannot take care of them. Many of them do not commit crimes nor become nuisances, and even if we had an abundance of colonies and institutions it would be difficult to get them into them. But of these people that we have been discussing, we have a large percentage that are officially in the hands of the law. The practical problem is, will the officers of the law take care of the feeble-minded persons that are thrust upon them? It must not be forgotten in all of this, that it is not only a question of taking care of these individuals, so that they themselves are less a menace to society directly, but it is a question of heredity. A large percentage of these people are not only obnoxious themselves but they are propagating their own weak-mindedness and continuing our social problems.

Our present methods, besides being unjust and cruel and thoughtless and careless, are doing nothing to prevent the continuance
of this species of humanity. It is hereditary feeble-mindedness that is at the basis of all these problems, and it is hereditary feeble-mindedness that we must attack and attack hard if we would solve them.

Stanley Hall has said that one's feelings and impressions are often truer than one's logical reasoning. One cannot study a mass of data like the preceding without having certain large and general impressions, which, while not demonstrable by a logical array of premises with their conclusions, nevertheless have a certain consistency which renders them helpful in any attempt that may be made to use the facts discovered for practical purposes.

The first of these we may designate as a general viewpoint of the problem of mental defectiveness — the conception of mental levels, or levels of intelligence. Intelligence as here used connotes more than the psychological intellect, it is more the popular understanding of the term, which, when reduced to psychological expression, means all of the essential mental processes in such proportion as to render the possessor able to adapt himself to his environment. It thus includes not only the intellect but the sensibilities and the will, to use an older classification.

Conscious adaptation to one's environment involves, on the one hand, a taking into account one's instincts, impulses, emotions, feelings; on the other a perception of the situation in all those details to which adaptation must be made. It involves a calling up of past experiences which show the result of various lines of action involving association, judgment, reasoning; it involves an attention to the situation and certain habits of action therewith connected. The amount of each one of these processes that may be involved, and the relative proportion of them all is determined by the environment itself. A highly complex situation may involve the highest degree of all of these processes, while a simple situation may involve only a part of them or all of them in a slight degree. We may thus have varying degrees
or levels of intelligence which can be measured by the degree of complexity of the environment to which the individual is capable of adapting himself.

Such a conception ought not to be difficult to entertain since the evidences are at hand. All men have their limitations, some high, some low. Strictly speaking, a feeble-minded person is not one who lacks intelligence, but one who lacks a particular degree of intelligence. That degree or level is fixed not arbitrarily but by the social necessity. Intelligence is thus relative. This again is a common enough idea; we say of a man that he is fairly intelligent, or very intelligent, or among the most intelligent; or we go down the scale and say he is only moderately intelligent, or has very little intelligence, or that he is unintelligent, meaning of course, that his degree of intelligence is abnormally low.

The degree of intelligence which marks the line between the feeble-minded and the normal person has been defined as that degree below which the possessor cannot manage himself or his affairs with ordinary prudence. Now it is the environment which determines how he must manage himself and what affairs it is necessary for him to control. In consequence of this it happens that a man may be intelligent in one environment and unintelligent in another. It is this point which Binet has illustrated by saying “A French peasant may be normal in a rural community but feeble-minded in Paris.” The peasant life is simple; the environment requires little adjustment. In Paris, it is different, all is complicated and requires the highest functioning of certain mental powers in order to enable one to adapt himself. That fact should be borne in mind throughout this discussion.

We have practically agreed to call all persons feeble-minded who do not arrive at an intelligence higher than that of the twelve year old normal child. But it must be remembered that this is merely an average, a norm from which to measure and by
which we can compare different individuals. It does not mean and must not be taken to mean, that the person of only ten year old intelligence is incapable of functioning in any environment, any more than it means that the person of fourteen year old intelligence is capable of functioning in every environment.

We are already struggling with the problem of the defective delinquent, the individual whom we cannot call feeble-minded according to our present standard, and yet who has not intelligence enough to function in the environment in which he finds himself. Such a person very probably has fourteen or sixteen year intelligence, and would function very well in any environment which required no more than that amount. But he happens to have been born or has got into an environment that requires a twenty year old intelligence and he therefore is defective.

The same is true if we go below twelve years. While we say that the child of ten-year mentality is feeble-minded this does not mean, as has been said, that he cannot function in any environment. It does mean that as society is now constituted in most civilized countries, he cannot function in the ordinary group; but he could function in a simpler one. Since he is in the minority and the majority has made the environment what it is, it would seem to be incumbent upon the majority to provide a special environment for this defective individual, with the expectation that in that special environment he would be normal — that is to say, he would be able to adapt himself and to function satisfactorily. This expectation has been abundantly fulfilled wherever it has been tried.

That there are mental levels is thus seen to be a tenable hypothesis and a possible key to the situation. We shall return to it later.

The second of these impressions obtained from studying the data relates to heredity. We have seen that feeble-mindedness is hereditary; can we say that these grades or levels of intelli-
gence of which we have spoken are directly transmitted as is the color of the eyes or the hair or the stature of the body? It is our conviction that, other things being equal, the children will have at maturity the same level of intelligence as their parents. This is not a new discovery altho our studies of feeble-mindedness have made the whole matter clearer than perhaps it has previously been made. Furthermore, it must be remembered that in such matters we can only speak in general terms. The intellectual level is not transmitted from father to son with the same accuracy that blue eyes are transmitted.

In the case of the intellectual level there are too many factors for us to be able to show a long series of precisely the same mentality. It is, however, perfectly demonstrable that in a general way this principle holds true. One has only to recall the Edwards family, the Adamses or the Lees, and scores of others to see what this means. A perusal of the biographical dictionary will show hundreds of families that have maintained the same high level of intelligence thru many generations.

Coming down in the scale from those who have had a national reputation we find that what we may call the average citizen in his community has maintained about the same level of intelligence as his father and grandfather who were also men of average intelligence: And it is only by way of completing the series that we find that among the mental defectives of the pure hereditary type the level is maintained. If the child is a moron it is probable that the father or the mother or both were morons and the grandparents also. Our families show this in many cases.

The same holds for the high grade and the middle grade imbeciles. Defectives of lower grade than the middle imbecile seldom marry and so our series ceases. As explained in another place, the children of lower mentality than middle imbecile, who are of hereditary feeble-minded origin, have their low grade of mentality either as the result of added disease or because they are exceptions to the rule, and exceptions we cannot often explain.
The fact of the transmission of the intellectual level becomes of tremendous significance in connection with the social problems. It is furthermore greatly complicated by the biological principle that if the condition is due to disease or acquired in any other way it will not be transmitted. This shows once more the necessity for separating the two elements, the one of pure or inherited feeble-mindedness from feeble-mindedness due to some extraneous cause.

A third point of view, or principle, that has come out of the study of these defective minds is of great importance for their training. This principle is somewhat difficult to state but may be put in this form: a person can never be trained to do intelligently any task the doing of which requires intelligence of a higher level than that to which he has attained. It is difficult to realize that fact when we consider only normal people. The view has been strongly impressed upon us all that any one can do whatever he wills to do, and we are unwilling to give up that belief, in spite of the fact that we see many persons attempting things that, as we say, are beyond them. We seem to be very unwilling to give up our prejudice that nothing is really beyond us. With the mentally defective, however, this becomes easy to demonstrate. The histories of our children as recorded give scores of illustrations. They are in fact so many tests of the principle. Our teachers with a delightful optimism have tried over and over again to teach a child with the mentality of four to do things that can only be done by a child of the mentality of six or beyond.

Before we understood as much about the defective mind as we now do, it was always expected that many of these children could learn to do much of the ordinary school work. Only a few years ago it was a proud boast of Institutions for the Feeble-minded that their school departments were exactly like the public schools. Every child that gave any promise whatever, that is to say, who was of the middle imbecile grade or above, was sent to school and every effort was made to teach
him everything that the school could teach. If the reader
will turn back and read the sentences that refer to the accom-
plishments of our children, taking them as they are arranged by
mental age, he will discover that all those of any one age have
had practically the same history. They have tried to do great
things; the teachers have persisted in their efforts to teach all
things to all children; gradually the higher things have been
dropped and they finally settled down to those attainments which
are commensurate with the mentality of the particular child.
For example, those who have a mentality of 10 or 11 are doing
some of the finer and more complicated work of the Institution,
in the shops, in the household, on the farm or in the garden.
Those who test 8 or 9 are doing the coarser work in the shops or
on the farm or at the house. Those of mentality 10 or 11 have
learned to read a little. Those of 8 or 9 perhaps got into the First
or Second Reader but not farther. Those who test 6 or 7 have
never succeeded in getting anywhere with the three R’s and while
they did some manual training and shop work in school, after
leaving school they are not found in the shops but only on the
farm and in the house, there doing the simplest kind of work.
Altho every effort, born of a blind devotion to an ideal, has
been made to make these children normal, or at least of
relatively high grade, it has invariably failed and they have
learned nothing that is beyond their mental age.

This is of profound significance for the training of the defe-
tives of the future, and is it of any less importance in the training
of normal children? The principle must be as true of normals as
of defectives. It would seem clear therefore, that if we would
train our normal children wisely without wasting their time or
energy, or running the risk of discouraging any further effort on
their part, we ought to discover: first, how much intelligence
is required for the various subjects that we present to them;
and secondly, what level of intelligence each person has reached
so that we may know whether he is ready for the proposed
subject. This is the next great step in the pedagogy of the future.

We may now consider what bearing these principles would have upon the problems growing out of low intelligence.

First we have illustrated the "levels of intelligence" view by showing that different levels of intelligence can function in different environments. Let us now apply this definitely to the problem of caring for these mental defectives.

As we have said, it is clear that the people of higher intelligence must, in self-defense if for no other reason, care for those whose intelligence is too low to enable them to care for themselves. In accordance with the principle we are discussing, this can be done by providing a sufficiently simple environment.

The amount of care and effort which the majority, the so-called intelligent people, must put forth in order to create an environment in which these lower grades of intelligence can function, varies inversely as that intelligence. Beginning with the lowest idiot, the environment consists of a comfortable home with an attendant who prepares the food and feeds it to the child, and performs whatever other labor is necessary to make the child comfortable and happy and his presence at all tolerable to those who thus care for him. This we usually call custodial care.

Those who have the intelligence of a child from three to seven, technically called imbeciles, also require more or less custodial care, altho the higher division of them can largely take care of themselves so far as the immediate necessities are concerned. They cannot provide for the future, they cannot even meet the little emergencies which arise in connection with such occupations as they may be trained to perform. They must, therefore, have constant oversight and must be given occupation which presents as few emergencies as possible. The lower half of this group will do little but sit around or walk about, pick up sticks, carry stones or the like; but the upper group, those of mentality
from five to seven, may be trained to simple occupations which they can do over and over again, provided, as already said, there is some one having the oversight of them to step in whenever any emergency arises. Both of these, the idiot and the imbecile, therefore, require segregation, colonization, where the environment has been simplified to the last degree.

We come now to the moron, the child of from eight to twelve years of age mentally. We will get an approximate idea of the needs of this grade of intelligence if we recall the normal child of from 8 to 12, for it has been determined that these defectives are very like normal children of the corresponding age. Of course the similarity is not exact. His physical growth and especially his sex development react upon the defective to give him certain characteristics not found in the normal of the same mental age. His environment and experience have also made some changes in him, altho these changes are slight because being defective he does not take in the environment or profit by experience. It must not be forgotten also that the defective child lacks energy. He is consequently not active, inquisitive, interested like the normal. His emotional reactions are less marked. In spite of all these differences, to say that he is like a normal child of the same mental age is to describe him much more accurately than can be done in any other way, and to regard him and treat him from that standpoint is the most useful and helpful as well as the safest procedure. Bearing these two facts in mind we can easily work out the program for this grade.

Let us consider a mentality of 10 in order to have a specific case. A normal boy of 10 can learn to do a great many things and can do them well. There are many things also that the normal boy could learn to do that he could not himself do because of physical inability. That incapacity is not present with these defectives, because as we have said, physically they are like men and women. Therefore they have in that way greater
capacity, that is a larger range of capacity, than the normal child of the same age. A normal child of ten does a great many tasks for which he has been trained. No one expects a normal child as a rule to set himself to work, to keep himself working, or to use good judgment in meeting the emergencies that arise in connection with his work. This is precisely the case with the defective of this grade. All this means that we must provide him with an environment in which there are few emergencies, in which the activities call for intelligence of his level and may be carried on by habit. This may include much of the routine of farming, of housework, and many kinds of simple industrial occupations. These pursuits, however, require more or less of planning and there are inevitably more or less emergencies, which means that there must always be a person of higher intelligence who can be called upon at a moment's notice, who will make the plans from day to day. This at once suggests a farm colony and segregation so much discussed at the present time.

In this connection the following industrial classification is of interest.

This classification was made in the following manner: Every employee at the Vineland Training School was asked two questions about every child in the Institution, viz.: What does he do? What can he do? The answers were grouped and all those of the same mental age were put together. From the many answers in each mental age group an expression was sought that would describe the activities of the group. The children of the same mental age were often doing different things, and the grades sometimes overlapped. One does not expect a generalization to fit individual cases. On the whole however the classification has proved wonderfully accurate. While some children of five-year mentality (e.g.) are doing better and some worse the great majority are doing work that is covered by the expression, "Only simplest tasks."
### INDUSTRIAL CLASSIFICATION

<table>
<thead>
<tr>
<th>Mental Age</th>
<th>Industrial Capacity</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 1 yr</td>
<td><em>(a) Helpless. (b) Can walk. (c) With voluntary regard</em></td>
<td>Low</td>
</tr>
<tr>
<td>1 yr.</td>
<td>Feeds self. Eats everything</td>
<td>Middle Idiot</td>
</tr>
<tr>
<td>2 yrs.</td>
<td>Eats discriminatingly (food from non-food)</td>
<td>High</td>
</tr>
<tr>
<td>3 &quot;</td>
<td>No work. Plays a little</td>
<td>Low</td>
</tr>
<tr>
<td>4 &quot;</td>
<td>Tries to help</td>
<td></td>
</tr>
<tr>
<td>5 &quot;</td>
<td>Only simplest tasks</td>
<td>Middle Imbecile</td>
</tr>
<tr>
<td>6 &quot;</td>
<td>Tasks of short duration. Washes dishes</td>
<td>High</td>
</tr>
<tr>
<td>7 &quot;</td>
<td>Little errands in the house. Dusts</td>
<td></td>
</tr>
<tr>
<td>8 &quot;</td>
<td>Errands. Light work. Makes beds</td>
<td>Low</td>
</tr>
<tr>
<td>9 &quot;</td>
<td>Heavier work. Scrubs. Mends. Lays bricks. Cares for bath-room</td>
<td></td>
</tr>
<tr>
<td>10 &quot;</td>
<td>Good institution helpers. Routine work</td>
<td>Middle Moron</td>
</tr>
<tr>
<td>11 &quot;</td>
<td>Fairly complicated work with only occasional oversight</td>
<td>High</td>
</tr>
<tr>
<td>12 &quot;</td>
<td>Uses machinery. Can care for animals. No supervision for routine work. Cannot plan</td>
<td></td>
</tr>
</tbody>
</table>

One important correction must be mentioned, as it is a matter that bears upon the problem of the feeble-minded. We soon found when we attempted to group our cases that those children who were over 20 years of age chronologically were a disturbing factor in our plan. They could not be grouped with the others of the same mental age. Some study of the situation showed that these older persons were doing tasks that seemingly required a higher mentality, but they were doing them not intelligently but *automatically*, that is after long train-
ing and drill they had learned to go thru the motions in a more or less efficient manner.

This well illustrates the way in which feeble-minded persons sometimes seem to have an intelligence beyond their mental age. The man who is 40 years of age, but of ten-year mentality has had 30 years in which to learn not only more ten-year accomplishments than any one normal boy of ten could acquire, but also he has had time to learn to do by habit and drill many things that he cannot possibly understand. In making the foregoing classification we threw out all cases who were over 20 years of age.

Since we have begun to realize the enormous number of defectives we are bewildered at the thought of segregating them all. There are between 300,000 and 400,000 feeble-minded persons in the United States. That would mean 1000 colonies of 300 each, or 300 colonies of 1000 each — from 2 to 30 institutions in each state according to the population. In view of such an enormous undertaking we naturally look about to see if anything else is possible. Under the present social conditions it is hard to think of any other treatment as being adequate to the situation.

But when the mountain would not come to Mahomet, Mahomet went to the mountain. If we cannot remove the mental defective from society to a colony, we can at least colonize him where he is and possibly this may be made quite as satisfactory as the other plan. Indeed it requires only a little optimism to believe that it may be better than the other. One of the main reasons that the moron is so dangerous under present conditions is that he is not understood; he is assumed to be normal, he is treated like a normal person and is expected to react like a normal person. There is no evidence to prove that the feeble-minded person taken in the beginning, understood and properly treated, becomes vicious, bad or dangerous. On the contrary there is much to prove that he is not vicious; he may be made so by mistreatment but he is not so naturally. A menace to society? Yes
when mistreated, when not cared for, when allowed or compelled
to bear the burdens of intelligent people. If a nine year old child
is left alone in a house with fire and matches and he sets fire to
the house, — who is to blame, the child or the people who left
him in such a position? In precisely the same way the feeble-
minded in the world to-day are a menace to society, because we
have not understood them, because we have placed them in an
environment where they easily go wrong. But cared for and
protected, as all wise parents care for their children, these chil-
dren need be no more of a menace than other children are.

Suppose, for the sake of making the matter clear, that every
normal person recognized these defectives, that a moron as he
grows up is recognized as a moron; altho full size for a 20 year
old boy, with a physique as healthy and comely as that of the
average, all realize that he has a mind of 8 or 10. What will this
changed attitude or condition mean? In the first place it will
mean that we will teach him in school only those things that a
ten year old child can learn. This will leave him with a minimum
of the three R’s and a maximum of manual and industrial train-
ing. Suppose he is ready to go to work; he seeks employment;
he thinks he would like to run an elevator — Will any one employ
him? Does any one employ a ten year old boy to run an ele-
vator? Why not? Not because he has not the strength, not
because of the Child Labor Law, but because a ten year old boy
is known not to have sufficient judgment to manage a machine
where a slight error might be so serious.

If it is asked how the employer is going to know that this
likely-looking man of adult years and normal-looking physique
has only the mentality of a 10 year old child, the answer is at
hand. There must be a registration bureau where the grade of
intelligence of all such persons is recorded. Until some other
agency is established for this purpose the public schools must
serve in this capacity. Under our compulsory education laws
every child must attend school. Our school officers are already
discovering that for their own efficiency they must determine the mentality of their dull children, and must provide for them such training as they are able to take. They will record the degree of efficiency in terms of mental capacity. But what will impel the employer to seek the information that he can obtain from this school system? In many states the employers already have the strongest kind of motive to seek this information. This is in the Employers' Liability Law. Employers will be quick to learn that there are these defective persons and that the danger of employing them in complicated work is very great. A man who employs a mental defective to run an elevator will sooner or later be compelled to pay for injuries that result from such a boy's lack of judgment. He will then seek for the information that will protect him; and will act upon that information.

Therefore, if our 20 year old boy sought the job of running an elevator but was known to have only ten-year intelligence, he would not secure the job. He would however secure such a job as a ten year old boy could do. Besides getting employment that fitted his intelligence he would be treated as a 10 year old child, he would be guarded and protected from dangers of all kinds by all persons who had intelligence. With this protection born of an understanding of his condition he would get along very well; having been properly trained as a young boy he would probably be nearly if not quite self-supporting. If not quite self-supporting he would be a ward of the state and whatever he lacked of enough to support himself would be made up to him in the proper way.

This could easily be arranged thru the Police Department or the Probation system, or the Department of Charities, and would be justified on the understanding that if this were not done the individual would become a pauper or a criminal and cost society vastly more because then his entire support would be at public expense. Thus the problem would be largely solved.
In a goodly percentage of the cases he would live out his life pleasantly, happily, and be relatively useful.

Our first problem then is to recognize the moron. By suitable mental examination they must be discovered, and discovered as early as possible. This is best done in public schools. If a child is backward he must be carefully watched. If it is only a temporary matter or one due to physical causes which can be removed, he will eventually be normal. But if he is really mentally defective it will soon show and as soon as it is determined his treatment must begin. It is then a matter of education, of training. We must learn what this mental defective can do, what kind of training is profitable to him. At present the indications are that comparatively few people who are mentally defective are ever able to learn to read, write and count, or in short to do the ordinary school work. It is even questionable whether those who are able to do this after an enormous effort ought to be compelled to make the effort; whether their efforts cannot be better utilized in other directions which will make them more useful and happier.

We are beginning to learn, not only how to recognize them, but how to determine what degree of mentality they possess, or where in the scale of development their arrest has taken place. Careful studies of this problem will show us the kind of training that is adapted to each one. Trained along these lines from early childhood, kept from learning vicious ways and bad habits, they remain innocent children with much of the naïveté and attractiveness of normal children. They are simply perpetual children. They may live to be sixty years of age and still remain the same childlike persons that they have been for fifty years.

There are many things that they can be trained to do with sufficient proficiency to pay for their cost of maintenance. Here then, is perhaps the solution of this part of the problem — early recognition, careful determination of the degree of
defect and careful training fitted to make them happy, useful, and self-supporting under direction.

It will be seen that what we have said here is based upon the view that these mental defectives are cases of arrest of development and they are like normal children of the age at which their arrest takes place; and that our safest guide in the treatment of these cases comes from a consideration of the wise treatment for the normal child of that age. That this is a correct view is becoming more and more evident every day. The more experiments and tests are made and the more we study the problem of the defective the more we discover and become convinced of this truth.

The foregoing is not proposed for all mental defectives. It is offered as a possible help in view of the practical impossibility of segregating the large number of defectives that we are finding in every community.

Suppose now we go back to the general question — what shall we do with people of low intelligence? Colonize them, says one; sterilize them, says another; educate them, says a third. Each plan has its advocates and each has its difficulties. The first two seem to assume that the people of low intelligence are a different group and should be treated in a very special way; that those of us who are pleased to style ourselves intelligent have the right to deprive these people of something that we enjoy. The third plan suggests that these people are our equals in some things and that they can be educated as we have been educated.

It will be well to examine what facts we have before coming to a decision. Our facts at most are too few to warrant us in neglecting any. To begin with, no student of the problem will admit that these people constitute a different species of humanity. Some intelligence is possessed by all unless possibly the very lowest. It is a question of degree and a question of the need that the individual has of intelligence, in other words of his environment. If an individual cannot adapt himself to his environment,
can we not adapt the environment to him? "This is what colonization does," says the advocate of this method. In theory this is true, in practice it is also often true, but not always. With certain high grades and under certain conditions there is an element of restraint, the colony becomes practically a prison; only under the wisest management, by the most broad-minded policy can this element of restraint be kept out of the mind of the high grade defective. And it is doubtful if it ever can be kept entirely away from the highest grade. Suppose then we are content to colonize as many as can be made contented in the colony, what of the others? It is for these that sterilization is supposed by many to be the panacea. But sterilization seems only to apply to a narrow zone; many of these high grades are regarded as being on the border line, where it is of doubtful justice to take this action. Many other objections are urged.

We may accept the verdict that the facts, particularly those that are set forth in this study, show that we must colonize as many of the feeble-minded as we possibly can, that we must sterilize some and then we discover that we have only tithed the problem, we have not solved it. We still have left one expedient, that of educating them. "But," says some one, "they cannot be educated, they have not mentality enough to take an education." That depends upon our definition of education.

The group that cannot be colonized and many of those indeed who will eventually be colonized, and the group where we are in doubt about the propriety of sterilizing can be trained to a relatively high degree in certain directions. But again, says some one, they will always be vicious and dangerous and a menace to society. There are, however, no facts to prove this. That may sound strange in view of what has already been said in this volume. But it must be remembered that we have studied people, who in addition to their feeble minds, have had a bad environment, have been misunderstood and mistreated.

With a better comprehension of the nature of these persons,
with wiser methods of training in a suitable environment, the viciousness that we sometimes see will seldom, if ever, develop.

Only one thing remains to be considered, their propagation. We have said that no feeble-minded person should marry or become a parent. From the standpoint of an ideal eugenics that cannot be denied. But the ideal and the practical are seldom the same. We must aim at the ideal but take what we can get. The feeble-minded will continue to become parents for many years to come. Let us face the fact and make the best of it. Does not our horror at the mating of the feeble-minded and the production of more feeble-minded offspring arise largely from our experiences with them up to the present time, and is this not complicated by the bad environment and mistreatment of which we have spoken? When we have learned to recognize these people and learned how to treat them, how to train them, will not the situation be entirely changed? May it not be possible that we will find use for all these people of moderate intelligence, and that the production of so many high grade feeble-minded is only the production of so many more people who are able and willing to do much of the drudgery of the world, which other people will not do.

This is not to be understood as advocating such a procedure. The point is made merely by way of emphasizing the fact that when we shall have come to understand these people and to treat them in accordance with their mental condition, their low intelligence, that a large part of our problem will have been solved and that many of the evils that we now complain of will not reappear.

We have said that in spite of all of our efforts, after we have colonized all that we can, these people will become parents; so far as we can see there is only one way to obviate it, that is by a very general practice of sterilization. If the process of vasectomy proves as satisfactory as its advocates believe, it may be that we shall ultimately be willing to sterilize all of these border-
line cases, and then, there will be no longer any objection to their marrying. Indeed it has already been proposed more than once, that when a feeble-minded person wishes to marry he shall be told that, if he is willing to submit to vasectomy, a marriage certificate will be granted and he may enter upon a career where he will be a husband but not a father.

Such a procedure may have many objections and may be repugnant to many of us. Nevertheless, a broad-minded view of the problem, a willingness to consider all possible solutions, requires that this suggestion should be considered in the light of conditions as they will be when our fundamental requirements are achieved, namely, that the feeble-minded are recognized and their degree of mentality and responsibility is understood and they are treated in the manner that they require.

For the sake of clearness let us repeat some of the points of this Chapter.

First: the mere recognition that there is a problem of the feeble-minded will go a long way toward its solution.

Second: a large part of the mental defectives who cannot be segregated may be reasonably and safely cared for in their homes, when we learn to recognize them for what they are, children in intelligence, tho men and women in body.

Third: we must increase our efforts to segregate as many as possible, because for a long time to come there will be a larger number who need colonization, than we can possibly care for.

Fourth: we must have sterilization wisely and carefully practiced for the solution of many individual problems that are not reached by any other method.

In conclusion, we believe that we have demonstrated that feeble-mindedness is sufficiently prevalent to arouse the interest and attract the attention of all thoughtful people who are interested in social welfare; that it is mostly hereditary; that it underlies all our social problems; that because of these facts it is worthy the attention of our most thoughtful statesmen and social leaders;
that much of the time and money and energy now devoted to other things may be more wisely spent in investigating the problem of feeble-mindedness; and that since feeble-mindedness is in all probability transmitted in accordance with the Mendelian Law of heredity, the way is open for eugenic procedure which shall mean much for the future welfare of the race.