latest facilities for treatment but to see to it that an adequate Medical Staff exists for carrying out that treatment. In a similar fashion the unlocking of doors and the reduction of mechanical aids to supervision call for a larger degree of human supervision and place increased burdens upon the Nursing Staff with a demand for its augmentation. Nor must the Clerical Staff be overlooked. The amount of correspondence, statutory and otherwise, entailed by the administration of this Act renders our ideas of the staffing of the Clerical Department quite obsolete. I find that the old habit of using ready printed forms is of necessity falling into desuetude. Nearly every letter which I receive (and they have increased) requires a personally dictated answer. In any case it is highly desirable that replies should be made in this manner.

This effort to outline modern mental treatment in older institutions has been sketchy and is capable of much enlargement and addition in many directions. It is beyond my power to make it more complete at this moment for the simple reason that we still live in the age of experiment as far as the application of the new Act is concerned. I can only outline some indication of my firm belief that "where there is a will there is a way" and that the slogan of the adapted "Asylum" should be the motto quoted in our Hospital Rule Book, namely, "Effort and renewed effort".

Observations on the Training of Idiots and Low Grade Imbeciles

By E. J. FITZGERALD, M.D. Medical Superintendent, Bridge Home, Witham

The care of the low grade adult Mental Defective is a problem of urgent consideration for those responsible for the administration of the Mental Deficiency Acts.

The Board of Control, in their report for 1936, mention that it is difficult or almost impossible to find vacancies in Certified Institutions for low grade or troublesome defectives. Mental Hospitals and Public Assistance Institutions are unwillingly obliged to receive these cases. Local Authorities are well aware of the harm and hardships which ensue from the retention of this type of patient in Public Assistance Institutions. The Board of Control require that Mental Defectives in Public Assistance Institutions, under Section 37 of the Mental Deficiency Act, shall be completely separated in suitable surroundings from the general body of the inmates.

There are, however, in most areas, uncertified defectives in the ordinary wards of Public Assistance Institutions. The staff of these Institutions are not taught how to deal with these defectives who receive no kind of training or education. They tend, therefore, to deteriorate in habits and conduct; and as

idleness breeds mischief, become an annoyance and nuisance to the staff and the old people who form the majority of the normal inmates in these Institutions. This is so much the case that they frequently spend all their days in bed.

The work of Duncan, Penrose, and of Turnbull at Severalls Mental Hospital, and the estimates of the Board of Control, show that many low grade defectives in Mental Hospitals could be safely removed to Mental Deficiency Institutions. Dr. Ivison Russell in his recent book on Occupational Therapy points out that unfortunately a considerable number of low grade imbeciles are admitted to Mental Hospitals and a special ward is necessary for them. Dr. F. C. Shrubsall was of the opinion:—"There can be little doubt that the prolonged or permanent care of low grade cases and those of higher mentality incapacitated by concomitant physical defect, is greatly appreciated by the majority of relatives, and, within certain limits, by the patients. It is a great boon to such sufferers to be kept with their likes and such cases are not suitable for Public Assistance Institutions".

The co-ordination of the Public Health Services rendered possible by the 1929 Local Government Act and the growing sense of responsibility by Public Councils has resulted in a strong demand for beds in Mental Deficiency Institutions for low grade defectives.

The Report of the Lunacy Commissioners in 1865 speaks of the good results from training of the lowest grade of idiot. In 1866 Millard and Dr. Duncan, the consulting surgeon to the Eastern Counties Institution, published their excellent book on the Training and Education of Idiots and Imbeciles, based on the teaching of Seguin in 1842, who laid down the principles of training later developed by Madame Montessori. One hundred years ago Seguin had remarkable results even in apparently hopeless idiots. The method used was "To take each function or faculty, each physiological system of neurones and by means of appropriate and carefully arranged progressive exercises to develop them to the fullest extent of their capacity". The first step is to arouse spontaneous interest, and the progressive steps are:—

- (1) By Medicine, Surgery and Hygiene to remove if possible any improvable clinical disability.
- (2) By Education (a) To develop and cultivate all the latent potentialities of the Body and Mind.
 - (b) To eliminate vices, faulty modes of action, abnormality of impulses and defect of control due to faulty upbringing and adverse environment.

As far back as 1871, W. Millard (then Superintendent of the Eastern Counties Institution) writes pointing out the then and still prevalent practice of placing idiots in Mental Asylums and Union Work Houses. He draws attention to the necessity for Training Institutions for the improvable idiots and permanent Homes for unimprovable idiots who require to be sheltered and kindly cared for. At that date the term 'Idiot' was used to include all grades of Mental Defect.

Dr. L. Penrose, in his book on Mental Defect, very succinctly points out

the unduly pessimistic view of most modern social workers and Psychiatrists in regard to the care and training of low grade defectives. In many minds the idiot is associated with ideas of sterilization and the lethal chamber. It is suggested that it is not worth while wasting time in attempting to train the low grades. Dr. Tredgold, in 1937, refers to "Life on a lower plane even than the beasts of the field"; but Sir Frederick Bateman, in 1897, "The Idiot, His Place in Creation and His Claims on Society" points out that "the idiot is a human being who possesses the tripartite nature of man; body, soul and spirit". recent work of Doll and his co-workers at the Vineland Training School, New Jersey, shows that the idiot can provide interesting material for educational psychologists: "The idiot child presents a slow motion picture of the rapidly maturing pre-school child and thereby reveals many facts impossible to observe among pre-school children themselves. Unlike normal babies idiot children never outgrow the period of dependence and distractability except as they are trained to capitalize their meagre talents. It is wrong to assume that an idiot's failure to learn is due to sheer stupidity until every possibility of increasing the incentive has been exhausted".

In a paper on "Comparative Intelligence of Idiots and Normal Infants", Doll and Aldrich draw attention to the following important conclusions:—

- (1) Idiot children display inferiority on Kulmann Binet scale, showing special disability on language test.
- (2) On the Gesell, a greater spread of abilities among idiots, deficiency in language and a slight superiority in tests which may be attributed to training and experience.
- (3) Idiot children are very much superior to normal infants on the performance tests of the Stutsman series, revealing greater manual dexterity. Doll further reports that the manual superiority of the idiot compared with children of the same mental age leads to the expectation of training possibilities, which have been fully borne out. The inability to deal with language remains.

Dr. Ivison Russell writing in his book, "The Occupational Treatment of Mental Illness", on habit training remarks: "Except in the case of a few idiots, the normal simple habits of decent living can be acquired if teachers have the patience to continue training persistently for a sufficiently prolonged period. Low grade imbeciles can learn to behave in a clean, quiet and orderly manner; to attend to their personal wants and to obey simple verbal directions". It is interesting to note that he finds the training suitable for untrained imbeciles, also suitable for deteriorated schizophrenics. The Medical Superintendent of Rampton State Institution in his report for 1936 mentions that low grade men of schizoid diathesis have been brought under instruction with good results. My personal observations lead me to the conclusion that the deterioration so often noticeable in adult low grade defectives can best be controlled or prevented by organised occupational therapy.

In an excellent pamphlet issued by the Central Association for Mental

Welfare. "Centres for the Occupation and Training of Mentally Defective Children", the writer states:—"It is a well known fact that a child who has been trained for years in an Institution will deteriorate in the most deplorable fashion as a result of few months' idleness at home. In the same way, too, a low grade child left continuously without training is likely to remain helpless, dirty and uncontrolled; an almost intolerable burden on the Institution to which he must ultimately be sent".

Since the extension of work for defectives rendered possible by the Mental Deficiency Acts, there has been perhaps an understandable loss of interest in the care and training of idiots and low grade imbeciles, especially those of adult age. Workers in Mental Deficiency have been occupied with the feebleminded and with the great problem of socialization. The acute shortage of beds has led to the tendency in some areas to exclude low grades from Institutions. Low grades need more care and give less apparent return for their greater cost, yet is there any class of our unfortunate fellow human beings who have greater need for our services?

The care and training of this class of defective calls for special qualities. It is difficult for us to bring our minds down to the level of an adult with a mental development of a pre-school child. A nurse for adult low grades must combine the best qualities of a trained kindergarten teacher, the skill and patience of a fully trained children's nurse and the understanding of a mother. These qualities are difficult to find in a woman and almost unobtainable in a man.

When these grown children become adults and almost necessarily pass from the care of females to that of males it is an unfortunate fact that there is a marked deterioration unless the previous training is kept up. There is a noticeable difference in the conduct and general happiness of those adults who have been through the low grade schools and men who have been transferred direct to Bridge Home from Public Assistance Institutions or from their own homes when they became so troublesome and helpless, that it is an almost superhuman task to nurse them adequately. Many such cases have deteriorated because the little initiative they ever had has become atrophied through disuse. It was quicker for a mother to do all for a child, attending to these men-infants kept alive the maternal instinct. Many come in bed-ridden, unable to attempt the simplest co-ordinated motor movement. It is our proud boast at Bridge Home that we have here no bed-ridden cases except the acutely physically ill. Our aim here is to carry on throughout life, the care and training these types of defectives have received in the nursery and lower grade schools of the parent Institution.

The Bridge Home is an old converted Essex Workhouse taken over in 1922 as an ancillary Institution to the Royal Eastern Counties Institution at Essex Hall, Colchester. The Directors have, since then, built two villas for low grades and cripples, and spent some thirty thousand pounds in improving the buildings. There are at present 342 adult males in residence here.

102 have a mental age under two years.

52 have a mental age over 2 years and under 4 years.

45 have a mental age over 4 years and under 5½ years.

There are thus one hundred and ninety-nine patients, or over 55 per cent. of the total population we have here, under a mental age of five and a half years. There are 63 epileptics: 24 completely paralysed: 35 partly crippled and 10 blind. Everyone will agree it would be difficult to find more unpromising material; yet there are only seven unemployed; four for reasons of bad health and three who are too low grade and crippled to be able to attempt any form of training.

The scheme for training is based on the following books:-

(1) "Manual for Mental Deficiency Nurses," of the Royal Medico-Psychological Association. (2) "Centres for the Occupation and Training of Mentally Defective Children," of the Central Association for Mental Welfare. (3) "Simple Beginnings in the Training of Mentally Defective Children" by Margaret MacDowall. (4) "The Care and Training of Mentally Defective Children," Jennie Benson. (5) "On the Imbecile and Idiot," Duncan and Millard. The approach to the adult low grade is in all essentials the same as the approach to the idiot and low grade imbecile child. While acute attention in low grades is often poor or absent, spontaneous attention is often present. Doll at the Vineland Training School found that a percussion band was the most useful means of arousing the perception of idiots and the most successful means of socializing an a-social child. Dr. I. Russell in his scheme of occupational therapy for Imbeciles and Deteriorating Schizophrenics forbids the use of noise producing instruments, but our experience here has led us to believe that Doll is right in stressing the importance of percussion bands. Sixty-four of the low grade men take part in the two percussion bands. The band always plays in the lowest grade class if possible. The rhythm and time is provided by a radiogramophone and one of the male staff who has served in an army band takes charge. The photograph gives some idea of the activities of this class. In the forepart of the picture two cripples can be seen playing with blocks and toys. The two in the cripple chairs are playing a simple game with a rag ball suspended from a bar. The cripple at the back, pushing the railway engine, is learning to walk. The engine is so weighted in front that he can put his whole weight on it and it will not tip up. The other cripples at the back of the picture are learning to walk between two parallel iron rails made from piping. The cripple chair is placed at one end in front of the bars and the men are encouraged to leave the chairs and exercise their crippled legs. Some of the most helpless cripples are lying on rugs and playing with children's toys. The toys are placed out of reach so as to encourage movement. It is surprising to see the progress that apparently hopeless cripples can make with this inducement. Trays are fitted to the chairs so that the men can use simple kindergarten material. They are induced to try and feed themselves, though many are clumsy and spill a lot of food. The aim is to make each man do as much as possible for himself. The results of this lowest

class are very encouraging. Many who were previously chair ridden cases are now able to take exercise, pushing their own chairs about empty as an exercise to strengthen their legs and arms; habits are improving and the improved health and happiness of the men is noticeable.

The next step is the low grade physical exercise class. All the apparatus, except the outdoor gymnasium set consisting of swing, climbing rope and trapeze, is home made. Shop made articles will not stand up to use by low grade adults. A rocking-horse, is made from an old type gymnasium horse; a steam roller from old laundry machinery, and a fixed bicycle from an old cycle arranged on rollers so that the effort required is equal to a ride up a slight hill. The bridge shown in the picture is constructed so that the approach can be used as an incline or a ladder. A gate and bar across provide obstacles and the steps of the stairs at the other end teach confidence in going up and down stairs. The photograph gives some idea of their construction and use. Wheelbarrows, filled with sand from a sandpit, are pushed up and down inclined planks. There is a skittle alley, stepping stones in concrete, large coloured blocks, low hurdles and narrow balancing planks for use in simple exercises. An interesting innovation is the ball game. A circle in concrete is marked out, in the centre of which there is a post with four baskets each in a primary colour. The four patients have a coloured sash corresponding to the basket and the instructor has four large coloured indicators. There are several exercises possible, for instance:—(1) The boys march round the ring and stop opposite their own colour on a signal from the instructor. (2) The boys pass a ball round and on a colour being shown by the instructor the boy holding the ball tries to throw it into the basket of the colour shown. (3) Each boy is given a ball which he tries to throw into the basket of the same colour as his sash. These exercises can be extended by having teams of boys wearing the same colours. Set exercises are limited to fifteen minutes in each hour and at other times the patients are allowed to amuse themselves in free play with any of the apparatus in the playground which may take their fancy. We have found it impossible to get this type of patient to join in organised games for any length of time.

We find that low grades pay more attention to a whistle than to the spoken word, and we invariably use one when we want to attract their attention. As with children, we try and condition all their developing habits of training with pleasureable sensations and it is surprising how kind words and the weekly penny for sweets helps. Any man, no matter how low grade, who makes the slightest effort, receives his weekly reward. Other set exercises suitable for this class will be found in Mrs. Benson's book.

The third grade class is the Elementary Sensory Training and Occupational Class. This is held in the new detached pavilion. A new case is introduced to a variety of apparatus described by Stutsman for use in the Merril Palmer tests for pre-school children and is allowed to play with peg boards, boxes of cubes, nests of cubes, to do paper cutting and folding, the Seguin form board, picture

puzzles and the sets of buttons and buttonholes, etc. Not only will some of these materials occupy new cases for hours but will enable the instructor to form an estimate of each case's potentiality for training. It is necessary to have all apparatus made of the strongest materials and it can be copied from test model by the higher grade patients in the Handicrafts and Carpenters' Shops. Kindergarten occupations are gradually introduced to improve sensory and motor functions. Men in this class are systematically taught things which the normal child picks up without training. As Seguin has pointed out: "Sense education is possible and efficient where other forms of training fail". Mental Defectives are more likely to be interested by coloured apparatus, and primary colours should be used whenever possible. We have found brightly coloured simple shapes cut with a jigsaw of great use. Wooden discs made from old cotton reels from the workroom can be used for stringing together. A number of low grades can be employed in sandpapering plywood apparatus. A variety of simple constructional toys shown in the lists of nursery school equipment can be copied and put to excellent use.

We find that many of the cripples are unable to cut paper as they require both hands to operate a pair of scissors. The paper slips all over the table and to overcome this difficulty we place the paper between two plywood shapes held together by a winged screw. This is mounted on a screw clamped to the table and enables the man to turn the shape as he cuts along the sides. Many spastic cases have shown considerable muscular co-ordination after exercise with this aid.

For first steps in stitching a piece of wood with the holes bored is used. A large blunt needle is threaded with brightly coloured wool. More complicated designs are gradually introduced. Knitting of dish-cloths can be taught to low grade imbeciles. Old wool jersies and socks are pulled to pieces by some of the more destructive idiots and the brighter men use the material in making simple rugs by the peg method. The best boys in this class make paper bags and are taught simple brush work by the wire drawn method.

The fourth class is very accurately described as the miscellaneous Manual Instruction Class. Here are wood bundlers, boot cleaners and polishers; those who polish knives, forks, tins, etc. Some do simple mat repairs, help to fill mattress cases with flock and to remove flock from old mattresses for refilling.

The four classes hold morning and afternoon sessions and as far as possible anyone engaged in a sedentary occupation at one session goes to an active physical exercise class during the afternoon session. All men are encouraged to attempt simple household and personal tasks.

In dealing with low grade defectives we do not expect spectacular and rapid results. One often wonders whether it is worth while. Miss Darwin, a senior Commissioner of the Board of Control, in a preface to Mrs. Benson's book, writes, "No one who has had the opportunity of watching destructive habits, apathy or discontent disappear, to be slowly replaced by some measure of social self-respect, independence and happiness, can doubt the truth or wisdom of what

she says". My experience at Bridge Home has confirmed me in the opinion that Miss Darwin is not overstating the case for the occupation of low grades.

Dr. F. Douglas Turner, Medical Superintendent of the Royal Eastern Counties Institution, in his Annual Report for 1936, writes, "At Bridge Home a special study has been made of the best methods of teaching and training the large number of idiots there. They have been surprisingly successful in inventing new gadgets and working out new ideas to occupy these really low grades who had been given up as hopeless".

To Dr. Turner is due my best thanks for his constant help and interest which has made this work possible, and to Dr. Penrose, Director of the Research Department for allowing me access to his papers.

My thanks are due in a special manner to my staff from the Matron, Miss Tanner, down to the last probationer, for their really hard work and willing co-operation.

Modern Educational Experiments VI.

The Use of Films in the Education of Backward Boys

Readers will remember that in our last issue, reference was made to some interesting experimental work with Films which was being carried on with "Opportunity" Pupils in the Spurley Hey Central School, Rotherham. The following account of the work has been sent to us by Mr. W. W. Barber, M.R.S.T., by kind permission of the Head Master, Mr. Ernest Healey.

A twelve month trial of the film for the education of our backward pupils at Spurley Hey Central School has taught us that we have a very useful ally in this newer form of visual education.

Realising that the backward pupil needs particularly stimulating treatment, that he needs to have his interests strongly aroused, that his weaker powers of imagination and inability to follow verbal instruction need supplementation, we decided to give the cinema a trial. We have been amply repaid in the increased range and interest of the pupil, in the reality which has been introduced into the History, Geography and Science lessons and the better understanding of the world around him which comes to the child whose opportunities have been more than ordinarily restricted.

On the grounds of expense and cost of hire of films and also on the ground that we wished to supply the commentary, we turned down the "talkie" apparatus and bought a good 750 watt silent projector with reverse and still devices and this has proved to be the ideal machine for our purpose. The silent film is likely to remain of great value in spite of the development of the talkie for it is not possible to talk the same language to the "A" stream and the "E" stream