INVESTIGATION INTO THE INCIDENCE OF MENTAL DEFICIENCY AMONGST DUBLIN SCHOOL CHILDREN.

By Dr. Louis S. Clifford. (With Discussion.)

(Read before the Society on Thursday, 7th December, 1939.)

Introduction

In this paper I propose giving an account of an investigation into mental defect amongst Dublin children. This forms part of a larger investigation, not yet completed, into the incidence of mental defect and epilepsy not associated with insanity in selected areas of the country. The paper concludes with certain recommendations as to the treatment of these handicapped children.

Dublin Investigation Area

The selected area lies north of the Liffey, extending from Liffey Bank House, Conyngham Road, in the west, to Pigeon House in the east, and reaching at its most northerly point to Phibsboro'. This area may be said to be representative of old Dublin and contains an undue proportion of the lower strata of the population. It should be noted, however, that of the new housing estates of North Dublin only the one on the East Wall district lies within its boundaries.

Selection of Cases and Tests

In dealing with school population in England, Dr. Lewis found that various difficulties arose from the fact that the selection of children to be examined was left to the head masters and mistresses, who did not always understand what was required. In order to avoid misrepresentation as to what constituted "mental defect" and to remove the responsibility for the selection from the school authorities, our investigation was for the greater part confined to the group or "sample" of children born between the dates 1st July, 1927, and 30th June, 1928, which was considered most suitable, principally because if younger children were selected they might not be able to follow the group tests, while older children would be out of the range and might have left school before the survey was completed. In order to cope with those not in the age group we proposed to consider all over fourteen years as "adults" and investigate epileptics of all ages who might be brought to our notice.

The tests used in the investigation were the Otis Group Intelligence Scale, Forms A and B, which were used in the schools, and the individual testing was carried out through the medium of the Terman and Merrill Revised Standard Binet Intelligence Scale, supplemented

when necessary (as in the case of deaf and dumb children and those with serious speech defect) by the Collins and Drever Performance Scale, which has the advantage of being non-verbal.

Sources of Information

The whole success of the inquiry depended on the supply of suitable material by those social services which normally come into contact with mental defectives and sane epileptics. In order, therefore, to ensure co-operation from all these bodies, a circular letter was issued specifying the nature of the survey and stressing the urgent need and public demand for such an investigation. The help of responsible officials was sought from the various hospitals, and Dispensary Medical Officers were visited. Interviews were arranged at the Child Welfare Department and assurances were received from the Department of Education, the School Medical Service and School Attendance Officers of their willingness to assist us. Forms were issued to all clinics, to Gárda Superintendents, and to charitable and philanthropic societies, requesting them to send in returns of all persons known to them and thought to be epileptic or "mentally defective," to be inperpreted as persons considered below the average intelligence.

The Feeble-minded Child

In order that we might have a true insight into the problem we had to deal with, it was necessary to keep clearly in mind what constituted mental defect in the child and adult. The interpretation of a mentally defective child was based on the criteria of educability. The children to whom we contemplated administering tests, were those who by reason of mental defect were incapable of receiving proper benefit from instruction in the ordinary schools. The child who falls into this category is neither an imbecile nor an idiot, but is considered in those countries where legislation has been enacted for the care and control of mental defectives simply to be "feebleminded." The fact that the child cannot derive benefit from the education provided does not mean that he is ineducable. If given special instruction suited to the limited intelligence he may become a fairly useful member of society, and perhaps earn his own living under supervision.

The feebleminded is the most important class of all, three quarters of all defectives belonging to this grade, according to such authorities as Dr. Tredgold and Dr. Penrose.

In the child of the school age one finds that the scholastic ability of the feebleminded defective is poor: the majority of these children are unable to make satisfactory response to elementary teaching, and their attainment is not equal to the normal child in Standard III. Many of these defectives may work later, provided they have had specialised teaching, and may contribute to their upkeep: they will be able to perform semi-skilled work and be employed on the land. The high-grade defective may be capable of looking after simple machinery. In spite of the types of employment which can be undertaken by the defective he can still never attain the normal standard of efficiency. The reason for this is his inability to generalise, making him unable to adapt or apply knowledge gained in one work to another, if the new job is slightly different.

The highest grade of all those having intelligence quotients between 65 and 70 in appearance may pass as ordinary children and present no stigmata. They can carry on a conversation even though their vocabulary

is limited. In certain cases these high-grade defectives may be able to reach a fairly high standard in school and behave perfectly normally, yet although they can do all these things, something is lacking which is necessary for complete social adaptation. When they leave school it will be seen that they are quite incapable of managing their own affairs, and are liable to get into a muddle unless they have some guidance.

The Defective and Dull Child at School

The whole purpose of primary education is to make children literate. Many defective children are markedly subnormal for school work, yet they can later earn a living. This is the hardest task a child has to face. Education helps them to do so. The defective child may never reach a normal standard of education; still, he can be instructed and enabled to make the most of his limited intelligence. Defective and dull children seem to worry the teacher, the greater number being unable to make satisfactory response to the instruction provided. Here we speak not only of the defective but also of the dull and backward child. Parents object to their children being dubbed defective; "backward" many of them tolerate, but then backwardness is a "respectable" complaint. Resentment is shown at the child's inability to learn even to read and write and do simple arithmetic. One can well understand a parent's concern, especially the illiterate parent, who has learnt from his own experience. The individual who is going to adjust himself to life must be able to do these essential things if he is to succeed. large proportion of high-grade defective and dull and backward children leave school unable to read or write or do even simple arithmetic. The average child goes to school at five, up to which age defect is not noticed in these particular types. At home he was able to deal with everyday problems, then he was suddenly precipitated into a new world where competition is the order of the day. In fact he comes up against competitive society for the first time, requiring him to fight and get on and learn-for it is the child who learns, and learns easily, who is the approved child. It is the business of the child to learn, and the business of the teacher to get his children to learn. One can readily visualise the defective and dull child put into such a situation. A new life of competition and struggle is opening for him where he is expected to fight and struggle and, mentally handicapped as he is, he has a difficult task.

Results of Failure

Every child has a certain amount of mental energy which in the case of the children under consideration is now dammed up. This often drives the defective upon himself; he is unable to stand up and he ceases to strive. It is better that the child should not go to school at all than go to school and learn to fail. Failure in some children shows no marked repercussions, yet in others the reaction is severe. The stream of the child's energy is wasted, it runs out and he leaves school untutored and unlearned, a complete social disaster. This situation drives children to delinquency and daring situations are often the expression of the child's thwarted energy.

Adult Defectives

We cannot consider the problem of mental defect amongst children without referring briefly to the problem of the adult defective in the general community. Here we have people who suffer from a condition of incomplete development of the mind to such a degree as to render them incapable of adjusting themselves to social environment in a reasonably efficient manner and so necessitating provision for their care, supervision and control.

According to the Mental Deficiency Act of 1913 and amended by the Mental Deficiency Act of 1927, the legal definition in England of mental

deficiency is as follows:-

Idiots.—That is to say persons in whose case there exists mental defectiveness of such a degree that they are unable to guard themselves against common physical dangers.

Imbeciles.—Persons in whose case there exists mental defectiveness which, though not amounting to idiocy, is yet so pronounced that they are incapable of managing themselves or their affairs, or in the case of children, being taught to do so.

Feebleminded.—Persons in whose case there exists mental defectiveness which, though not amounting to imbecility, is yet so pronounced that they require care, suprvision and control for their own protection and for the protection of others, as in the cases of children that they appear to be permanently incapable by reason of such defectiveness of receiving proper benefit from the instructions in the ordinary school.

It will be seen that the definition of adult defective is a social one as opposed to the education criteria of the school child.

Group Testing

As large numbers of children were involved, the method of testing by groups was adopted. Group testing has the merit that it enables considerable numbers to be examined in a short space of time and with a fair degree of success, at least under ordinary school conditions. The test takes on an average from 50 to 60 minutes to administer and, therefore, has the advantage of saving time, besides the fact that it is quite impracticable to use the Binet Simon Scale for such large numbers. In America, during the Great War, practically every recruit was tested by this method and the mental age and intelligence quotients of nearly two million men were ascertained. When certain factors were taken into account such as defective hearing, poor vision, emotional disturbances, and even broken pencils, the group test was for us a means of sifting the chaff from the wheat. A careful study of low scores was made and those reaching a certain standard eliminated.

Number of Schools Visited

It was found that in all 47 schools, with some 2,000 children in the age group, required to be visited. As it was quite impossible in the time available to one man to visit such a considerable number, the area was divided, my assistant visiting the schools on the western side. Twenty-five persons over fourteen years were returned to us as below the average intelligence. The number of epileptic children in the schools of all ages was asked and these proved to be inconsiderable: five names in all were received.

Administration of Group Test

On the date of our visit, in most cases, we received every facility, a large class room being provided and the children in the age group

and any over fourteen years presented. The list of names was then checked and care was taken that the dates of birth were correctly given, each child bringing a school card on which the parent was requested to give the exact date of birth, which arrangement in most cases proved satisfactory. The actual administration of the Otis Test was rendered easy by the interest of both pupils and teachers. Few difficulties were encountered, an occasional teacher remaining in the class-room in spite of our tactful request to have the pupils to ourselves. In one case the test was ruined by an over-zealous master shouting to the boys to "wake up and sit up and listen carefully!"

In giving these tests care was taken to follow the instructions in such a fashion that the children were able to cope with the tests in a reasonable manner. Where feasible one desk to one pupil was requested and coloured pencils were provided which helped to hold their interest. Time was kept as accurately as possible and a stopwatch was carried.

Reaction of Pupils to Tests

In practically every instance the children reacted well to the procedure. Here and there we found that when a pupil was unable to answer the questions set, an attempt was made to disturb the class and deride the work. Disturbances of this kind were met with firmness, without giving the children the impression that we were bullying them. On the completion of the test the children returned to their respective classes in high glee at the final question:

"Why do men raise their hats when they meet ladies they know?

Now pick out the right answer.

"(I) They learned to do it when they were boys.

"(2) It is considerate polite.

"(3) To show that their hair is brushed."

Parents' Reactions to the Test

Fears were entertained at one period that parents might object, thinking the test to be an additional examination. In only isolated instances were objections received. One or two parents were under the impression that if the child failed in the test he would be sent to a "Lunatic Asylum" or removed to some "Home" in the country. These groundless fears we were able to surmount. An occasional absence due to illness on the day of the test was noticed; these sick children were, however, traced and visited in their homes. One now and again met with point-blank refusals and letters were received recording objections. Given below is a sample of a rather amusing communication:—

"Under no circumstances whatever will I allow my child to be touched—anyone doing so I will consider as an assault on my child. If she grows to womanhood diseased in mind the Saorstát is the place for her to live in. If, on the other hand, she is intelligent and God-fearing then I can send her elsewhere."

Reaction of School Officials to Test

The administration of the Otis Intelligence Test was followed with marked interest by the teachers, numerous questions being asked and a lively interest in the whole subject displayed. Many teachers enquired where the Text Books could be obtained and where courses in training of defective children are given. During one of the visits we

chanced to meet an official who was of the opinion that it was not socially economic to be too solicitous about these defectives; as he put it: "After all, this is a world for the average man, and if there are any funds available the bright child who will be an ornament to the State and become a useful citizen should be helped. I think it is a waste of time trying to teach children who can never learn and can never be taught to learn."

In this person's opinion it is wrong to provide for the unfit at the expense of the fit. "Dull people," he explained, "will always exist. They are born that way." His solution to the whole problem was to read the burial service over every defective, forgetting, of course, that everybody has some kind of mind, and that if the limited intelligence is properly directed the defective may not prove to be such an uneconomic proposition after all. Here let us suggest that where feasible a proper understanding of the problem of deficiency in relation to the feebleminded and dull child should be aimed at. One must keep in mind that dullness and backwardness are not synonymous terms—dullness is innate, backwardness may be present in children with an intelligence quotient well above the average and may be due to many causes.

As a result of group testing it was found that between 85 and 90 children had failed to reach the required standard, 23 of whom were children over fourteen years of age.

Individual Testing

On the completion of the group testing it was felt that we should have in our hands the best possible instrument with which to measure the intelligence of the children. We were aware that Terman's new revision of the Stanford-Binet Scale was being used by statutory certifying Medical Officers in England, and this, the most up-to-date testing material available was used on the work.

The children chosen for Binet-Simon testing were those who failed to reach the required standard in the group test, and epileptics of all ages. It was found that the group testing involved approximately 2,000 children, and from these 70 must now be given medical examination for stigmata and other specific disabilities, and subsequently taken individually. Some 25 children over fourteen years of age were included in this survey.

In order that we might clearly understand what we were testing it was necessary to have Professor Tredgold's teaching constantly in mind and to remember his definition of intelligence: "That function which shows itself in one's ability to adapt oneself to living, and enables man to become supreme in the animal kingdom. It includes man's ability to get in touch with the world through the medium of the sense organs, such as sight, hearing and touch. These are the first operations of intelligence, later it enables man to establish relationships with the outside world. The functions of intelligence are thinking, reasons, learning. The more intelligent we are the less need there is for us to learn."

Testing intelligence is no new fad. It is, in fact, as old as man himself; but, as Boynton has it: "It is not the measurement which is new, but the method." Many workers have sponsored and devised various methods. In England Sir Francis Galton, we are told, was probably the first who attempted to devise suitable tests. Many will give pride of place to Oehrn, who is said to have made the first formal approach in the development and use of intelligence tests, and who worked under the

supervision of the noted German psychiatrist, Kraepelin. America contributed Cattell in 1890, and much useful work was done in Italy by Guiccardi and Ferrari, who published a work in 1896. In 1899 Binet followed with a test which served as an introduction to his 1905 scale, when he was associated with Simon, and in 1908 a scale was published by the same author, far superior to any yet devised which was not only used in the selection of the mentally unfit but also for the classification of the normal and superior. From now on workers in America and Europe were each in their own countries applying and devising various modifications to suit their particular requirements. In America, Terman and Child's work attracted great attention. For some years the Terman Stanford Revision of the Binet-Simon Scale has been in use. Very recently a new revision of the Scale was published and it was this revision which was used in the Dublin schools.

The intelligence test is not concerned with school learning, and is not a test of scholastic achievement, but is designed to indicate the child's native intelligence. What we want to find out is: does the child possess those qualities of mind which will enable him to adapt himself to social conditions? Has he prevision, judgment, perception, reasoning and discrimination? We want to ascertain his range of general knowledge, whether he has learnt anything by himself in his contact with the world; in fact, has he common sense?

Binet-Simon Test

The Binet-Simon Scale is divided into age groups of a half a dozen questions or tests set for each age group, which it is estimated the average child of that age group should answer. The test begins at the age of two, and is arranged and numbered in order of increasing difficulty. The result of the testing is expressed in terms of mental age. Thus, a child aged 11 who completed all the tests up to and including the series of 11 years old has a mental age of 11. By means of these tests a child can be compared with the average child of his age. His relationship to the average child expressed as a percentage is known as intelligence quotient (I.Q.).

$$\frac{\text{Mental age}}{\text{Chronological age}} \times 100 = \text{I.Q.}$$

For example, a child of 11 with a mental age of 8 has an I.Q. of 73.

Method of Diagnosing

In diagnosing defect we were careful not to rely too much on the I.Q. obtained, as we found this does not always solve the problem.

Nevertheless we took heed of Duncan's dictum that "The I.Q., as found by intelligence tests, is an indicator of a child's power to acquire learning in the academic subjects taught in the schools."

In administering the test we tried to put the child at ease. Much useful information as to the child's mental make-up can be secured by observation during the examination. The lower the grade, the more difficult the test—they lack the power of attention. One of the most striking features of the test which has been noted by others is the complete inability of the imbecile child to copy a diamond, which is required at the age of VII. Another item in which we had large numbers of failures was item 4 in year IX, the inability of the children to understand what a rhyme was.

On the completion of the test the child was examined for any disability—as defective vision, deafness, specific reading disability or any other factors which might vitiate the test. All physical defects were noted. But there is no time in this paper to analyse the importance or otherwise of these factors.

Interview with Parent

On the conclusion of the physical examination the parent was interviewed alone. Information was obtained concerning the personal and family histories. At these interviews, in some instances, it was found that not only was the parent of poor mentality but subsequent inquiries into the home circumstances showed that many of these people would in other countries certainly be regarded as "subjects to be dealt with." Even with the limited time at our disposal for investigation of individual cases we were able, occasionally where the child appeared to possess an outstanding specific manual disability on the performance scale, to give advice as to the future employment of the child. In this way we felt that we had been able to give practical help to parents and so avoid the square peg in the round hole.

Statistical Results

The statistical results of our inquiry are summarised in the following table from which it appears that, of 1,966 children of the actual age group examined, 42 were mentally defective; of the latter number 36 were feeble-minded and 6 were imbeciles.

Children born between 1st July, 1927, and 30th June, 1938, in National Schools in Dublin Investigation Area classified according to Intelligence.

$\begin{array}{c} { m Classification} \\ { m of} \end{array}$	Ac	ACTUAL NUMBERS		
Intelligence	Boys	Girls	Total	Distribution of Total
Mentally defective: Feeble-minded Imbecile	9	23 3	36 6	1·83 0·31
Total mentally defective Not mentally defective	999	26 1,102	42 1,924	2·14 97·86
Total Children	. 838	1,128	1,966	100

In the sample age group there was a marked excess of females and the proportion of girls mentally defective was higher than boys. This result was possibly fortuitous as due to the hazards of sampling; if the inquiry had extended to all city children the proportions might not have been significantly different. The probability that the result was fortuitous is about one in eight.

In consultation with inspectors of the Department of Education we divided the national schools in the Dublin Investigation Area into two groups (a) schools mainly recruited from relatively poor districts, and (b) schools mainly recruited from better districts and it was found that there were 34 mentally defective children (or 2.86 per cent.) in group (a) and only 8 mentally defective children (or 1.03 per cent.) in group (b): the difference here is undoubtedly significant. It was

found that in the whole City, schools attended mostly by children of poorer parents constituted a far lower proportion (39·7 per cent.) than in the Dublin Investigation Area (60·5) per cent.) and accordingly, in view of the marked difference in the percentage of defectives in the two groups, it was necessary to correct for this factor so as to establish a percentage of mental defectives, amongst senior national school children for the whole City. This correction was made by weighing the sample percentage of defectives in groups (a) and (b) respectively for boys and girls separately by the percentages $39\cdot7$ and $60\cdot3$ ascertained for Dublin City. The percentage found was $1\cdot73$ (of which $1\cdot43$ per cent. were feebleminded and $0\cdot30$ per cent. were imbecile).

The principal object of the statistical investigation was to determine the magnitude of the problem in Dublin City; in other words to estimate from the sample tested the number of mental defectives. solution presents no difficulty. On 30th June, 1938, the number of children (other than infants) in national schools was 53.006 (26.840 boys and 26,166 girls) and if the percentage cited at the end of the last paragraph be applied to this number, we estimate that the number of mentally defective children in standards other than infant in Dublin national schools was 917. This estimate is subject to the important qualification that it is based on a small number (42) of cases of deficiency. If other sample groups of children had been examined different results would have been obtained. From theoretical considerations it is, however, possible to make the following statement based on the results obtained from the sample: it is unlikely (the odds are about 20 to 1 against) that the number of mentally deficient children other than infants in Dublin City is greater than 1,200 or less than 650. It is unfortunate that the result cannot be stated with greater precision. It will clearly be desirable at some future date to widen the basis of inquiry and so reduce the margin of sampling error.

Estimates of the number of imbeciles (separately) for the whole city based on only 6 cases found in the sample would, of course, be subject to so wide a margin of sampling error as to be without practical value.

The Defective Child in School

The situation to-day is that the feebleminded and dull child is not instructed to the extent he should be; this is no fault of the teacher. If he does not learn he is entirely neglected or tries to attempt far more than he is capable of achieving. The consequence is that he is led either to fear school, to become rebellious and possibly indifferent and even more lacking in intelligence than normally he would be. This position is made worse by method of promotion, lack of promotion at present being generally regarded by inspectors as a reflection on the teacher, with the result that the defective is never able to make up for lack of intelligence by spending longer on the necessary elements of school subjects. When it is appreciated that a considerable percentage of school children come under the heading of defective it will be realised how adversely the superimposition of these defectives must affect the already over-worked teacher. Realising the danger to himself, for he is a challenge to the teacher's skill, the teacher's patience is exhausted in an effort to bring him up to the required standard, a task which is utterly futile. The defective child is a source of grave concern to the teacher as at inspection time a class is frequently judged on the standard set by those backward pupils, with detriment to the teacher who may lose his efficiency mark through the failure of the "Awkward squad" to show up on the day of inspection. Teachers informed us that it is useless to protest that these pupils are defective or dull. Officials say this is only

an excuse for incompetence.

The defective child is not welcome in school, he is harassed and unduly punished in an effort to get rid of him; if he will not leave of his own volition his parents are seen and prevailed on to transfer him to another school. The same process is apt to occur in the next school and a vicious circle is set up until finally the child finds himself excluded from school everywhere. This must have a disturbing influence on the defective and is liable to lead to his spending far too much time in the streets, the least desirable surroundings for one so easily led astray. These abuses arise from the failure on the part of some officials to realise that the defective does exist and that such children are a serious problem which should be faced and not merely dismissed.

Efforts to Form Special Classes

We have encountered one or two head teachers who, in an effort to give defective and dull children individual attention, had segregated their pupils into special classes where they could be taught up to their This effort was frowned upon by officials, who conmental capacity. sidered that the children should be returned to their respective classes and mix with the average bright pupil, "Where they could acquire knowledge in their efforts to emulate their companions." master thought that by placing defectives with children chronologically three or four years their juniors, the problem would be solved. is, of course, erroneous, as it is a well-known fact that it is not desirable to place mentally retarded children with younger normal children. The normal child of eight years can learn quicker than a defective child with a mental age of eight, and will soon outstep him. The potentialities of the defective are quite different: he is slow all along the line, his mental growth is only six months per year. Mental defectives do not grow out of their backwardness and you can not make them understand the ordinary school work. If a child is retarded this retardation remains throughout life as a permanent arrest of the intellect. In dealing with defectives one needs slow, careful teaching. There is a great need to teach. One fully realises, of course, that the child in the special class (defectives) feels a certain sense of isolation, of inferiority, yet this inferiority will not be as great as that felt in the ordinary class. In the special classes the child becomes more self reliant, and a feeling of self-respect is restored, because he is proceeding and using his mental energy—above all he is not learning to fail. If we cannot have special schools, and there is no reason why we should not, let us at least make the life of the defective and dull child easier.

Before we leave the school children, let us consider also the stupid practice often met with in schools of automatically promoting children mentally handicapped, to higher standards, year after year, irrespective of their scholastic achievement. This practice should be abolished, as it must be realised the harm that could be done.

Imbecile and "Mongol" Children in the Schools

The number of imbeciles was indeed surprisingly high, and the presence of two "mongol" children in one school certainly calls for some proper provision to be made for these abnormal children. Not

^{*} i.e., mental defectives of oriental appearance.

only are these children completely ineducable, but the psychological effect on the normal child is highly undesirable. These, of course, need a training which is entirely outside the ordinary school curriculum.

School Leaving Age

An important matter which seems to exercise very considerably the minds of the more conscientious teacher is the school-leaving age. The subject was discussed in many establishments, and opinions sought Opinions differed from school to school; the on this vital matter. majority of teachers consulted advocated the raising of the schoolleaving age to 16 years, especially for the defective children. The defective child, and this refers more so to those with anti-social tendencies, leaves school at 14 years, a most impressionable time, the higher grades to find work in blind alley occupations. On reaching 16 years they are discharged to make room for younger children who need not come within the scope of the Insurance Act. It must be remembered that the present school-leaving age coincides with adolescence, always a difficult period for any child, and much more markedly so for the defectives, who are incapable of moral judgments and in whom prudence is sadly lacking. Thrown into a world where they will be the last to obtain employment in a scarce market, they will be most likely to fall prey to immorally earned money without realising the consequences. The mental defectives are the first to lose their employment when workers have to be discharged. Idle, unprofitable, unwanted and miserable at home, they are a burden to themselves and the community. The lower grades are unable to find employment and exist—poverty-stricken and objects of contempt. Objections were made to the raising of the schoolleaving age by some masters, who considered that the schools were already overcrowded, and that there was no provision for these extra Others objected on the grounds that it would be a distinct handicap in the rural districts. This was principally because the agricultural workers need the assistance and labour of their adolescent children on the farms.

RECOMMENDATIONS

Ascertainment of Children of School Age

It should be legally incumbent on the local authority concerned to ascertain all children between the ages of 7 and 16 who are thought to be mentally deficient, whether or not the said children are attending school.

Mode of Ascertainment

Certain of the School Medical Officers should have the necessary qualifications obtained after a recognised course in Mental Deficiency and the ability to produce an Intelligence Quotient on standard tests.

All teachers should be required to produce for examination to the school medical officers, any child whom they consider to be below the average intelligence. If the Certifying Officer finds the child to be defective, he should consult the teacher. If, after this consultation, be is still satisfied with his diagnosis, he should be required to set down on a recognised form, the type of defect, its degree and the Intelligence Quotient, showing whether the child be educable or not.

Feebleminded

In the case of the feebleminded, enquiries should be made into the home circumstances. If these prove to be satisfactory, in other words, if the defective is not "neglected, abandoned or cruelly treated or in grave moral danger or without visible means of support or beyond control of parents or guardians," he is a candidate for a "special" school.

Special School

The special school should provide an education for the feebleminded from ages of 7 to 16. Such education should be confined on the intellectual side of the elements of reading, writing and arithmetic, with the developments from this curriculum for those who can benefit. Simple religious instruction must also be given. Arts and crafts and manual training and domestic subjects should predominate. Eurhythmics is a subject of particular importance for the development of muscular co-ordination and correct posture. Musical games, folk dancing, singing, will be found extremely useful, especially as an aid in the development of the power of attention. A trained occupational therapist with a special training will be required, and it will be realised that only the best can be taken for this specialised work.

It will be remembered that the estimated number of feebleminded children in the Dublin schools probably amounts to about 800. As many as 700 of these may be cases suitable for special schools. On this basis we would estimate that a boys' and girls' school on each side of the river would meet the case. Classes should in no case exceed 30 children, is individual attention to each child is most necessary. The schools would have to be situated in the most central area of their district, and transport should be provided where necessary.

and transport should be provided where necessary.

During the period of attendance at the special schools a detailed annual examination of each child should be made by the Certifying Officer to assess their present mental condition, together with an enquiry into their scholastic achievement, and a report made. If, after consultation

with the school authority, it is considered that the child will now be able to profit by normal school education, a certificate should be given to that effect. This will be a very rare occurrence.

At least 6 months previous to his attaining the age of 16 years, each case should be again considered with a view to future disposal. This review will have to include an investigation into the present condition of the child's own home.

One of four decisions has to be made:-

- (1) The child is returned to his home, is not in need of further care, supervision and control, and is no longer a subject to be dealt with.
- (2) Returned to his home after certification as a mentally defective in need of care, supervision and control.
- (3) If the house is unsuitable but a satisfactory foster-parent or guardian can be found he can be boarded out by the authority as a mentally defective.
- (4) If, owing to anti-social behaviour or the inability to find a suitable foster parent or guardian, he is still a subject to be dealt with, he can be sent to the Senior Colony.

The Junior Colony

We now turn to those defectives returned as educable but who, by reason of their being "neglected, abandoned or cruelly treated, or in grave moral danger without visible means of support or beyond the control of parents or guardians," are in need of special treatment. These will have to be sent to a residential institution, which we will call the "Junior Colony." This should be divided into male and female departments. The colony will be recruited from these feebleminded children below the age of 16 years, at present in St. Vincent's, Cabra; St. Augustine's Colony; the Industrial Schools; the Union or Mental Hospitals, as well as children subsequently found on ascertainment to fall in the category mentioned above.

It is highly desirable that a Residential Medical Officer should be in charge of the Colony, and under whom should be a staff of male and female nurses holding the certificate for mental deficiency nursing. Here, as in the special school, a trained occupational therapist will be an essential member of the staff.

It may be found necessary, owing to certain behaviour problems of a child in a special school, to transfer him or her to the Junior Colony.

On their reaching 16 years the same conditions should apply to those mentioned in the case of special schools.

The Ineducable Defective

In regard to all ineducable defectives it should be ascertained whether the home is a suitable one and, if not, proper provision should be available.

Institutional Provision

In the case of idiots and imbeciles (males under 13 years and females under 16 years) they should be sent to St. Vincent's, Cabra. Males over 13 years should be sent to St. Augustine's Colony, and females over 16 years to a Senior Colony.

The Senior Colonies

Admission to Senior Colonies should be:-

- (1) From St. Vincent's, Cabra.
- (2) From the Junior Colony in case of those who cannot be returned to the general community at the age of 16 years.
- (3) For those mentally defective in the general community who need to be institutionalised owing to a change in the home conditions, i.e., death or infirmity of their guardians, etc., or who prove themselves to be anti-social after 16 years of age (including those who are before the Courts and who never should be sent to prison or have the stigma of a recorded conviction).

Those lower grade mentally defectives who are too old to be trained and who are now resident in other institutions should not be sent to the Colonies, but kept in special wards of County Homes. There should be very stringent regulations as to these wards and the care given to them therein.

Task of Senior Colonies

It should be remembered that the purpose of these Colonies is not mere custodianship. Their task is to train as many as possible to be able to return to the community. There is no reason why a proportion of patients should not, after training in suitable types of manual work, as, for instance, needlework and domestic work, return to their homes capable of being in some measure self-supporting. In an agricultural country it should be possible for such a colony to turn out a considerable number of perfectly competent farm labourers who could be boarded out by the authority and be worth the standard agricultural wage. This, however, cannot be satisfactorily done, unless there is supervision by the authority of the conditions under which they will be and are employed subsequently.

New Colonies Required

It will be noted that our recommendations suggest, apart from the special schools, only two new Colonies, the Junior and Senior Colonies.

In the case of both Colonies we would stress the importance of the following points:—

- (1) It is highly desirable that they should be in the charge of a Resident Viedical Superintendent. Only under such a leadership can the problem be properly studied, and it should be borne in mind that there is here a vast field of research that has barely been touched. The assistants should also be resident.
- (2) The nursing staff, both male and female, should all hold the certificate of mental nursing as well as their general nursing qualifications and be under the direct control of the superintendent.
- (3) In the case of the female Senior Colony we must remember that the whole purpose is to make the patients, as far as possible, capable of standing on their own feet.

Occupational Centre

During our survey in Dublin and since our transference to the second area, the need for some form of provision to be made in the future for

defectives of low grade who are excluded from school and whose homes are suitable and parents good was fully realised.

Occupational centres seem to meet the need for these unfortunate members of society and to readily solve the problem as to what can be done if institutionalisation is not desirable.

In an occupational centre, training is provided in various types of housecraft, needlework, knitting, chair seating, basket work, and the making of garments for boys and girls. The boys are occupied in boot repairing and metal work. Training is so devised as to inculcate in the defectives a certain social sense and the formation of good habits. Speech training is also undertaken, and this is a most useful form of occupation. In many instances during our work we encountered mongol children who have not been able to speak and who, if given proper and adequate training in speech control, could readily string sentences.

Young boys would attend the Centre as well as boys over 16 years and adults. These last would welcome, no doubt, the Centre, as they could be occupied in wood work under the instructions of a male handicraft teacher.

It is considered that the greater part of the task has been accomplished as far as possible and to the best of our ability. If, by our efforts, we can in the future help he who "received the one talent" to unearth his talent and turn it to his profit, then we shall indeed be rewarded.

DISCUSSION ON DR. CLIFFORD'S PAPER.

SENATOR ROWLETTE, proposing a vote of thanks to Doctor Clifford, said that the paper was particularly suitable for delivery to the Society as it came under the heads both of Statistics and Social Inquiry. need of such studies had not always been recognised, and it was one of great importance. Some twenty-five years ago when the community began to take a special interest in tuberculosis, there was no statistical information as to the extent to which tuberculosis existed, although a system of notification had existed for some years before that. It was satisfactory to know that there was now a more enlightened spirit among the Health Authorities, as was shown by the fact that Doctor Clifford was able to carry out this investigation apart from his ordinary duties. He thought it was the first time that an investigation of the kind had been made in this country. Some thirty years ago there was a sort of enumeration of epileptics, an inquiry into the feeble-minded; and an enormous amount of information was gathered, but no action was taken. The subject was peculiarly interesting in another wav-it was on the border line of medicine and education, and medical and educational experts must take an equal share in it. Doctor Clifford had shown that he had considered it from the educational side as well as from the medical. It was thought when the system of medical inspection of school children was started some years ago that there would be opposition by the teachers and parents, but both classes were cordial about it. Senator Rowlette added that it would be out of place for him to follow Dr. Clifford along all the suggestions he had made. He gathered that the main principle of his suggestions was that it was not good for defective children to be treated in the same classes as normal children, and he thought also that a class of thirty was too large. He liked what was said on the subject of dullness, and how likely a child was to remain illiterate because of dullness. But the child who found it very hard to learn at school might be very efficient with his hands. One of his own friends, who became a most distinguished man of science, was regarded as a dunce at school. He did not learn to read until he was nine years old, and it was a matter of very great difficulty for him to pass with the minimum of marks into the University. Yet he outran all those who had looked down on him as inferior and dull. That was only one example of the different lines on Of course there were innumerable other which intelligence can run. lines. Many children who failed to pass tests in education would pass through doors into fields much wider. The need was to search for the child's faculty—as Dr. Clifford had said—and try to develop it. They had been impressed not only with the zeal with which Dr. Clifford had carried out his study, but with his humane approach to it.

Professor Shields, seconding the vote of thanks, said what particularly struck him was the real note of human sympathy running through the paper. He found himself in rather a difficult position as he was neither a medical nor a psychological expert, nor had he had the opportunity of teaching children of primary school age: He had some slight experience of children of the poor in the course of social reform work, but not sufficient to permit him to speak with any authority on the subject matter of the paper. Dr. Clifford well deserved the vote of appreciation for the excellent paper he had prepared. The problem had been neglected in this country except in so far as it had been dealt with in schools of medicine and in the course of medical treatment and in the special institutions established for the purpose. He had outlined the general procedure of his investigations and his conclusions, and indicated in some detail how the problem—a blot on our social and educational life—could be remedied or at least alleviated.

Referring to the two Acts of Parliament mentioned on page 32, Professor Shields said he took it that these were not in operation in this country by similar Acts, and if they had more information on the provisions of these Acts, particularly on the duties and powers of county borough councils and local councils in respect of them, they would be able to appreciate to a greater extent the recommendations noted in the Appendix to the paper. It was a pity, probably on account of the difficulties presented to Dr. Clifford, that a larger sample than 1,966 cases or 3.7 per cent. of the school-going population could not be investigated. The fact that only 1.83 per cent. of the cases studied were considered feebleminded would not lead to the conclusion, having regard to the number in the sample, that about the same percentage would obtain for all Dublin. The figures might be more or less.

When a questionnaire was recently sent by a particular social organisation to every primary school in the city and surburbs on the matter of free books, and was filled up by the principals of some 77 schools with a school population of 31 thousand, it was found that 30 per cent. of the children could not buy a single book, and 37 per cent. were able to purchase books by instalments, which, in many cases, were not fully paid. That would give the idea that the percentage given on page 37 of the paper, 39.7 per cent. of the poorer children was too low. He would say the percentage would be nearer the 60 than Dr. Clifford made out for the investigation area. It would be very useful to have the results of investigations of a similar nature as that of the present paper made

They would have provided a very suitable comparison, particularly with regard to cities of more or less the same size and the same conditions of housing and conditions under which the children live. Another question that might be considered was the type of tests used. whether they were written or verbal tests, and so on. Then it might be asked how far the results correlate with the views of responsible teachers or headmasters of the schools, or if possible of school medical officers who were interested in and who have studied these matters. Another aspect to consider was, in tests other than actual performance, how far the standards that are used, say, in England or Wales or the United States could be reconciled with standards to be used in Dublin. That was important on account of the revolution that had been going on for some time in primary education in this country, and raised many issues in which one would be inclined to think that purely scholastic teaching was bound to have some influence on what Dr. Clifford stated on page 35, "prevision, judgment, perception, reasoning and discrimina-Lastly, he would like to have seen some definition of feeblemindedness from the point of the intelligence quotient. Then it must be considered that a test cannot be fully tried out unless a number of expert testers were able to test the subjects on a number of occasions. intelligence quotient would often vary on account of social, economic, or other changes.

Dr. Catherine O'Brien said that Dr. Clifford and the Hospitals Commission were to be congratulated on having tackled this question of the abnormal child, and they hoped and trusted that a definite practical scheme for dealing with the question would be the result, and soon. At this stage of their growth and progress, the mental defective was scarcely any longer a subject for academic discussion and theorising, but rather one for effective and wise treatment.

Dr. Clifford had computed that the number of defectives actually in attendance in the national schools was 917. He stated in his report: "It is unlikely (the odds are about 20 to 1 against) that the number of mentally defective children other than infants in Dublin City is greater than 1.200 or less than 650." That did not include the lower grade defectives, the idiots and imbeciles, who had never attended schools, or whose efforts to attend met with complete failure in the shortest possible time—to become mere castaways, until the ultimate results of their poverty of intellect brought one up with a jolt. The question of grading of defectives should no longer present any difficulty. Their classification and segregation according to mental capacity was definitely called for. That could be the only working basis, in fairness to the defective himself. There must then be established special schools, day and residential, with suitable teaching methods, objective instead of subjective, specially trained staff, special equipment and curriculum for the mental and physical training of these children who have been admitted to these particular schools only after accurate classification and scientific grading according with their own intellectual capabilities, limited though they be.

Doctor O'Brien went on to say that there was another aspect of the problem of mental defectives which might well cause one to think, and that was the incidence of juvenile delinquency. There were 82,723 children attending 212 national schools in Dublin City—more than one-sixth of all the children of Éire. While the school population of the whole country had fallen by 39,803 during the past ten years, there had been an increase of 40 per cent. in the number on rolls of the national schools

in Greater Dublin.* The Judicial Statistics, Éire, 1st August, 1937—31st July, 1938, paper 3402, stated that 428 applications for committal of young persons were made to the Dublin District Justices. Of these, 342 were sent to industrial schools, 33 to reformatories. There were 969 committals to industrial schools in the same period for the whole 26 counties, and 69 to reformatories. This high percentage for the city might of course be due in part to committals under the Children Act, 1929 (Destitute). Unless a young delinquent had an accurate mental assessment carried out, one could not ascertain whether in fact the child or young offender were not really the dupe of an actual criminal—the victim who by reason of his own inherent lack of judgment and discretion, by its very suggestibility, was but the prey of the evil-doer.

In the report of the School Attendance Department for Dublin City during the year 1938, we read that 93 children were committed to industrial schools for failure to attend school—prosecutions having been instituted against 565 defaulting parents. How many of these 93 children were either so dull or so backward as to make them abhor attendance at the ordinary national school with its instruction and curriculum designed for the normal average intellect? Indeed, it would be a nice point to determine in fact how many young persons in industrial schools and reformatories are actually feeble-minded, and who, in their own interest as well as the others, would benefit by transfer to residential special

schools.

Dr. T. J. O'Connell, associating himself with the vote of thanks, said he did so all the more heartily because he was speaking as a member of a body to whom this problem was not a new one by any means. Every teacher was up against the problem of the mentally defective or backward child. Very often there was not much distinction drawn between the feeble-minded and mentally defective and the backward and dull child. They were all referred to as the "duds." It was a problem to which his profession had been calling attention for a long time, but up to the present they were a voice crying in the wilderness. If this paper focusses attention on the problem it will have served a very useful purpose. The paper deserved and would repay careful study. With regard to the recommendations of Dr. Clifford, Dr. O'Connell said he thoroughly approved of the special schools for these children who were not able to avail themselves of the ordinary education in the national schools. Twelve or 14 years ago he saw those special schools in Chicago. A bus went to the homes of these children every morning, collected the children, brought them to the school and took them home again. The education was not confined wholly to the intellectual side. Attached to each school was a medical superintendent and a staff of nurses, and the children were fed during the day and got treatment suitable to their conditions. He agreed with Senator Rowlette that a class of 30 would be too large. Thirty was all right in an ordinary class, but in these cases there would have to be a good deal of individual teaching, and 30 would be too large altogether. The teachers in charge of these particular children would require special training. A teacher was trained for teaching normal children, and it was essential that in order to teach this particular class a teacher should get special training. There were children who appeared

^{*}These figures refer to the Metropolitan District. The Metropolitan District embraces a greater area than does the City of Dublin, while some parts of the city are outside the Metropolitan District, 1 e in the District Court areas of Drumcondra, Rathfarnham and Howth.

to be dull when judged by the literary standard, but when it came to hand-work showed unusual intelligence. One criticism that could be offered to their educational system was that it was too bookish and too There were many things which Dr. Clifford said in his paper with which he agreed, but in others Dr. Clifford was inclined to generalise too much. On page 10 he said the defective child was harassed and unduly punished to get rid of him. There may be individual cases of that happening, but he (speaker) would be very much surprised to know that it was anything like a general practice on the part of teachers. He would not like to accept that statement without more evidence to support it. Then the paper said that the effort to segregate children was frowned on by the officials. He did not think the Department of Education itself would frown on that system though individual inspectors may have that opinion. He said that because he knew that quite recently the Department of Education recommended that there might be a segregation of children—not mentally defective children, but that the children could be segregated according to their efficiency. That system was recommended in a very large school in the city and was carried out. The principal teacher thought that the most efficient teacher in the school should be put in charge of Class C. or the "dud" class, and that was correct. But the result was that the teacher lost her efficiency marks because these children were not up to the ordinary normal standard of the school. That showed some of the difficulties teachers had to meet. surprised to see Dr. Clifford fall into the fallacy that the land was the best place where these children may be employed. There was no occupation that he knew of that required a higher degree of intelligence than work on the land. Every occupation on the land required a certain degree of intelligence, and there was no man who could do more harm on the land than the man lacking in intelligence. There was nothing automatic about work on the land. He was not to be taken as detracting in any way from the value of this paper, and there was no body who would appreciate the work done by Dr. Clifford more than the national teachers.

THE PRESIDENT, putting the vote of thanks to the meeting, said the Society felt under a deep debt of gratitude to Dr. Clifford for his valuable paper. It was a subject that men like himself had very little knowledge of, and it was a revelation to read the paper and study the various aspects of it. Dr. Clifford had also given them a series of recommendations, and he hoped the authorities would look at these recommendations and that something good would ensue.

Dr. Clifford acknowledged the vote of thanks and said that it was possible to present only one facet of a many-sided problem in such a short paper. It was impossible to discuss the problem of mental deficiency without at the same time considering the closely allied problem of intellectual dullness. For every mental defective person six were considered to be intellectually dull. With the progress of civilisation the art of living and of earning one's living was becoming increasingly difficult. Those who had seen something of mental deficiency knew the amount of human misery that accompanied it.

Every effort should be made to alleviate the sufferings of those less fortunate than ourselves. Dr. O'Connell had taken exception to his statement that defective children were harassed in the schools, but he was afraid that he (Dr. Clifford) could not let that pass, as since he went to the second area he found that it still occurred.

Concerning the intellectual level of rural and urban districts it was found in England among school children that the percentage of the school population mentally deficient was $2\cdot 5$ in the urban areas as opposed to $4\cdot 6$ in the rural. Therefore, country children would appear to be less intelligent than those in the towns. It was thought that the reason was that the brighter element tended to drift to the cities leaving the duller stocks on the land. Intermarriage between dull stocks produced mental defectives.

As to environment, in the slums few low-grade defectives were discovered. Concerning inheritance few mentally defective had inherited their defectiveness from defective parents. Children of defective parents tended to be dull certainly, or neurotic, but it was the exception rather than the rule for them to be defective. Environment had not much to do with the production of mental defectives nor from what he had seen did the slums of themselves produce defectives.

The following communication was received from Mr. John Collins, who was unable to be present at the meeting:—

Dr. Clifford's communication will be of the greatest value to those who have given any thought to the administrative problems created by mental deficiency. Dr. Clifford endeavours to answer two important questions, one as to the magnitude of the problem and the other as to the measures that should be taken to deal with it. I find the centre of interest in his paper on pages 36 and 37 from which it appears that 17 per 1000 of the children are defective and of these 3 per 1000 imbecile. The estimate made thirty years ago of 12 per 1000 approximately was, it now appears, too low. At that time it was computed that there were 5,796 defective children in national schools of Ireland. This formed a little over one-third of the number of defectives both children and adult needing provision. I have no doubt the improved technique of examination had led Dr. Clifford to more accurate results than were formerly possible. Roughly 400,000 children attend national schools, so that we may expect, if Dublin turns out to be a fair sample of the country, that there are in this country six to seven thousand defective children at least needing provision. If we add to the children the defective adults, we find a problem of serious magnitude. The Lunacy Laws were not made for the imbecile and feeble-minded and although defectives are to be found in the mental hospitals their presence in these institutions does not exercise a good influence on the other patients. Dr. Clifford's recommendations seem to me sound. The reforms he suggests are not disproportionate to the problems to be solved. I am, however, inclined to think that remedies will be delayed if an attempt is made at comprehensive reform by placing new statutory obligations on local authorities. The best is at times the enemy of the good and I believe that just as all the projects that came to fruition in the immediate past for the benefit of defectives—I refer to St. Vincent's School at Cabra and St. Augustine's Colony at Blackrock—have sprung from voluntary and religious effort we must place our hopes of improvement, so far as the establishment of colonies are concerned, in voluntary bodies undertaking the task. The wonderful colony at Ursberg in Bavaria where, under skilled and self-sacrificing guidance, a thousand inmates, mostly defectives, provided for their needs by their own industry is an example of what is possible. If such a colony were started the question of subsidy should not I think prove an insurmountable difficulty.