

WHAT SCIENCE CAN DO FOR THE FEEBLEMINDED

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Mrs. Chairman, Ladies and Gentlemen: I feel quite flattered in being asked again to address this conference of superintendents. I know, like all good Americans, you are willing to try anything once, but when you ask me the second time to address you I feel it is a compliment.

The subject which your secretary proposed to me was a good one. I wish to congratulate you upon its selection because it indicates that you are thinking profoundly on this question of what science can do for the feeble-minded. We are witnessing on all hands demonstrations of what the feeble-minded can do to science and government and society, but it is refreshing that anyone should think of what science might do for the feeble-minded.

The laity in general take a very narrow view of what constitutes a feeble-minded individual. I think if they were asked to define a feeble-minded person they would show about as much comprehension as the Irishman who was taking a civil service examination in New York for an appointment in the health department. One of the questions was, What is rabies and what can you do for it? Being an Irishman he had an answer. He said that rabies were Jewish priests and you couldn't do a damn thing for them.

Perhaps some time we have visited an institution for the feeble-minded and the idiots and imbeciles we have seen there constitute in our minds our conception of the feeble-minded.

Now we have come to the place where we must take a broader view. We must enlarge our idea of the feeble-minded and ask ourselves the question, Who are they and what constitutes a feeble-minded person?

Last week I was in our own probate court on a commission to determine what we were to do with two young women whom the social workers had brought up for consideration as one of their problems. One of these girls was twenty-one years old and had a mental rating of about six years of age. The other was a girl of twenty-six and had a mental rating of about twelve years. One of them was entirely inadequate to face her environment, could scarcely work under supervision, but her behavior was good. Her feeble-mindedness was easily apparent. The other girl was not up before the court so much because of an inferior mental rating; she was there because of delinquent behavior. She was twenty-six years old, unmarried, and had four children, in whom she took no interest or accepted any responsibility for. In the home where she was staying she had been acting as cook. It was a place for delinquent girls, and they had some twenty-two people in this house. The matron of the house stated that she was a good cook and quite efficient in the performance of her duties.

According to public opinion and the law in this state there did not seem to be much of anything that we could do for this girl. Already four children were started on their careers for the next generation to care for. When we

Blanche L. La Du, Chairman State Board of Control: Our program today is a discussion or study of problems concerning the mental defectives and the delinquent defectives. We had expected to have with us a speaker from another state, one well qualified to speak on this subject, Dr. Hurty, of Indianapolis, who was health commissioner of Indiana for a number of years. I know you will regret very much his absence, which is caused by illness.

I am pleased to announce that we have others with us who will no doubt handle this problem in just as efficient and interesting a manner. Home folks are going to talk to us today. Those of you who were at Phalen Park Hospital last February will recall that we had a speaker who gave us a very interesting, instructive and entertaining talk on the problems of the epileptics. He is with us again today, Dr. Charles R. Ball, who will speak to us on the subject of "What Science Can Do for the Feeble-minded." I am pleased to present to this conference this morning Dr. Ball.

think of the appalling records of the Juke and Kalkak families, the one in New York and the other in New Jersey, we can imagine the problem that this one girl, who is not so feeble-minded in her intelligence quotient but who is perfectly irresponsible in her conduct, is going to present to the next generation.

A week or two ago a social worker brought a young lady into my office and said that she had been looking after her for a year and that she had reached the end of what she could do for this person. She thought perhaps I could suggest something. The history of this girl briefly was this:

No one knew anything concerning her parents; whether they had died when she was young or had deserted her was unknown by her. She was adopted into a home and lived in this city. Several years ago this young girl, at that time twelve years old, created such dissension between the husband and wife, her foster father and mother, that they concluded that they could not keep her any longer. They thought perhaps a new environment might help her, so sent her to a relative in Superior, where she staid for a number of years, but eventually created a disturbance of a similar character in this place, finally coming back in the last year to her foster parents again. She had not been there very long before the same sort of difficulty arose. She was continually telling the wife stories about her husband and about the husband's attitude towards her, trying to stir up a dissension and a jealousy so that she created an impossible situation.

Now, to understand the problem of the feeble-minded in its broader sense, we must understand the situation in this case. Here was a girl possessed of more than ordinary good looks and in many ways more than the average intelligence. She had gone through the eighth grade and was in the high school, and the only reason she stopped in the high school was because of the disturbances which she had created, not because she was not quick enough to learn. Her great weakness was her inability to adjust herself to her environment.

This is the strong point that I wish to make in my talk today. We have been misled by depending too much on the I. Q.—that is, the purely mental rating—in determining who are the feeble-minded, and not enough on the power of these individuals for adjustment to their environment. The worth of an individual does not depend upon how great a mathematician he may be, or how clever he is in writing a story or composing a poem, but his worth in the world, his worth in society, depends entirely upon his ability to adjust himself to the environment in which he happens to find himself. If he is unable to make acceptable contact there is a feeble-mindedness present which depends in degree on the width of the contact gap.

All of the organs of our body do not differ so very much in structure; they are all composed of cells and supplied by lymphatics and arteries and veins. The radical difference in them is the difference in function. The function of the stomach is to digest, and when we have a stomach that is unable to digest fats or desserts, we say the individual who possesses such a stomach has a weak stomach because it is not able to perform to the full extent its function. When a person has a pair of eyes with which he is unable to see without getting a pain, or is unable to see at a distance with-

out some kind of a glass as a help, that pair of eyes is weak in its function. At the present time when a person has a brain that believes two and two make five, and that person wants to argue the question with you, saying, if you start to remonstrate: "You are narrow-minded; you are an old fogey; you are a standpatter," the only logical conclusion one can draw concerning that person is that his brain is weak in its chief function, that of thinking.

There isn't anything in this world that is worth anything if it hasn't some apparatus that gives it control. We step into our trains de luxe at the Union station, and whirl through the distance in these magnificently upholstered and lighted and heated cars at the rate of fifty or sixty miles an hour, and the only thing that makes that ride possible, that makes that train able to operate, is the airbrake which controls it. If there wasn't any brake on that train, you would not dare ride in it. We see the beautiful, high-powered automobiles driving through our streets, even in the downtown district, with safety and comfort at the rate of twenty miles an hour, and the only thing that makes this possible is the brake drum on the rear wheels. Otherwise automobiles would be such dangerous things that nobody would want to ride in them. But when it comes to questions of practical living, when it comes to questions of government, we want at the present time to have a government without any brakes. The feeble-minded are very intolerant of restraint.

Lately I have been thinking of the infinite wisdom of the Creator when he established the solar system, and put it beyond the power of our legislators or our congress to change. What a mess we would be in if the congressmen from Minnesota would get out among their constituents and say: "We have a cold country up here; it costs so much to buy coal; you can only raise certain things in this climate; if you send me to congress I will work for you and I will promise you that we will have a new declination of the sun on its axis so that the state of Minnesota will present a California climate." Well, that congressman wouldn't have any trouble in being elected; he would have a large majority, but his constituents up here, and he himself, forget to think about the congressmen in California, and what such a change in the sun's declination would do to the people out there, and what it would do to the people in our southern states. I have no doubt that it would engender such a controversy that in the end it would be settled as only all essential controversies up to the present moment have been settled, and that is by the right of might.

It makes some of you smile that we should think of disturbing the eternal laws of our solar system, yet we do not smile when we think of disturbing economic laws that are just as immutable in their working-out as the laws of the solar system. The feeble-minded are unable to perceive this. All thinking men are trembling at the present time in contemplation of what the feeble-minded are going to do to the rest of the world if science does not step in and do something for the more effectual control of the feeble-minded.

In order to understand better our conception of feeble-mindedness and of behavior, we must know something about the nervous mechanisms which have to do with this whole subject. Of these nervous mechanisms there are

two. One is called the cerebrospinal nervous system, and the brain is the chief unit in this system. The other is called the sympathetic nervous system, or sometimes the endocrin system. Of these two systems the endocrin system, or the sympathetic system, is the primitive. The endocrin system, about which we hear so little in comparison with the cerebrospinal system, is the more primitive and it is the most dynamic force in the body. The functions of the two systems may be briefly illustrated in the following manner:

The individual becomes hungry; or, to express it in another way, the organism needs nourishment. So the sympathetic nervous system enervates the glands of the stomach and promotes the secretion of the gastric and various juices of the stomach concerned in digestion. It also furnishes a vital spark to the musculature which causes the contraction of the stomach which is necessary to the process of digestion. And through these two functions it conveys a meaning to the cerebrospinal system or to the cells in the brain that the system is in need of food, and the brain immediately proceeds to take the proper measures according to its environment to supply this need.

When these two systems are perfectly related, we have the normal individual; when they are imperfectly related, or unequally adjusted, we have the feeble-minded individual, whether that means his mental rating and concerns chiefly his brain, or whether it means the rating of his behavior and concerns not only the brain but the endocrin system and their adjustment to each other.

For example: Certain individuals have coming from their endocrin nervous system inordinate, excessive stimuli which we express as desires or cravings. For instance, the man who drinks to excess has an abnormal thirst. He has a thirst that the normal individual does not have, and this thirst puts a lack of balance into the control between these two systems. It is this peripheral impulse which is expressed by the sympathetic or the endocrin nervous system. You see some individuals who have hypersensitive skins, and their whole conduct in life may be determined by this abnormality with reference to their skins. They are all the time seeking some kind of baths to add a delectable sensation to this hypersensitive skin which the normal individual has not got. They are seeking out fine underwear; they are doing all sorts of things that the normal individual does not do. The peripheral impulses are too strong for the central control; the lower nervous system dominates the higher one; the brake is fundamentally inadequate.

It is this inequality that creates our delinquent, whether that delinquency leads him to be a drunkard or a thief or, if you please, a radical or a progressive.

We must have some criterion, some standard, by which we can judge an individual in addition to the mental rating. In telling of a man's size we have two standards. Somebody tells you the weight of a person. That does not give you any idea about the shape of that person. He may be short and round like a barrel or he may be as tall and slender as a bean pole. We have got to have another standard by which to judge, and so we not only ask for the weight of this individual but we also ask for his height, and then we know something definite about his proportions.

Heretofore in recent years we have done a great deal of good with the intelligence test, but that is a purely intellectual quotient. We need still another standard in order to get a proper conception of a person, and so we must have another test which might be called the behavior test, or the behavior age, just as we refer to the mental age in the purely intellectual rating. This is not a theoretical conception. As a concrete example of how these two criteria, both based on pathology of the two nervous systems, may differ, the following case is a good illustration.

Some parents brought their boy, 15 years old, to see me to know what could be done for him. At the age of 12 years this boy was in the fifth grade at school. At this age he had seemed to be quite normal in every way. In 1912 he was taken with encephalitis, sleeping sickness, and was unconscious for a number of days, then semi-conscious, and finally recovered, but when he recovered they noticed that he was a changed boy. They sent him back to school and the school kept him for two years, but he never progressed; he staid in the fifth grade. Finally the school authorities came to the parents and said: "We can't keep this boy any longer because his behavior is such that he upsets the discipline of the whole school. You will have to take him out and do something else with him." So the parents brought the boy to me. I made a mental test and found that he answered questions pretty well; he knew the multiplication table; he could read; he could count; he could bound Minnesota; he could tell something about its rivers; if I could fix his attention long enough, but there was great difficulty in fixing his attention, in order to get him to give these answers. I rated his mental age at nine years, but that only told a part of the story. When he came into the office he was so loud and noisy, so boisterous, in the waiting room that my office assistant came in and said: "What shall we do with this boy, Doctor? He is disturbing all the rest of the patients." When he came into my room I got up to greet his father and the boy immediately sat down in my chair and said, "Hello, Doc." I had my fountain pen lying on the desk. He picked it up and attempted to take it apart, just like a child. In his behavior one would have expected more of a baby of three years.

This behavior rating is something we have paid entirely too little attention to, and it is not always, by any means, due to training or environment, but it lies, as this case illustrates, beyond doubt in the brain cells and their capacity to function and in the relationship between these two systems, the cerebrospinal nervous and the endocrin systems.

Psychoanalysts say that when a child pauses over long at a certain stage in its development it is apt to cling to these reactions as it goes through life, and so they, in judging of their patients, seek out the infantile reactions still existing in them and regard these infantile reactions as evidence of an incomplete development. Whenever you see anybody in adult life do the baby act, as people say, or behave in a childish manner, you know that such people are simply exhibiting the reactions of their infantile days, and in these things they have never matured.

The things that appeal to the child are different from the things that appeal to the adult. In regard to the life of Lincoln, the child is apt to think of Lincoln as being born in a log cabin—of course that is not what made Lincoln famous—or that he was a rail-splitter, or that at one time he jumped out of his carriage and pulled a pig out of the mud. That appeals to the child and the child mind. But what appeals to the adult mind is that Lincoln issued the emancipation proclamation and put it through.

We are having demonstrations of this child mind on all sides today. Take the example of the governor of Oklahoma. By such antics as pulling a pig out of the mud; by giving a dollar to a man who was perhaps dying for a drink; by opening the doors of the penitentiary and turning out broadcast all the criminals that had been incarcerated there, he appealed to the immature minds of his state and was acclaimed by them as the first citizen of the state. While another man, the secretary of the treasury, within the past few months has financed over seven billions of dollars in the United States and never created a flurry in financial circles, and I do not suppose there is scarcely one of the thousands who voted for the former knows or appreciates the splendid service of the latter.

The children like fairy tales; they have to have them. I have heard discussed the question whether it was not wrong to tell the children about Santa Claus. I do not think we ought to rob them of that delightful phantasy. As they get a little older and better able to make contact with reality the story necessarily becomes a myth. But if they never get any older, if they still remain children in their minds, you could keep on repeating the story of Santa Claus to them over and over again.

That is just what is being done on all sides in the financial, in the medical, the religious world and in the world of government.

Ponzi goes to Boston and sets up a bank. Nobody knows who he is or where he comes from. He promises the undeveloped certain things and so they flock to him by the thousands because they have not got the foundation, they have not got the experience, they have not got the good sense and judgment, of the adult mind, to realize these promises do not make the proper contact with reality.

In the medical world a Coue is brought to the United States, and for a period of a few weeks, by an insidious and efficient propaganda, we all nearly go crazy on the subject of Coue.

Dowie comes to Zion and announces himself a second Elijah. So the children from all over the country flock to Zion and believe the fairy stories of Dowie.

The politicians are promising the children a socialistic Utopia, a new Jerusalem, and the children are flocking after them even to the extent of turning their backs on the greatest promise to the adult mind since the Wise Men of the East saw the Star of Bethlehem, the constitution of the United States and the equality before the law of every man and woman in this country.

The children like to look at pictures. We do not bring them reading matter; we buy them picture books for Christmas when we want to please them. And so the movies have come along and the children's minds have hailed them with acclaim. All this is exceedingly discouraging, for I do not believe you can ever change the children. The number of children's minds is not decreasing.

I was talking with the health commissioner the other day. He said: "Just at the present time we are having some cases of smallpox in St. Paul, and you would be surprised to see the people who are walking into our office and asking us what we think of vaccination, if it really does protect from smallpox." Now, vaccination is over 100 years old, and all the adult mind has to do to know about vaccination is to read history and to see, before Jenner discovered this method of doing away with smallpox, that it was a terrible scourge to humanity, and every second man and woman you met on the street was pock-marked. That convinces the adult mind, but the child mind is unable to make the proper contact with this reality.

We have a little boy at our house named "Sonny" who has been brought up in the country. He really has never been any place to speak of except at this home in the country and in our back yard. Some of the other boys took advantage of that, just as other people are taking advantage of the children elsewhere and so they said to Sonny: "O, Sonny, let me see your arm. What a muscle you have got! O, Sonny, that is a wonderful muscle. You could lick anybody in the world with that arm, Sonny." And so when I came home that night Sonny said: "Doctor, I am the strongest man in the world." That is laughable with regard to Sonny, but think what it did when the great Roosevelt slapped the Kaiser on the back and said: "Bill, you can lick the world." This was where the unutterable harm came in. What a staggering cost to the world it was before the Kaiser found out it was not true!

That is a good illustration of just the things that are going on today. Politicians and demagogues are telling their constituents fairy stories, making them promises which do not make contact with reality, and the children believe them.

We are having now some talk about a new standard in currency, doing away with the old standard because gold and silver is a capitalistic standard. We want something else. Somebody suggests a bushel of wheat and he calls himself a progressive. The children say: "He is a progressive; he is the man for us." But they never read about the trouble we had in our own country after the Civil War with the shinplasters and the greenbacks. If that is too modern, let them go back 29 centuries to the days of Lycurgus and the Spartan republic. Lycurgus had an idea like that, that he wanted a socialistic state. He wanted to do away with incentive. He thought to do away with incentive he would have to do away with gold and silver. He made iron money, and in order to make it useless for ordinary purposes he treated it with vinegar. When the ladies went down town shopping they had to take an ox team with them to haul around their money. He succeeded in killing the incentive in the republic of Sparta and incidentally the republic also.

Let us apply these standards which I have spoken of—there is no reason why we can not apply them—the I. Q., the intelligence quotient, and the M. C. Q., the mental control quotient or the behavior age.

We are thinking a good deal about what we are going to do with the immigration problem, and our statesmen are sweating over not what they are going to do that is going to be a help to the immigration problem, but what kind of a fairy tale, Santa Claus story, they are going to fix up to deceive the children and make them think they are all right on the immigration problem.

Some time ago I went out to the city hospital where there was a man who had just come over from Germany—he was an educated man; the I. Q. alone would not have touched him. He was a machinist, but after talking with him closely I learned he thought he was Jesus Christ in His second appearance on earth. He had a stab wound over his heart, where he had tried to kill himself. If the M. C. Q., the behavior age standard, had been applied to this man, he never would have been able to enter this country.

Now these two standards, the I. Q. and the M. C. Q., would settle the problem of immigration because it would keep out all the undesirables, the people who could not behave at home, the people who were troublemakers, who were not able to adapt themselves to their environment, who could not make contact with reality. At the same time it would let in those people whose I. Q., whose intelligence quotient, might be lower but whose M. C. Q., behavior quotient, was good. It would give us the labor from this type that we should be glad to get and that we need so much. Science, with these two standards, would do for the immigration question what nothing else that has ever been proposed would do. It would settle it satisfactorily.

We have another nasty problem, the narcotic question. In 1914 they passed the Harrison law. The Harrison law gave the dope fiends a jolt. It was to go into effect the first of March. In the month of February I had 24 dope fiends under my care, but they soon found out it did not mean anything. The increase of narcotics has spread by leaps and bounds since the passage of the Harrison law, which is the most stringent law that any country ever passed with reference to that evil. Now, then, the people that passed that law did not realize that it was a political law; they did not realize that that dope fiend was a patient; that that dope fiend was a delinquent; and that until the law gave us the right to control that dope fiend—and control is one of the great panaceas for the management of the delinquents—we should not accomplish much. These two standards applied to this question would settle it also better than any "verboten" law.

Then we have another law that probably some of you have heard of. It was fastened on a congressman from our state by the name of Volstead. We wonder why that does not work. I never felt so indignant at that law—my sense of justice was never so outraged—as I did the other day. A poor woman came into my office in a half-apologetic, shrinking, pathetic manner, and said: "Doctor, could you give me something to put in my husband's coffee so he will quit drinking?" And so I asked her about her husband and she said: "Well, he works in Minneapolis and he makes good wages, but the last two weeks—he gets paid on Saturday night—he hasn't come home

to his family until Tuesday or Wednesday morning and his money is all gone. I have three children, and I owe the butcher and the grocer. Doctor, won't you please give me something which I can put in my husband's coffee so he won't drink any more?" And I had to acknowledge to that woman that I was helpless to aid her problem any because the law did not take into cognizance the fact that this man who drank to the ruination of his family and the ruination of himself was a delinquent and that we needed some law whereby he himself could be put under control and kept under control and his family looked after until such time as his M. C. Q., his behavior age, if ever, came up to the normal.

We come finally to the suffrage question, such a serious question that government and civilization wait while we consider it. It is really this question: Are you going to permit science to help you in the management of the feeble-minded with reference to suffrage, or are you going to go on and permit the question to be settled in the old way; that is, finally, after much controversy and tribulation, by force, by the strongest element; the only way that such questions have ever been settled heretofore in the history of the world. Is it to be the old way, or will we permit science to come in with these two standards and solve this question?

We rushed to war on the cry of "Save the world for democracy." Now we pick up our daily papers and stand appalled at the way the world is going at the present time, and we say, "Are people degenerating? Is the human race deteriorating?" No, a thousand times no; the human race has not changed one iota to my mind since the days of King Tut and long before. The only thing that has changed is this, the lack of suitable control.

You visit a friend. The parents are at home. They have five or six children. They are wise parents and they know how to govern their children, and you think how well behaved they are. They are polite; they are quiet; they stay in their proper place. Then you go again and visit that same home when the parents are away. You would think that those children were brought up on an Indian reservation. The children have not changed. They are the same identical children, but the difference is that the control factor is absent.

We were reading a few years ago about Italy, the Italian parliament and what the Bolsheviks were doing; about the socialistic element taking over the factories and the wharves, and everything was at sixes and sevens. A great strike was declared on all the railroads to paralyze the government. All at once the parents came back to Italy in the form of authority and the Fascisti. Almost over night order was restored because they had the authority, the power to control. And the same people who were so anxious to strike and cause a revolution were within two weeks' time subscribing money to pay off the government's debt. They were the same people, but the transformation in them was great because the parents, in the form of authority, had returned to Italy.

We in the United States have boasted about our republic; that it was going to be an enduring republic; we have set up a statue in New York harbor Liberty Enlightening the World, and everything we based that on was education. We were going to have a stable republic because we were

going to educate everybody. When everybody was educated they would be sensible; the I. Q. was going to make this a stable government. There never was a more foolish idea in the world. We have got to change that conception. If America is going to show the world anything it has got to put another standard in there, and we have got to have not only a rating of the I. Q. but a rating of the M. C. Q. before a man or a woman is entitled to vote. It is not a monetary standard; it is not a standard of birth; it is only the standard that Burns set up in his poem, "A man is a man for a' that." This idea of thinking that an individual who fails at school, who fails in his environment, who is unable to take care of his family, who is an inferior, can settle these problems of government and have as much right to vote as the adult is ridiculous. You might just as well say that the children do not need any parents. Statistics will tell you that in the homes of the children where the father is dead they get more delinquents, because there is lacking the authority, the control, which the father is able to enforce if required.

What can science do for the delinquents? The greatest thing it can do is to establish these standards to make a man fit to participate in government, to participate in anything that requires decision and is of importance, and then science will have done what all the world in the past, and the World War, failed to do, make the world safe for democracy.

The Chairman: I am sure that you all agree with me when I say that we are again deeply indebted to Dr. Ball for the splendid address which he has given us.

We have invited another outside our own immediate group to open the discussion on the subject just given. Dr. Arthur Sweeney, of St. Paul, has consented to start the discussion. Dr. Sweeney.

Arthur Sweeney, M. D., St. Paul: Madam Chairman, Ladies and Gentlemen—It is a great pleasure to be here and it was a great pleasure to listen to Dr. Ball. I feel a sense of congratulation that his subject is one which spreads over so much territory that it does not make any particular difference which particular thing I agree with or find fault with.

The subject is, "What Science Can Do for the Feeble-minded," and I think the Doctor has emphasized one or two points that are very important and worthy of consideration, but I wish to reassure Dr. Ball a little bit; the world ain't right, it never was right, it is a pretty bad world, the world is full of fools, but, Dr. Ball, you are not entitled to priority in that discovery because Barnum found it out long ago. We must not take the attitude of the pessimist who woke up in the morning and said: "If something ain't wrong 'tain't right." We know that the world is not right; never was right; and I doubt if in our generation it will be right. That is due, of course, to the peculiar kind of people that are in the world, to the human element, to personality and the desires and ambitions of individuals. Some of us are going so fast the rest of us have not found out whither we are going. Some of us are bad by environment and some by inheritance.

What is the difference between good and bad conduct? It is pretty hard to tell. Out at Lake Elmo there are two churches situated about two hundred yards from one another, both Lutheran. A friend of mine, noticing

this propinquity of similar religious edifices, said: "What in the world made these people put up two churches of the same denomination so close together?" The Swede who was interrogated said: "The fellow in that church believes Adam was a good man but he fell; and the fellow in the other church he believes that Adam didn't fall but that he was a son-of-a-gun from the start."

So it is with human nature. We must realize that a certain proportion of us never were good from the start and probably never will be good, but there is such a thing as yielding to temptation. I always have sympathy for the Frenchman who said, "I can resist everything but temptation."

So our conduct is governed by many factors; not only by the intellectual side of us, but also by that elusive, emotional side which Dr. Ball emphasizes as the M. C. Q. I agree with Dr. Ball that the I. Q. is not all. The purely intellectual side of us is a part, but our conduct is to a large extent governed by the emotional system and by lack of control. I agree with him up to this point, but I should like to find out what kind of a yardstick he is going to measure the emotions with; how he is going to analyze that complex arrangement which so disturbs our intellectual poise that we are not in harmony with our environment. I agree that so far as we have gone the I. Q. serves an excellent purpose. The M. C. Q., when we discover the method of measuring the emotions, will still further amplify our method of analyzing human conduct, but we have not arrived there yet.

I am still fond of the old-fashioned idea that the motives which people act from are always the best, even in a bad action. I see a bag of money upon the table, and I take it and get away with it, but when I reach the door I realize that I ought not to have done that thing. The motive which prompted me, which initiated the muscular action to take that bag and run to the door was the best motive at that instant. That same motive being active again would again be operative and I would again do it; but reflection, association of past experiences, comes to my enlightenment and I make another determination. My judgment was faulty; my motive was wrong. I return the bag or I get arrested, one of those two things.

Our conduct is determined by our judgment and motives of thinking. And upon what is our judgment founded? It is founded in the first place upon a more or less complete and accurate perception of our environment. It is also founded upon our power of concentration, or fixed attention. It is also founded upon our associative memory in which the past experiences, the information which we have received from education and from association, bring to us the knowledge of the past. Upon those three things, attention, perception and associative memory, is founded our judgment. The motive which actuates us is always the best motive at the moment, even though it is a bad one. Perfection of judgment depends upon the perfection of our intellectual processes.

What is will power? A little while ago we used to think it was a separate factor of the mind; that if a man were endowed with a strong will he could act or refrain from action. The modern tendency is to regard will power as a coherent part of judgment, because if judgment has no impelling force, either to act or not to act, it is absolutely ineffective and amounts

to a negation. Will power is simply the operation, by motor action or want of action, of the intellectual judgment which we have conceived, so that in conduct we have still got to get back to the thing that conduct is determined by, motive. Motive is determined by the perfection of those elementary things which lead up to judgment. We can not get away from it.

Of course we make mistakes. A man's judgment, even with people of average intelligence, may not be correct. Lots of us have bought oil stocks and other things that have turned out to be worthless, but those mistakes are nothing more than the frailty of human intelligence, because intelligence is not perfect.

I also wish to emphasize the fact that bad conduct in itself is not an evidence of feeble-mindedness. Mr. Vasaly knows that. He knows that lots of people in his institution are, as the Swede said, "son-of-guns from the start." They choose the bad motive not so much from the intellectual deficiency as from the predominance of other emotional traits, avarice, selfishness, voluntary disregard of social obligation. You know it is only the fellows in prison who have done wrong. One of the nice things about this world is that the man who, with his wealth and power and intelligence, imposes upon those of less intelligence and reaps enormous fortunes within the law, is not a lawbreaker. No. But is he a moral man, responsive to the dictates of society? No. I do not believe that intelligence itself insures honesty or morality. Intelligence is a weapon by which we can be either honest or dishonest. I think there is a very trite saying, "There are more criminals outside the institutions than inside the institutions."

So far as we have got with our analysis of human nature, the intelligence quotient is about the best yardstick we have by which to measure the conduct of people, but it is not perfect; it does not take into account those affective qualities of mind. I should like to measure the light of the will-o'-the-wisp if I could. I should like to capture the atmosphere of Mars. I should like to know a lot of things that elude us in our present state of knowledge. But I can not find anything by which we can practically determine the standard of behavior.

What is the standard of behavior? The standard of behavior is that a person shall be a social creature and shall, so far as possible, adapt himself to the people with whom he lives.

What are morals? Morals are mores, customs, ways of life. The morals of the people of central Africa, Asia and the United States differ like the poles. Things that are moral in Africa are not moral in New York. In the United States it is not moral to hit your grandfather over the head when he can no longer accompany you on your travels. It used to be moral in Australia and America. Morals are customs, and he is the best individual, the best social being, who can as nearly as possible adjust himself to the customs of the community in which he lives.

One of the things that Dr. Ball said was that when we think of Lincoln we think of a log cabin or a pig in the gutter. This question has occurred to me: What are we going to do with our future statesmen since civilization has become so complex? Since people have got to living in three-room

flats, what is the hero or the statesman of the future to do for a picture of his birthplace? He will probably have to take a picture of a maternity hospital.

Conditions have changed, but I want to say this, that intelligence does rise and lead to the elevation of an individual as to his conception and as to his conduct. Who are the self-made men? The men who had the stuff in them; the men who had the brains handed down to them by their heredity.

What are we going to do about this whole question? Well, we are not going to do much. We can not change the heredity; that is a fixed fact. The germ plasm that a man has is got from his ancestors. We can not change that. We can not change our social organization to suit his peculiarities. The only thing that we can do as physicians is to try as far as possible to adapt the environment to the individual, because I doubt the ability to adapt the feeble-minded and the moron to his environment. I think the mistake which we have made is that we have tried to improve the mental capacity of the moron and the feeble-minded. You can only put a pint of beans into a pint cup; you can not put a quart into it. What a man receives at birth he retains and he can obtain no more; so that the effort that we must make is to try to find an environment in which this feeble-minded person or this moron can live with the least damage to society. That is about all we can do. Adaptability is the essence of the question.

We can not hope to teach the feeble-minded new things. I recall that I had a man working for me who had been for eight years a gardener for Holm & Olson. He was accustomed to plant gardens under supervision. Two years ago I said to him: "Now, Johnson, I want you to plant my potatoes for me this morning. Make the rows three feet apart and plant the potatoes in hills sixteen inches apart." "Yes, sir; yes, sir; I will do it," he replied. When I reached home in the evening I found he had not followed instructions, so I said to him: "Johnson, you are a pretty smart fellow. You have put in about four times as many potatoes as I expected to have. Instead of planting them in rows three feet apart you have made the rows one foot apart, and instead of planting them sixteen inches apart you have planted them six inches apart. I think I shall have about four times as many potatoes as I planned on having, but I am wondering how you are going to hill those potatoes and catch all of the potato bugs." "Well," he replied, "I didn't think about that." You could not make that man efficient unless you stood over him all the time. The moron and the high-grade feeble-minded are to my mind impossible, but you can more or less adapt his environment to him, and if you stand over him you can teach him something for the time being.

I am not going to talk about the endocrine glands because that is another subject that we do not know much about. This is a world of great progress. The only trouble is that we never stop to think whether in all these things we are progressing forward or backward or sideways, and it seems to me that we go sideways just as often as we go forward. With a little knowledge of a great subject we predicate a great deal.

The same thing is true of the psychoanalysts. Novelty is a great thing, "omne ignatum pro magnifico." Whatever we do not understand must be splendid. It is a trait of human nature to accept the supernatural as being fine, because if it is so fine that we can not understand it, we believe the fellow that invented it must be "a corker." There is a tendency on the part of all of us toward a fondness for the mystic. Do you suppose Dowie would have got anywhere with his theory if he hadn't said he was Elijah? In other words, the love of the mystic and the supernatural is one of the things that impels us to take up these new things.

We thought we knew something about endocrin glands. We are beginning to find out that we know about just two or three glands, the beginning of their action and history. I have not much time for psychoanalysts. I think the person who can take in Freud and understand it and believe it, is the same kind of a person who can read Mary Baker Eddy's Key to the Scriptures and understand it.

It is very encouraging to hear these things discussed because it brings to this great subject earnest and serious thought. We feel that every meeting of this character which we have leads us nearer to the understanding of the great problem of human conduct. I thank you very much for permitting me to be here this morning to listen to the splendid talk by Dr. Ball.

The Chairman: I want to assure Dr. Sweeney that the privilege of listening to him has been one of our opportunities this morning, which we appreciate very much.

We are also to have the pleasure of listening to Dr. L. G. Lowrey, director of the child clinic at the University.

L. G. Lowrey, M. D., Director Twin Cities Child Guidance Clinic, National Committee for Mental Hygiene: It is quite a handicap for a stranger in a community to face an audience of this sort and to follow two speakers of the kind you have just heard. I assure you, however, it is a very great pleasure to be here and to discuss Dr. Ball's paper from the angle of some of the things we are trying to do. There are so many points made by Dr. Ball and Dr. Sweeney which I should like to discuss that I have had to make rather a rigid selection of just a few that will probably be of most interest to you.

Dr. Ball's comments regarding the Frenchman who came to our shores and took the whole country by storm reminds me of a comment made by one of my rather caustic friends, who said he had been puzzling a good deal as to how to pronounce C-o-u-e. He could not figure out whether it was coo or cuckoo. At any rate, the meaning was much the same.

We have found in our experience that the intelligence quotient taken alone is not a very satisfactory thing. We deal altogether with behavior problems in children. We deal with behavior problems in children up to the limit of juvenile court work, which means that in some states we deal with children of 17, 18, 19 and 20 years, according to the particular standards they may have. About 10 per cent of our cases will fall into the group that might be classified as feeble-minded; perhaps another 10 per cent will fall into a group with inferior intelligence quotient, so that on the whole some

20 per cent of our cases will show definite defects in intelligence such that we feel that they are important factors in the causation of the situation that we have to meet.

I could not help but think, when Dr. Ball spoke of the rush to Ponzi and Coue, all these ideas and panaceas, the do-it-quick, have-it-over-with sort of thing, that after all we deal there with one of the most powerful, one of the most difficult mental mechanisms we have, the unfulfilled wish for power or riches or whatnot; the wish that is the driving power behind all that we do and all that other people do as well.

There is one reason why our low intelligence-quotient group is small which needs to be pointed out, and that is that unless there is an associated behavior problem we do not accept cases that are obviously simply intellectually defective. The reason for that is rather plain. There are in the world a great many people whose intelligence level is such that they must be classified as feeble-minded. There are a great many people in the world whose intellectual qualities would land them with this group who nevertheless make a really satisfactory social adjustment, people who do not get into trouble, who are self-supporting, who are not economic liabilities in the community. They are not very successful it is true; they do not occupy a very high position in the world; still they do useful and rather nasty work that most of us would rather not have to do. Dr. Fernald, who has a very wide experience along this line, says that the stable moron is the backbone of the industrial world. Take that particular group out and, as he puts it, some of the rest of us would have to go to work.

The problems that we encounter fall roughly into three types. In the first place the degree of disturbance in behavior reactions is such that the individual is distressing to himself or his immediate family. The second group is one where the influence of the behavior reaction is such that the individual is a disturbing element outside the family circle, but still in a rather limited way, usually at school or with his playmates. The third group is that in which the behavior disorder is sufficiently marked so that they come to the attention of the courts and become legal problems. In analyzing any of these situations, such as the court type in which they are the most marked, we find one thing emerging very clearly—that is, after all, the thing that I want to get before you—every one of these situations presents more than one factor in the background. It can not be laid to original sin; it can not all be laid to defective heredity; it can not all be laid to a low intelligence; it can not all be laid to any one of a series of factors; it may be reduced to Dr. Ball's behavior age, which is a very important conception, but, as Dr. Sweeney has pointed out, extremely difficult to establish. I suspect there are more people working on the problem of the measurement of emotion and volition than on any other single problem in psychology. The problem can not be reduced to the question of environment alone; it can not be reduced to the question of tonsils or adenoids or any other similar medical term. But in all these cases certain groups dealing with behavior problems say: "Oh, well, what can you expect from this particular child? Look at the environment in which he has been raised."

When you come to analyze the situation, you find that it is not a direct imitation of others that starts the child off on his trail; it is, instead, the mental reaction set up in the child by different things that are occurring in the environment, different influences, and the fundamental equipment with which he started out, that is producing in the end the difficult behavior problem. This means that switching this youngster into another environment which may or may not be adapted to him may not solve the problem. Instead it may become a more complex problem.

So it goes throughout any series of analyses we might wish to make, the behavior disorder shown by the patient may be exactly the same yet the fundamental factor in one case may be feeble-mindedness; the fundamental factor in another stage may be the environment; the fundamental factor in another may be the mental stresses upon a child having certain fundamental defects; et cetera. In other words, from our point of view every problem that comes up deserves the very fullest analysis that one can give from every angle that the particular case may show.

There is just one further point. All those who have worked very much with delinquents or behavior problems will agree that the later in life you start in with your problem for study, diagnosis and remedial adjustment, the greater the difficulty and the handicaps under which you work. It is precisely for that reason that our particular program, which is nation-wide, emphasizes working on children who are behavior problems at the earliest possible stage in the attempt to do remedial work, with the idea of preventing later a more serious difficulty.

The Chairman: I should like to call upon Dr. Meyerding, of St. Paul, for a discussion on this subject.

E. A. Meyerding, M. D., St. Paul: Madam Chairman, Ladies and Gentlemen—My particular field in St. Paul has been the Public School children, principally the subnormals. We operate under the law that provides state aid for subnormal children.

Children who have an I. Q. between 50 and 85 only are admitted. This arbitrary classification is necessary in order to provide limits for those to be admitted to these classes. We appreciate the weakness of the I. Q. alone, but, for a rapid and simple method of classification, it has proved to be a practical method.

We have had these classes for about five years and have at present an enrollment of 400.

We find that if we get these subnormals young enough, especially those grading between 70 and 85, we have no delinquency trouble with them. We are proud to state that among the children we have enrolled with us before they were nine years of age we know of no cases of delinquency developing. This in spite of the fact that the home environment is frequently not good.

We have a sort of intensive course of study, both for the child and the teachers connected with this group. The child is studied by everybody concerned and is taught to do the things in which he is interested and capable of doing.

Every child has a bank account. He is taught to earn money. They are never given anything in school, with the idea that they should expect charity. The things that they make they are allowed to sell and receive a small profit. He pays for his lunches, but is able to earn the same through his labor in the kitchen. If he works in the kitchen he receives 25c for the same. This he may put in his bank account or buy additional lunches with it. The aim is to make him socially competent—independent, not socially dependent.

We have had a good many children in the Special Classes who have been in the State Training School at Red Wing. It seems that the girls at Sauk Center are too old for our classes. Some of our boys have been automobile thieves, burglars, and have committed other kinds of crime.

All of these, as a rule, came to us after they were 10 years of age, and yet among our children none have become delinquent who came to us before the age of nine years; despite the fact that in the school building we have this mixed enrollment of the type that are supposed to be susceptible.

I believe we have been unusually fortunate, and the time will come when some of our children will be influenced by their associates in school, but, nevertheless, it seems that this type of subnormals, placed in the proper environment, can be made socially competent and an asset to society.

Galen A. Merrill, State Public School: May I ask Dr. Lowrey what children are eligible to treatment in the University clinic?

Dr. Lowrey: All children in Ramsey and Hennepin counties. This includes St. Paul and Minneapolis. Outside children can be admitted only by special arrangement. It is still a question how much time we shall be able to devote to problems arising outside the two cities. There are a great many children in St. Paul and Minneapolis who are not really residents, and there certainly are many outside these cities whose domiciles would be regarded as here. We have very definite groups in Minneapolis and St. Paul. A request for service outside the cities will be a third element which we shall have to meet if the request comes.

We have absolutely no connection with the University. That sounds peculiar when you know the clinic is at the University. We are at the University but not of it. We are a demonstration clinic coming from the outside, provided by the University with quarters. The expense connected with this clinic is borne by the Commonwealth Fund of New York.

Mrs. Nathaniel McCarthy, Board of Women Visitors: I should like to ask Dr. Meyerding a question. What is the age of the children with whom you are the most successful; that is, if you get them young enough?

Dr. Meyerding: If we get them before they are nine years old, we can do a great deal with them, dependent, of course, upon their I. Q.

Arthur F. Kilbourne, M. D., Rochester State Hospital: I should like to ask Dr. Lowrey how many are taking advantage of his clinic.