[Report 1935] / School Medical Officer of Health, Leeds City.

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City of Leeds

EDUCATION COMMITTEE

REPORT

OF THE

SCHOOL MEDICAL OFFICER

(G. E. St. CLAIR STOCKWELL B.A. M.B. B.C.)

For the year ended 31st December, 1935

Jowett & Sowry, Ltd. Leeds.

City of Leeds

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SCHOOL MEDICAL OFFICER

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For the year ended 31st December, 1935

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LEEDS EDUCATION COMMITTEE

Medical Inspection of School Children

MEDICAL SUB-COMMITTEE

Councillor J. TAIT (*Chairman*).
Alderman R. H. BLACKBURN.
,, H. MORRIS.
Councillor J. C. BERRIFF.
,, E. E. BULLUS.
,, J. CROYSDALE.
,, L. J. EDWARDS.
,, E. M. LISTER.
,, B. QUINN.
Mr. W. SPENCE.
Mrs. MURPHY.

MEDICAL STAFF

School Medical Officer—GEO. E. ST. CLAIR STOCKWELL, B.A., M.B., B.C.

Full-time Assistant School Medical Officers—
MAURICE E. WILLCOCK, M.B., Ch.B., D.P.H.
FRANCES M. BEBB, B.A., M.B., Ch.B.
HERBERT HARGREAVES, M.B., B.S.
RONALD WOOD, M.B., Ch.B.
IRENE M. HOLORAN, M.B., Ch.B.
GWENDOLEN F. PRINCE, M.B., Ch.B.
BERNARD SCHROEDER, M.B., Ch.B. (*appointed June*, 1935).
JOHN F. GALPINE, M.D., M.R.C.S., L.R.C.P., D.P.H., M.B., Ch.B. (*left 31st December*, 1935).

Consulting Surgeon (*Nose, Throat and Ear*)—ALEXANDER SHARP, C.B., C.M.G., K.H.S., F.R.C.S.(Edin.).

Consulting Surgeon (*Orthopædic*)—S. W. DAW, M.B., B.S., F.R.C.S.

Consulting Ophthalmic Surgeon—G. BLACK, M.B., B.S.(Lond.), F.R.C.S.(Eng.).

Senior School Dental Officer—R. DRUMMOND KINNEAR, L.D.S., R.C.S.

Full-time Assistant School Dental Officers—
ARTHUR B. MORTIMER, L.D.S.
ELEANOR KNOWLES, L.D.S., D.P.D., H.D.D.
DAVID E. TAYLOR, L.D.S.
NORMAN K. DAVISON, L.D.S., R.C.S.
E. EMERSON GIBSON, L.D.S.(Eng.)
MARY KING, L.D.S.
ARTHUR H. GREEN, L.D.S. (*appointed temporary, January*, 1935, *permanent, August*, 1935).
HENRY E. GRAY, L.D.S. (*appointed September*, 1935).
GEORGE M. E. MCGIBBON, L.D.S., R.C.S. (*appointed September*, 1935).
LAWRENCE MORAN, L.D.S. (*appointed September*, 1935).
J. WALTER SHAW, L.D.S., R.C.S., H.D.D. (*appointed September*, 1935).

MEDICAL STAFF—(*continued*).

School Nurses—

Isabel Ferguson (*Senior Nurse*).
Jane Tottie.
Gertrude Smith.
Carrie Lewis.
Helena Simpson.
Evelyn Lowe.
Elsie K. Briggs.
Annie A. Poskitt.
Mona K. Macpherson.
Sarah E. Webster.
Gertrude M. Penfold.
Grace E. Prior.
Doris Hodge (*appointed January*, 1935, *left May*, 1935).
Bessie Atkinson (*appointed temporary, April*, 1935, *permanent December*, 1935).
Ethel Wilson.
Elizabeth M. Whurr.
Rose Payne (*retired March*, 1935).
Hilda Moody.
Emma M. Hearnshaw.
Mary Cherrett.
Elizabeth M. Benson.
Edith D. Wynn.
Lilian Moody.
Mary D. Carrick.
Minnie Abbott.
Alice Shackleton.
Mary Lanham (*left 31st March*, 1935).
Alice A. Hodgkinson (*left 31st October*, 1935).
Matilda Holmes (*appointed May*, 1935).
Edna M. Howgate (*appointed May*, 1935).

Masseuses—

Edith A. Revill.
Alice M. M. Sugden.
Gertrude M. Islip.
Winifred Wear.

Dental Attendants—

Mary E. Mortimer.
Grace E. Brown.
Marjorie Cordwell.
Margaret Boyd (*appointed September*, 1935).
Marion Hudson (*appointed September*, 1935).
Nancy M. Rush (*appointed September*, 1935).
Cicely M. Baxter.
Marjorie M. Hixon.
Kathleen Haley.
Dora Jewells.
Winifred Leishman (*appointed September*, 1935).
Dorothy Coulson (*appointed January*, 1935).

Summary of the Work of the Leeds School Medical Service, 1935.

Number of Children examined by the School Medical Officers at Routine Inspections	22,873 (22,566)
Reinspected in the Schools by the School Medical Officers	32,178 (23,052)
Examined by the School Dental Officers	25,066 (26,080)
Examined by the School Nurses in the Schools ..	206,732 (201,496)
Number of Visits to Homes by the School Nurses ..	165 (205)

Clinic Work.

Total Attendances, 1935 .. .. 198,977 (209,071)

Clinic.	Number of Attendances.		Nature of Work.
	Medical.	Dental.	
Central	12,744 (12,927)	6,325 (5,186)	Inspection. Refraction. X-ray. Orthopædic. Aural. External Eye. Dental.
Armley	15,155 (14,839)	5,230 (4,173)	Inspection. Treatment of Minor Ailments. Refraction. Orthopædic. Dental.
Burley	18,549 (19,381)	4,106 (2,958)	
East Leeds ..	16,752 (17,507)	5,079 (3,273)	
Edgar Street ..	31,491 (33,569)	4,087 (3,921)	
Holbeck	20,459 (30,602)	4,297 (3,111)	
Hunslet	23,378 (24,053)	4,074 (4,138)	
Meanwood Road ..	17,439 (21,502)	— —	Inspection. Treatment of Minor Ailments.
Middleton	7,995 (6,988)	— —	
Dental Hospital ..	—	1,817 (943)	Orthodontic.

Number of Children certified by the School Medical Officers :—

(*a*) Mentally Defective	121 (231)
(*b*) Physically Defective	791 (564)

The figures in brackets are those for 1934

CITY OF LEEDS

EDUCATION COMMITTEE

Report of the School Medical Officer for the year ended the 31st December, 1935.

To the Chairman and Members of the Education Committee.

LADIES AND GENTLEMEN,

I have the honour to present the Annual Report upon the work of the School Medical Service of the City of Leeds for the year ended the 31st December, 1935.

In my last report I reviewed the suggestion that the School Medical Service was in danger of becoming static, and pointed out that, so far as Leeds is concerned, the word static did not apply, and that we were passing through a period of consolidation.

During the past year, papers have been read on alterations in the Service and much controversy has taken place thereon. But the duties laid on Authorities under the Education Act of 1921, are very comprehensive and if followed out in the spirit as well as in the letter cover most of the suggested changes.

I can see no justification for the abolition of Routine Medical Inspection which will of necessity require an addition when the leaving age is raised to 15. The substitution of voluntary attendance at clinics for examination in school would mean that large numbers of children would never be presented, amongst whom we should find most of those who are in need of advice.

The following duties are laid upon Local Authorities by the Education Act, 1921 :—

1. To make or otherwise to secure such adequate and suitable arrangements for attending to the health and physical condition of the children, and to provide for their Medical inspection on such occasions as the Ministry of Health may direct.

2. To make arrangements for ascertaining what children in their area by reason of mental or physical defects are incapable of receiving proper benefit from the instruction in a public elementary school.

3. To provide for the education of blind, deaf and defective children resident in their area.

4. To examine in public elementary schools approved or maintained by them, the person and clothing of all children in attendance for conditions of cleanliness.

5. To undertake the medical inspection in schools for Higher Education, if so requested by the Managers.

These duties are further amplified by the Special Services Regulations, which state that the Authority must provide for the medical inspection of children :—

(*a*) On their first admission to a Public Elementary School.

(*b*) On their attaining 8 years of age.

(*c*) On their attaining 12 years of age.

The arrangements of the Authority must include provision for the "following up" of defects found in the course of Medical Inspection ; the detection and prevention of uncleanliness ; the medical treatment of defects of eyes, teeth, minor ailments and enlarged tonsils and adenoids. In addition, the Authority, with the approval of the Board, may make provision for other forms of treatment, *i.e.*, orthopædic treatment, X-ray treatment, etc.

In Leeds the School Medical Service provides for the medical examination at the ages set out in the Board's Regulations ; the annual dental inspection and treatment of children 6, 7 and 8 years of age, and the continued treatment of children who have previously accepted the conditions of the Committee's Dental Scheme, and the inspection at least twice a year for conditions of cleanliness of all children attending the schools.

There are nine School Clinics which are all equipped for inspection work. Treatment is provided for minor ailments, defective vision, crippling defects, ringworm, dental defects, nose and throat defects, etc.

The services of Specialists are available for consultation in certain cases. Operative treatment is provided by arrangements with the local hospitals.

Each clinic is open on one fixed half day each week, on which occasion parents, teachers, nurses, and enquiry officers may send children in need of medical advice.

Spectacles, surgical appliances, malt and cod liver oil, and milk are provided through the Services free of charge to necessitous children, and on full or part payment in other cases.

All children reported as subnormal are examined by approved Medical Officers and, if certified as incapable of receiving proper benefit from instruction at ordinary schools, provision is made for them to attend Special Schools.

In "following up" defects the policy of the Committee is, in the first instance, to recommend parents to obtain medical advice. Children with defects are reinspected after an interval, and if the defect is not remedied the children are invited to the Clinics; in cases of neglect proceedings are sometimes taken against the parents before the Magistrates. All children with defects are reinspected every time the Medical Officer visits the school until the defect is remedied.

In about 75 per cent. of the cases parents appreciate what is done for their children, and render every possible assistance. In perhaps 20 per cent. the response is not so favourable but the object is attained with a varied amount of pressure. In about 5 per cent. stronger action is necessary to enforce treatment.

A child's medical record card should contain particulars of all essential facts affecting the medical history and not only an account of each routine medical examination. In Leeds, the record cards are filed at the Central Clinic, and particulars of any examinations, *i.e.*, scholarship, employment, inspections at the Clinics, treatment carried out at the Clinics, and also particulars of advice and treatment given at local hospitals are recorded on the scholars' record card, without which continuity of record Medical Inspection would lose much of its value.

Detailed records must be kept in order to supply vital statistics to the Board of Education, and also for local guidance as to the incidence of disease. Parents must be notified, and the cases " followed up " until satisfactory treatment is obtained.

There is one corollary, that Medical Officers give clear instructions for the benefit of the clerical staff.

One guiding principle has always been that every defect should be recorded to ensure that all such children are seen each year, for even if they do not need treatment at the moment, it may be necessary later. As an example, children with subnormal nutrition requiring observation are seen at least four times in the year, or given opportunities for being seen—sometimes in school, sometimes at the clinic. They are seen in school as reinspections at the time of routine inspection—and again at the time of reinspection and their other reviews take place at the Branch Clinics by invitation at suitable intervals.

Until fresh regulations are issued by the Board of Education I do not desire to make any great changes in our system.

By co-operation with the School Attendance Department, information as to transfers from school to school, leavers, etc. is available and the medical record cards are dealt with accordingly.

Over 10,000 examinations are carried out by the School Medical Service every week. A programme of work is issued weekly from the Central Office for Doctors, Dentists and Nurses.

I mentioned the importance of Research last year and it is gratifying to report that every member of the Medical Staff is undertaking or about to undertake an investigation into some problem connected with the Service. Amongst those in actual progress are Dr. Wood's investigation into the rate of increase in myopia, Dr. Hargreaves and Mr. Jordan into the causation of stammering, Dr. Willcock into certain problems associated with the Open Air School. Dr. Bebb is investigating questions of the employability of crippled children and also of those children known as " Dual Defect " cases. Dr. Prince is continuing her work in comparing the Nursery Schools and Nursery Classes and Dr. Holoran

enquiring into certain aspects of orthopædics. Other investigations are also in progress showing a very live interest on the part of the staff.

Staff.

Owing to the increase of work, caused by extra duties at the Training College, by the work of the Juvenile Court and the re-organisation of the Special Schools, it became necessary to appoint an additional Medical Officer, and Mr. Bernard Schroeder, M.B., Ch.B. (Leeds), was appointed to the post, and commenced duty in June. His appointment has enabled me to release Dr. Willcock from Branch Clinic duty and to have him available for more important work, to spend more time at the Central Clinic, and to assist in administrative duties. This rearrangement gives most of the Medical Staff a definite responsibility for some portion of the work, and for the organisation and efficiency of their particular section. This has not only added zest to their work, but will be more apparent in the reports as time goes on.

Dr. Galpine resigned in December, on securing the post of Port Medical Officer at Hull. He has been a particularly useful member of the staff, and his career will be watched with much interest. To fill the vacancy thus created Mr. Walter Wyatt, M.B., Ch.B., D.P.M. (London) was appointed, and has already commenced duties. He holds the very valuable Diploma in Psychological Medicine of the London University in Mental Deficiency, and is capable of taking an active part in any developments where psychiatry may be required when the necessary educational psychologists have been found.

As the acceptances for full dental treatment under the new scheme exceeded anticipations, it became necessary to increase the dental staff, and with the approval of the Board four new dental officers were appointed, namely, Mr. H. E. Gray, Mr. G. M. S. McGibbon, Mr. L. Moran and Mr. J. W. Shaw, who began work on the 3rd September, and the appointment made permanent from the 1st August, of Mr. A. H. Green, who had been previously a temporary officer. The four new officers were selected from a list of over thirty applicants, and are all of high professional standing.

This brought the number of dental officers up to 12, and placed more responsibility on Mr. Kinnear, the Senior Dental Officer.

It is probable that a further increase will be necessary, if the promises made of yearly treatment to all accepting children are to be carried out, apart from the real need for giving the 5 year old group an opportunity of receiving the care that, unfortunately, the majority of them need, for the state of the primary or milk, dentition in the city is bad. Mr. Kinnear will deal with this point in his section of the report.

In the Nursing Staff, a few changes have occurred. Nurse Payne, who was the first nurse appointed to the School for Physically Defective Children, in 1908, was unfortunately compelled by ill health to resign. Her services to the crippled children in Leeds can only be realised by her former pupils and those in close touch with them, but she will be remembered by hundreds of children who will wish her a long and happy retirement. Her place was filled by the transfer of Nurse Benson. Nurse Lanham left on her marriage, and as Nurse Hodgkinson's health did not improve she was compelled to resign. The vacancies were filled by Nurse Hodge, who later was transferred to the "Mothercraft" section, Nurse Atkinson, Nurse Holmes and Nurse Howgate.

New appointments as Dental Attendants were filled by Miss Leishman, Miss Rush, Miss Boyd and Miss Hudson.

Return of Number of Children on Roll on the 31st December, 1935.

Type of School.	Number of Schools.	Number of Departments.	Number on Roll.
Elementary—			
Council	77	172	40,628
Voluntary	53	95	18,685
Higher—			
Maintained	13	13	5,733
Non-maintained	5	5	2,093
Home Office	2	2	211
Special—			
Mentally Defective ..	5	5	410
Physically Defective ..	1	1	122
Blind and Partially Sighted	2	3	171
Deaf	1	1	98
Sanatorium	2	2	69
Nursery	1	1	99
Open Air	1	1	238
Total	163	301	74,557

Co-ordination.

Once again it is gratifying to report the valuable assistance we receive from the other Medical Services of the City.

There is a full transfer of relevant information from one Department to another, and to Dr. Jervis, Dr. Sharpe, Dr. Gladys Russell and Dr. Tattersall I would express my thanks for their help.

Dr. Tattersall now sends a list weekly of all known children who are contacts, and arrangements are made for these children to be supervised at the Branch Clinics, whence they will be sent again to the Tuberculosis Dispensary when necessary. These children will be carefully watched as regards nutrition, and the provision of milk, etc., urged where advisable.

Dr. Sharpe's work on immunisation against diphtheria will be referred to elsewhere.

Co-operation with the Public Assistance Committee, Hospitals, both voluntary and municipal remains unchanged, and I would add my thanks to the members of the staffs of the various Institutions for their help.

The interest of the Invalid Children's Aid Society in the School for Physically Defective Children is undiminished.

School Hygiene.

I must again call attention to the necessity for the conversion of all remaining trough closets in the Provided Schools. Whilst some of the work has been done in the past year, there are still many ranges requiring conversion, and I earnestly request your consideration of this matter.

A young child's lessons in hygiene must be practical ones, formal lessons are impossible and yet one of the most valuable is lost if proper sanitary appliances are not available.

Previous remarks about ventilation still apply. Registers have to be marked and consequently the first period is almost always a quiet one, and unless children have taken exercise before coming into school they are likely to feel cold. Windows are too often shut on cold mornings with a consequent increase in catarrhal conditions and infections. A well ventilated classroom coupled with the usage of every possible bit of sun is the best way of securing

a full attendance. Disinfectants cannot compete with sunlight and fresh air as a means of preventing disease, and in some cases their only action is by their odour to secure the opening of windows.

It is interesting to note that the old practice of building schools on main roads or tram lines is abolished, for classrooms are known where the outside noise makes ventilation almost impossible if education is to be attempted.

I wrote last year about the need for better artificial lighting of school rooms. The fact that there is either gas laid on or wiring for electricity does not mean that the room is adequately lighted. The essentials are :—

1. Adequate illumination on the books, desks, and black-boards.
2. Absence of shadow.
3. Absence of glare,

whatever means of lighting are used, and only too often all these essentials are lacking. Frequently it is found that artificial lighting is required in one part of the room only but to secure this all the lights must be used. I would suggest that the services of the lighting experts in the Corporation Service should be invited in the solution of this problem, which may have an important bearing on defective vision in school children.

Whilst the newer cloakrooms are a definite improvement on the older ones, there is still an absence of drying facilities, and dampness of clothing as a factor in the production of rheumatism has not been disproved.

The desk question has been referred to for some years and still remains. Unsatisfactory conditions of this kind do much to undo all the benefits of physical education. It is doubtful whether anything short of individual and adjustable desks will ever be satisfactory.

One of the latest non-provided schools has been equipped with Shower Baths and this example might be copied with advantage in all future building, and, as stated elsewhere, the provision of

hot water would prove more than a blessing. I venture to suggest for your consideration the advisability of its installation in the schools to be built.

Medical Inspection.

The statutory requirements of the Board have all been fulfilled and a check shows that the age groups have been fully covered. As expected we show a decrease, but very few children slip through the net because of the system of dealing with absentees at Re-inspection time.

Findings of Medical Inspection.

Summary of Defects referred for Treatment or Observation—Elementary Schools.

Defect.	Routine Cases.	Special Cases.	Total.
Nose and Throat	5,106	1,925	7,031
Tuberculosis	27	70	97
Skin Disease	580	10,418	10,998
External Eye Disease	244	1,395	1,639
Vision	3,730	5,340	9,070
Ear Disease and Hearing ..	732	1,499	2,231
Dental Defects	—	—	14,956
Crippling Defects	2,040	1,187	3,227
Other Defects	4,337	6,925	11,262

Following up and Uncleanliness.

The system of "following up" remains unchanged, and there are no points for particular emphasis at present.

Strenuous efforts have been made to reduce this problem, the improvement in which during the last few years has not proceeded as rapidly as could be wished.

Cleanliness should be the real duty of the School Nurses and clinic work not allowed to interfere. It is unpleasant and Nurses often have much to put up with but, so long as children can remain as a possible danger to others, this work must continue.

During the year there have been 134,514 primary inspections for cleanliness, which means that every child has been examined twice, and 48,208 reinspections amongst children whose cleanliness is not absolute; many of these receive immediate attention and the remainder consist of those children who are a menace to the community. There are children who have been seen by Nurses every month and if cleansed are found in the same unpleasant state a few weeks later.

During 1935, a scheme has been brought into use which will enable us to show the constant offenders at once, and possibly enable more drastic action to be taken in these cases.

Careful parents have a right to expect that their own youngsters shall not run the risk of contamination, but unless monthly examinations of this infected minority are continued the general condition would become worse. Actually the number of exclusions show a slight increase as do the number of warning notices sent, but even these do not show the extent of the work done.

So long as children remain in school with nits in their hair, others can be infected because every day there will be some hatched out. Children are never excluded for nits alone until every chance has been given to the parents to put things right, and often three or four months elapse before such action is taken, and it is hoped that the new system will enable us to shorten this period among the persistently unclean.

Summary of the Work of the School Nurses, 1935.

(A) Inspection—	1935.	(1934).
Number of visits to School Departments	5,693	(5,755)
Number of Children Examined*	158,524	(151,559)
Number of Reinspections	48,208	(49,937)
Number of Defects discovered—		
Uncleanliness of Head	12,672	(12,511)
Uncleanliness of Body	2,329	(3,042)
Other Defects	2,413	(2,479)

*In addition to the usual examinations this figure includes Special Examinations, viz., special vision cases, Doctors routine cases, etc.

(B) Visits to Homes	165	(205)

(C) Proportion of Time Given to Different Sections of Work.

	1935.		(1934).	
	Hours.	Per cent.	Hours.	Per cent.
Clinic Work	29,896½	72·9	(29,402)	(72·1)
Examinations in Schools	10,833¼	26·4	(11,044)	(27·1)
Visits to Homes	148¼	·4	(174½)	(·4)
Other Work	121½	·3	(147¾)	(·4)
	40,999½		(40,768¼)	

(D) Summary of the Work of Masseuses—

	1935.	(1934).
Number of Visits to Homes	37	(14)
Number of Children Treated	684	(395)
Number of Treatments	28,142	(28,687)

Arrangements for Treatment.

The arrangements for treatment are the same as in previous years.

Nutrition and Provision of Meals.—The work of investigating the nutrition of school children still occupies a good deal of the time of your Medical Staff, for to quote Sir George Newman in 1908, " a satisfactory state of nutrition in the child is the first essential to sound physical health " and I have no doubt that, to-day, the mental health could be not specifically excepted, and in 1925 he states that " the provision of school meals was never meant to be a mere form of Poor Relief: it was to be educational, economic, medical, preventive." Again in 1933, " the Education Authority can feed the child (in various ways and by various devices) and it can teach the child or its parents the sound conditions of nutrition. Over such factors as employment, housing, or rent, it has no direct power, but it is empowered by Parliament to feed and teach " and he concludes with the obligation to provide adequate instruction in the hygiene of nutrition.

It is often suggested that poor nutrition is due to lack of food, thus making the problem an economic one especially in times of industrial stress, whereas the real question frequently resolves itself into the suitability of the food provided coupled with the necessary assistance of such things as adequate rest, exercise and fresh air. Poverty is not the sole cause of malnutrition for there are many children who would benefit by correct feeding who are not eligible for free meals, and consequently are denied the advantages of the system because their parents are thought to be able to supply proper nourishment. In fact the numbers of children for whom meals are supplied on payment are negligible. The survey, however, shows that signs of malnutrition are spread all over the city and are not confined to the slum areas. Further, it must be realised that there are many children who are eligible for free meals on the income basis, but whose parents decline, for various reasons, to make application.

There are about 1,500 children getting free milk at present who do not get free dinners for which they are eligible. Some doubtless would apply if there were a centre more agreeable to them—distance being a deterrent. Often it is felt that some stigma attaches to the dinners which does not apply to the milk, especially in a street where most children are fed at home. No child knows whether its next door neighbour is paying for his milk or not, but such a statement would not be true of free dinners. But it is a fact that parents do dislike their children going to dinners, especially if there is any distance to cover. In one area of the city where the dinners are comparatively close at hand, there are 420 children having free dinners, milk and apples, and in some cases Cod Liver Oil as well, but there are 115 children in addition who are eligible but whose parents have made no application. It is interesting to note that out of a school population of over 3,000 in this area there is only one child referred for treatment and two for observation as cases of real malnutrition.

At the beginning of 1935, fresh instructions as to the classification of nutrition were received from the Board, the results of which are :—

Number of children examined ..	19,983.	
Number noted as above normal	2,212 or 11	per cent.
Number noted as normal ..	14,684 or 73·5	,,
Number noted as slightly sub-normal	2,995 or 15	,,
Number noted as bad nutrition	92 or ·5	,,

but of these 92 only 53 were referred for treatment, 18 for observation only and 21 were not referred. It may safely be said that only 53 children were in need of treatment and that this is the real important figure giving a percentage of ·26. It is true that this number is twice the finding of 1934, but on an entirely new method of classification which makes comparison difficult, as the total number ascertained is still relatively small. Close analysis of the 92 cases shows that 51 are girls and 41 boys, and at least 44 schools are affected, representative of every area and class in the city, and there are no outstanding examples.

Efforts have been made to make the diagnosis on clinical evidence alone with the result that correlation of the figures of individual Inspectors becomes impossible. It is, therefore, interesting to make a check by means of the Wt/Ht formula suggested in Leeds some years ago.

Analysis of a series of 1,175 cases reveal that in 286 or 25 per cent., classification was not made in accordance with the tables, showing that clinical judgment has overridden any judgment based entirely on Height Weight Age ratio. Theoretically the use of such tables as a guide should tend to reduce the variation between Medical Officers, but such a conclusion is not borne out by the analysis of the 92 cases. But the fault in pure clinical assessment lies in the fact that it is personal opinion and that over a series of cases there will be different views. This is borne out by the large number in the " slightly subnormal " group which appears in the Board's table for the first time.

For some time we have shown returns of children of " subnormal " nutrition needing treatment or observation which in 1934 was just under 4 per cent. as compared with the 4·7 per cent. of 1933. This year, by the addition of the word " slightly " the figure has jumped to 15 per cent., which I am satisfied bears no real relationship to the problem, for there are certainly not four times the number of subnormally nourished children in the city. The chart of weights in last year's report showed an increase in weight over a period of years with occasional slight variations. The 12 year old group still shows marked gains as compared with the weights for 1934, the boys being ·8 lbs. heavier and the girls ·6 lbs. The 8 year old group shows a decrease of ·1 lb. or 1½ ozs., whilst the 5 year boys are down the same amount, but the girls are up ·2 lbs. or 3 ozs. This 15 per cent. represents 2,995 children shown as of slightly subnormal nutrition and includes all grades down to really bad. Of these 417 are referred for treatment, 555 for observation and the remainder 2,023 requiring neither treatment nor observation. In 1934, we showed 512 children in all requiring treatment, and 350 for observation. The corresponding figures for 1935 are 470 and 573. The percentage for 1934 was just under 4 per cent., the figure for 1935 is 5·2.

The variability of these findings is doubtless due in part to the Board's new requirements, but also to the extra stringency devolving

on Medical Inspectors to classify all children examined under four headings whether needing treatment or not, and bringing up once again the essential difference between Physique and Nutrition, the former denoting the natural constitution of the individual, the latter the process of promoting growth.

In the use of any tables it is well to bear in mind that the average is not the optimum and in clinical assessment that there is the Racehorse as well as the Shire Horse type, and that the Racehorse is as well nourished as the Shire, even if the weight is not comparable.

The methods in use to counteract the effects of insufficient or improper feeding now follow :—

The Supply of Milk.

Circular 1437 will doubtless become known in time as one of the most valuable contributions made to the welfare of children.

Although there has been some decrease in the number of children taking milk, even now nearly half the school population are having their daily ration, which seems to be stabilised at about 32,000 bottles a day. The total number of bottles supplied was 6,943,095 of which 771,453 were supplied free, and it is interesting to note that whilst the free cases remained stationary, the decrease occurs in the number of bottles supplied on payment.

The innovation of the year was the continuance of the supply during holiday times to necessitous cases. All children receiving free milk during term time were supplied with tickets which enabled them to take their bottles at some convenient school. It was not possible to send supplies to every school, but arrangements were made with twenty caretakers to distribute bottles in exchange for tickets and to see that the milk was drunk and not taken home.

Although attendance varied, approximately 50 per cent. of those eligible availed themselves of the offer except during the Christmas Vacation when only 40·1 per cent. appeared. The biggest number issued was 1,670 on December 23rd and the lowest 942 on December 27th—the total number eligible being 3,364. Amongst reasons given for non-attendance were inclement weather,

dark mornings and sleeping in, especially as children were expected to be at the centre by 9.30 a.m. This time was specially arranged so that there should be no claim that milk spoilt the appetite for dinner. Although the number of children attending is disappointing, the experiment deserves continuation, but it must be remembered that the suppliers had large numbers of bottles returned to them unconsumed.

All old contracts ended on the 30th September, 1935, and new contracts which began on the 1st October contained the proviso that all milk must be pasteurised. Only a few suppliers did not renew, most of them being able to make arrangements which were satisfactory to the Medical Officer of Health. So far as can at present be seen, the introduction of pasteurised milk does not appear to have affected the demand to any great extent.

In one case an offer of a quantity of Grade A tuberculin tested milk at contract price had to be declined as the bottling arrangements were not satisfactory to the Medical Officer of Health. This is much to be regretted as the quantity offered would have been enough to supply one large school department and enable us to compare the two kinds.

There can be no doubt that certified milk or Grade A tuberculin tested would be more beneficial if it could be supplied at a suitable price, for whilst pasteurisation does make milk " safe " yet there are two objections, first that chemical changes however slight do take place and second, that there is no guarantee of the freshness of the milk. What is really required is a supply of clean and safe milk, properly handled and this must remain the ideal although until that time comes pasteurisation must remain.

Both Doctors and Teachers are convinced of the value of the milk ration properly consumed at a proper time. It must be taken slowly and not gulped : it must be taken at a time when it will not have injurious effect on the next meal and, therefore, our practice in Leeds is to take the milk as early as possible even before school and certainly not later than 10 a.m.

The morning break should be utilised for hygiene and exercise ; milk consumed at this time is either gulped or used as an excuse for

neglecting those two important points. Milk taken early acts as a corrective for improper breakfasts and helps to spread the necessary intake over a long period, and further does not spoil the child's appetite for what should be its main meal at mid-day. It was found in Leeds very early that many parents stopped milk because the child did not eat its dinner.

No figures are shown this year comparing weights of regular milk takers with non-takers, as there is agreement that weight alone is of doubtful value. What would be of far greater use would be a comparative test of two big groups of children living under similar conditions taking certified milk or some other clean pure milk and pasteurised milk respectively. But such an investigation is not possible locally at present, for whereas we had 1,320 children taking Grade A milk in March, 1935, there are none now.

The suppliers in general have been both helpful and careful, although some complaints have reached us as to contamination and have received immediate attention, but I would again stress the point that there is little advantage in "safe" milk in schools if the home supply is not up to the same standard.

Provision of Meals.

As in previous years, the quality of the food is excellent, and the menus as varied as possible when dealt with in a Central Kitchen and distributed by motor van. But this system does restrict output to dishes which are transportable and which are consequently of the "soft" type.

The children do enjoy their dinners, and all are also in receipt of a bottle of milk and an apple. Consequently, their daily intake as regards essentials is well regulated.

During the year 539,715 dinners have been issued as opposed to 520,746 in 1934, there having been a regular increase for many years. Of this number 491,756 were supplied from the Central Kitchen, 31,597 at Special Schools and 16,372 at Special Centres.

Three Nursery Classes, viz. :—Kirkstall Road, Richmond Hill nd St. Peter's Square are supplied from the Central Kitchen, a special menu being used as well as special containers. Some of these meals are paid for by the parents.

At all schools for retarded children the meal is cooked on the premises and many children get their dinners on payment and it is much to be desired that this system should extend. The meals brought to school are most unsatisfactory, and often cost much more than the dinner available. In no case is there more need for proper dieting than in this group.

Dinners at the School for Physically Defectives are still supplied through the Invalid Children's Aid Society, who receive a grant of £50 per annum from the Committee in addition to being paid for all "free" cases.

Included in Special Centres are meals cooked on the premises for the Green Lane Nursery Class and at the Roundhay Road (Partially Sighted) School. The daily supply has varied, the highest number reached being 2,528 in February, and the lowest 2,215 in September.

It is still to be regretted that the numbers supplied on Saturdays are only about 50 per cent. of those entitled and on other days the attendance is often down to 80 per cent.

Whilst the Supervisors do all that they can there is sometimes a lack of discipline at the Centres. The children do not come with clean hands and faces and cloakroom provision is not used—both points that need attention.

It will be seen that there are various methods available for improving nutrition but, except for milk, these agencies are only used by children on the free list and subnormal nutrition is not confined to them, but is met with equally amongst the remainder. In many instances where the Doctors advise extra feeding the parents' income is over the Scale and consequently it is impossible to be sure that the feeding is adequate.

Whilst parents do pay for dinners at various Special Schools—a practice that is deservedly increasing—this does not apply to what are known as "School Dinners."

Provision of Apples.

All children in receipt of free dinners now receive an apple in addition. This is issued to them with their milk, but generally speaking is consumed when they wish. The provision of fresh

fruit in a child's dietary is very important as it contains certain valuable vitamin elements. Further, it has a useful corrective action and helps to clean the mouth—a point alone which makes the issue useful.

Whilst the proverb that "An apple a day keeps the Doctor away" may or may not be true there is evidence that the attendance amongst apple takers is above the average.

I have consulted many Head Teachers and very few are not whole-hearted in their appreciation of the results, which cannot be judged by merely weighing and measuring.

There are many children who would benefit who do not, and cannot under the present system, get their apple, but there is far too little fresh fruit in the dietary of our children and the experiment is worthy of expansion. At present apples are only issued on the income scale, and it would be worth while to substitute them for Cod Liver Oil in some cases.

Extract of Malt and Cod Liver Oil.—9,669 lbs. of Extract of Malt and Cod Liver Oil have been issued during the year, a decrease of about 2,000 lbs. as compared with the previous year. The cost was £191 7s. 4d., and the sum of £153 18s. has been received from the parents.

Minor Ailments and Skin Diseases.—There is a welcome decrease in the number of minor ailments treated, but in one respect this is more apparent than real.

The attendances shown as due to malnutrition are largely those of children attending for the daily doses of Cod Liver Oil, increasing numbers of whom now receive it at school. The only important visits to the clinic for this are the periodical ones required for the children to see the Doctor. Under present arrangements all such children are seen four times each year, when the necessary advice and instructions are given.

There is an increase in the number who attended for conditions of uncleanliness due to the tightening up of procedure.

The use of more permanent dressings should lessen the number of attendances per child, but the need of soap and water both earlier and more often is still evident. Much could be done if hot water were available in the schools.

Visual Defects and External Eye Diseases.—The treatment of the various external eye diseases, such as blepharitis, etc., still occupies a big place in the work of the clinics, although there is a decrease in the number of attendances. Some of these conditions demand long and constant treatment, and are a source of anxiety. No cases have been recommended for residential school during the year, but one or two have spent a period in the Open Air School with variable success.

The Nursing Staff still undertakes all vision testing both as a preliminary to routine inspection, and to annual reinspection of children known to have defective vision, and by continuation of methods previously described we have now arrived at satisfactory results with most of the 5 year old children. If a test is not practicable at five by matching, the child is seen frequently until a result is obtained, and it may be claimed that we have a vision record always before a child is six. This means that children are now refracted and, where necessary, glasses prescribed some two or even three years earlier than the old scheme allowed. It is true that sometimes parents are afraid of young children wearing glasses, but generally they are thankful for any advice that will safeguard the sight.

During the year 578 of these young children have been refracted, of whom 451 or 78 per cent. were found to need spectacles. In 127 or 22 per cent. glasses were not necessary. These 578 are not all new cases during the year; some children have already had two annual examinations and in a few cases three. Many of these children will get annual refractions for some years in an endeavour to preserve sight and to sustain working efficiency. To ensure that all such children do get retested regularly, the following arbitrary standards are adopted :—

Where the light reflex on refraction turns at :—

1. Under + 1D.Sph. the eye is considered myopic and is refracted annually.
2. At + 1D.Sph. to + 1·25D.Sph. the eye is considered emmetropic and is kept under observation.
3. Between + 1·25D.Sph. - + 1·75D.Sph. low hypermetropia and is kept under observation.
4. At + 2D.Sph. or over the eye is considered to be hypermetropic.

Emmetropia is the word generally used to denote normal sight in the adult, but there is little doubt emmetropia and low degree hypermetropia in young children do eventually become myopia by the normal physiological growth of the eyeball, and for this reason groups two and three are kept under observation and are subject to frequent refraction like group one but it is impossible to make it annual in every case.

During the year the numbers so tested at varying ages have been :—

3 years	9
4 ,, ...	52
5 ,, ...	136
6 ,, ...	192
7 ,, ...	189

Of the last group rather more than half have been retests.

The following Table shows the analysis of 1,286 refractions of young children since the scheme was put into operation in 1933.

	R.	%	L.	%
Emmetropia	43	3·4	42	3·3
Emmetropic Astigmatism	50	3·9	29	2·2
Hypermetropia	610	47·4	603	46·8
Hypermetropic Astigmatism ..	390	30·3	420	32·7
Myopia	76	5·9	78	6·1
Myopic Astigmatism	53	4·1	54	4·2
Mixed Astigmatism	64	5·0	61	4·7
Anisometropia	296 cases or 26·2%			

This is chiefly of interest in that it shows that 77 per cent. of all eyes examined are hypermetropic or long sighted and confirms the view that hypermetropia and not emmetropia is the normal for young children. It also shows that in 296 or 26·2 per cent. the eyes differed in the same child.

The standard of visual acuity usually accepted as not requiring refraction is that the child can see at 6 metres what should be seen at 12. Vision worse than this is always recommended for refraction, and also some of this group where there are other signs, such as headache, but all are subject to annual reinspection.

The total number of children refracted during the year is 5,391 in 949 sessions (equivalent to two full time medical officers) but there is a slight decrease in the average number per session. This is partly due to failure to keep appointments and partly to the parents' consent forms not being signed, and both cause waste of time. This has been especially noticeable on sessions during holiday periods or on days when schools are closed.

One note of warning must be sounded here : glasses are only prescribed when it is in the interests of the child and parents should satisfy themselves that they know when glasses should be worn by asking the Doctor. Too frequently are glasses only worn in school and even left there. No benefit can be expected unless they are worn as ordered.

Ear, Nose and Throat Defects.—The treatment may be classified under two headings :—

1. That done at the Branch Clinics.

2. That done at the Central Clinic under the auspices of the Consulting Surgeon to whom cases are referred.

Mr. Sharp has attended on some seventy sessions and over 1,200 new cases in addition to reinspections have passed through his hands.

During the year he has recommended operative treatment in 389 cases, of which 118 accepted treatment under the Authority's Scheme, and 102 children were admitted to the Dispensary for operation, and 18 were outstanding on the 31st December. Further, 161 operations were arranged by the School Medical Department through the Leeds Workpeople's Hospital Fund. It will be noted that in the majority of cases treatment other than operation was advised. This still consists of daily douching of the nose and throat which has proved itself of value for many years.

There is no doubt that not only would many nose and throat operations be avoided, but much ear disease as well were it realised that early and regular douching is a real preventative.

The work at the Branch Clinics remains as before. Children attend as requisite for treatment on the advice either of the Consultant or the Medical Officer in charge, but in all cases "nose drill" is taught until it becomes a habit.

It will be noted that no less than 1,657 operations for nose, throat and ear conditions are known to have taken place during the year, a figure that must give much food for thought.

Summary of Ear, Nose and Throat Work, 1935.

	Ear.	Enlarged Tonsils.	Adenoids.	Enlarged Tonsils and Adenoids.	Other Conditions.	Total
Number of cases of Ear, Nose and Throat Defects referred by School Medical Officers for treatment ..	2,118	891	101	866	2,843	6,819
Number of cases which have received operative treatment—						
By the School Medical Service ..	1	2	3	92	4	102
By General Practitioner or Local Hospital.. ..	53	26	5	1,416	55	1,555
Other Forms of Treatment—						
By the School Medical Service ..	1,468	76	67	483	868	2,962
By General Practitioner, Local Hospital or otherwise	610	663	5	70	1,411	2,759
Total Treated	2,132	767	80	2,061	2,338	7,378*

* This figure includes all children of school age sent by General Practitioners as well as the School Medical Officers, treated during the year at Local Hospitals.

Orthopædic.—This work continues under the guidance and supervision of Mr. Daw, who not only has regular sessions at the Central Clinic but periodical visits to the School for Physically Defective Children.

Summary of Orthopædic Work.

	In 1935.	Since Inception of Scheme.
Number of Children examined by the Orthopædic Surgeon—		
New Cases	246 (183)	2,741 —
Reinspections	1,025 (945)	5,833 —
Number of Children recommended for—		
(a) Operative Treatment	46 (50)	641 —
(b) Surgical Appliances	152 (117)	1,568 —
(c) Remedial Treatment	164 (124)	1,531 —
Number of Children treated under the Committee's Scheme—		
(a) Operative Treatment	13† (9)	294 —
(b) Surgical Appliances	140* (114)	1,462 —
(c) Remedial Treatment	157 (120)	1,492 —
111 children have been discharged as cured.		
Number of Cases sent to Country Hospitals	2 (4)	60 —
There is one child still in a Country Hospital.		

*In 64 cases appliances were supplied free, or parents were allowed to pay by instalments.

†Although the Education Committee has only been responsible for the cost of 13 operations, actually thirty-one have been arranged through the Orthopædic Scheme, one was performed at St. James's Hospital, and in 14 other cases there was no charge because the parents contributed to the Leeds Workpeople's Hospital Fund, and the London Midland and Scottish Railway Hospital Fund undertook responsibility for the remaining 3 cases.

52 children have been X-rayed at the Leeds General Infirmary.

The new cases seen during the year are classified as under :—

Rickets	94
Curvature of Spine	42
Tuberculosis	8
Paralysis	19
Others	83

This work is particularly associated with the massage and remedial exercises department, and here is one avenue of expansion. Physical training is well understood and so are remedial exercises, but the connection between the two is not.

It is evident that remedial exercises to one or two children cannot be given during ordinary physical training lessons, and every effort is being made to hold small remedial classes at each Branch Clinic. This means less actual massage but active exercise and movement is always better than passive under similar circumstances.

There is certainly need for remedial exercises which will be continued.

All cases from the Babies' Welcomes are now transferred to us so quickly that gaps during treatment tend to disappear.

Heart Disease and Rheumatism.—The numbers of children listed as suffering from heart disease remain much as before and although this matter has received sympathetic hearing from the Committee in times past, nothing has been done up to date to deal with what is undoubtedly the greatest scourge of childhood. It was, therefore, with great relief that I received the Board's recent administrative programme of Educational Development in which the provision of resident treatment is advocated.

It must be understood that rheumatism in children is an entirely separate condition from that of adults in that there is always a grave risk of the heart becoming diseased, a condition which is certainly one of the most severe forms of crippling, and probably the most severe and attempts must be made to prevent it.

Some children are born with heart disease but the vast majority owe their defect to acute rheumatism of which the only sign may be "growing pains" or recurring sore throats, and frequently signs of damage to the heart do not show themselves for some time.

In the early part of 1932 I presented a memorandum to the Committee drawn up with the co-operation of Professor C. W. Vining, in which it was pointed out that the main objective must be prevention. Although a scheme presented at that time received the support of the Committee, the Board was not able to give their approval. Consequently it becomes necessary to restate the position, and make clear the fact that the Hospital Services of the country neither can nor should undertake the lengthy period of treatment that such eminent physicians as Dr. Vining advise, and which may be eighteen months or even more.

A classification of rheumatic children into four groups was made.

1. Children acutely ill with rheumatic fever or acute chorea with or without rheumatic heart disease. These are, for the time being, cases for the private doctors and hospitals. They are temporarily unfit for any form of school or education.

2. Children with established heart disease with efficient muscular compensation. These children, while requiring medical supervision by the private doctor or school medical officer, are usually fit for school and may live a normal life with certain reservations as regards games, drill, or exercise generally. Some of these children would undoubtedly be very suitable for the Open Air School.

3. Children with established heart disease suffering with temporary or more or less permanent cardiac breakdown with loss of compensation. Such children are cases for the private doctors and hospitals and are temporarily or permanently unfit for school of any type.

4. Children who have previously been in class (1) or children who have, within recent weeks or months, suffered from their first or second attack of rheumatism of a milder and more insidious type and who have quite recently developed signs of valvular affection of the heart. These are the children to concentrate upon very specially and who require energetic hunting for and who are urgently in need of care and supervision.

It will be understood that it is the Class four children for whom provision is required.

Dr. Vining remarks that it is a great mistake to keep "well" children of school age in bed for long periods of time with nothing to do mentally, and there is no reason why their education should not be continued during this very important period of cardiac

convalescence. He is constantly sending me the names of suitable children and has offered his assistance. Most of the cases will come through him, because the children, at the time the treatment should begin are not at school.

The best way to deal with the problem is to utilise some portion of the Lawns House site and build thereon the necessary accommodation for fifty children, a number which should meet the need for the city. The children must be resident and, whilst it is not advisable for them to become an integral part of the Open Air School, there is no reason why the Headmistress should not be put in charge educationally, nor the Matron for administration and management.

There is plenty of room available not only for such provision but also for further resident accommodation for the Open Air School, urgently required to make more room in the administrative block. Whilst this matter will be referred to later I hope the question of accommodation for the prevention of heart disease will receive your sympathetic consideration. Such children could then receive a full and sufficient education coupled with the requisite convalescence that should appreciably reduce the number of persons with organic heart disease, most of whom have difficulty in finding satisfactory employment as they are so frequently rejected by the Factory Surgeons.

Tuberculosis.—The figures shown in the Board's Table might be considered inaccurate without some explanation, for it will be observed that no children are shown in attendance at the Elementary Schools suffering from pulmonary tuberculosis. But the Board's instructions are that only cases requiring treatment at a sanatorium or elsewhere should be recorded, and any other children merely requiring observation are shown under the heading of "delicate," this group including most of the non-infective types.

I am grateful to Dr. Tattersall for the following figures showing the incidence of juvenile tuberculosis in the city comprising all cases under the age of 15 and therefore not all school children. Further, in the cases marked "TB –" no tubercle bacilli have been found in the sputum or elsewhere, whilst in the cases marked "TB +" bacilli have been found.

On the 31st December, 1935, there were on the books :—

Pulmonary tuberculosis including pleura and intrathoracic glands :—

TB –	Boys	..	138	
	Girls	..	122	
			——	Total 260
TB +	Boys	..	2	
	Girls	..	2	
			—	Total 4

Non-pulmonary tuberculosis including glands, bones, joints, etc. :—

Boys	..	123	
Girls	..	91	
		——	Total 214

Of the above the primary diagnosis was made during the year :—

Pulmonary TB +	..	4
Pulmonary TB –	..	43
Non Pulmonary ..	..	44

Of the above 43 TB – 24 are in attendance at Elementary Schools on the recommendation of the Tuberculosis Staff as being non-infective, although they are kept under observation. These are recorded as " delicate " children, in with those of the 260 who are of school age, the majority of whom have now become either quiescent or arrested. All such children are seen at least once a year.

The 4 cases marked TB + are not in school. Of the non-pulmonary types, 23 of the more serious are either at Alton or Thorparch, and 13 either in the Hollies or Killingbeck. Most of the remainder being classified as " delicate " or " cripple."

Arrangements have now been made for names of " contact " children to be brought to the notice of the School Medical Officer for periodical overhaul.

REPORT OF THE SENIOR SCHOOL DENTAL OFFICER

Mr. R. DRUMMOND KINNEAR, L.D.S., R.C.S.

The year just concluded has seen the development of the new scheme of dental inspection and treatment which was put into force in October 1934, particulars of which appeared in the Report for 1934, and although progress has not been quite what was hoped the experience has enabled us to estimate with more accuracy the amount of work necessary to provide for in an annual inspection of the children eligible under the scheme.

Strenuous efforts were made to cover the examination and treatment of all the schools in the city but this was found to be impossible. In July 1935, it was realised that the new scheme could not be carried out with the existing staff and it was estimated that six additional Dental Officers would be required to carry out the work. Application was made to the Board of Education who approved the appointment of four additional men but it was understood that a further application in the next financial year would receive favourable consideration.

Staff.—The staff now consists of twelve full time dental surgeons with twelve dental attendants operating twelve surgeries in seven clinics. Four new surgeries were established in existing premises to accommodate the additions to the staff so that the strength of the organisation is now disposed as follows :—

CENTRAL, adjoining the Education Offices	3 Surgeries.
ARMLEY, 29, Town Street	2 ,,
BURLEY, Willow Road	1 ,,
EAST LEEDS, Harehills Lane, York Road end	2 ,,
EDGAR STREET, off York Road	1 ,,
HOLBECK, Sweet Street West	1 ,,
HUNSLET, Powell Street, off Church Street	2 ,,

Equipment.—The equipment in the various clinics having been installed many years ago had become out of date and a source of definite inconvenience. The Committee decided to ask Professor Talmage Read of the Leeds Dental School to co-operate with his advice and experience in bringing the clinics into line with modern views on the type of equipment and general surgery arrangements most suited to our needs. Professor Read visited the various clinics and apart from the out of date equipment, found it necessary

to criticise the general lay-out of the waiting rooms, surgeries, wash-out rooms and lavatory accommodation in the majority of the premises but these faults could not be rectified without considerable expense and structural alterations. This may be borne in mind however should the necessity to erect new clinics arise.

The type of equipment—Unit—now installed in every surgery makes for easier conditions of work for both patient and operator and is a practical necessity where a high standard of treatment is carried out under considerable pressure. These Units have proved their value in several directions. Attention was paid to the minor conveniences of the surgeries such as the positions of the wash basins, sterilisers, general lighting, etc. Previously many of the dentists had to attempt to carry out delicate work in a poor light but such hindrances to efficiency have now been greatly improved. Professor Read advised that one surgery should be equipped for the treatment of special cases for in a scheme dealing with thousands of children many cases arise which are outside the normal routine but as these children have entrusted the care of their mouths to the Service it is only right that means should be at hand to deal with the unusual. For this purpose an X-Ray plant was installed and has already, during the past six weeks, proved its immense value in quite a number of cases. Leeds may congratulate itself on another pioneering venture towards better health for the school children, for before many years have passed every Authority may find it advisable to provide themselves with this means of assisting the ordinary clinical diagnosis of dental diseases and allied conditions.

Professor Read also advised that the present type of apparatus used to induce general anæsthesia should receive critical attention and the method employed be brought into line with present day knowledge of this subject. To this end a McGill gas and oxygen machine was purchased and has proved itself a great advance on the simple type of stand. This machine, which is referred to later, should provide data to be used as the necessity for replacement of the existing simple stands in the other clinics arises.

I should like to put on record my appreciation of the assistance and advice rendered by Professor Read. All those who may benefit directly or indirectly have reason to be grateful for his generous collaboration.

An unfortunate amount of time has been lost by reason of sickness, alterations to clinics, etc. In all, this accounted for

some 200 sessions but much of this is abnormal and should not occur in any other year. It is to be hoped that the staff will be more fortunate in the matter of illness in future.

Supervision.—A considerable amount of extra supervisory work was occasioned by the alterations to the surgeries and in addition, the launching of the new scheme has entailed duties which may not be necessary to the same extent in future years. An effort has been made to curtail the normal supervisory time to two sessions per week but it is doubtful if this is sufficient for a scheme the size of that in Leeds.

The progress of the scheme along with suggestions for improvement and matters of general interest are discussed by the whole staff of Officers at a monthly meeting held in the Central Clinic. The new Officers have settled to the routine of a school clinic with commendable adaptability and have proved a valuable addition to the organisation. A period of "settling down" is expected and allowed for as the transition from one type of work to another is a definite factor to be considered. The pressure of work achieved by the experienced school dental officer is not attained without practice and application, which however is now made less arduous by the Unit equipment.

Clerical Work.—A definite shortage of clerical assistance in the Section has added to the time occupied out of my professional duties and this is a position which is not economically sound as professional time given up to minor but essential work is derogatory to the main purpose. The Dental Attendants have become "chair-side assistants" under the new system of work in the clinics, to the benefit of the work and the patients but they have to find time as best they may for clerical duties and some relief is urgently required. It is not unreasonable to suggest that the work carried out by 12 dental officers and their attendants amongst some 60,000 children must require a definite quota of clerical aid. The Attendant is very fully occupied in the keeping of a modern surgery and the many minor but important chair-side duties in connection with the clinical work so that relief from all but the immediate recording is desirable.

Record keeping is reduced to a minimum consistent with the proper running of the scheme but even so the Attendants are working under difficulties, and it is hoped that this position may be rectified in the near future by additions to the clerical staff.

In Leeds there is a wide field for the collection of interesting data other than the merely routine but for the reasons just mentioned it has not been possible to take advantage of this.

Progress.—The method adopted in introducing the new scheme into each school has been to circularise every parent with a pamphlet explaining in simple language the aims and objects of the Service. Along with this there is given the dental record card which is provided with a space for the parent to sign either accepting or refusing the offer. So far as possible an answer one way or the other has been secured from every child and the teachers are due a word of thanks for the trouble they have taken.

Since the inception of the new scheme 48,096 children have been circularised and the acceptances have totalled 33,587 or 69·8%. The delay in dealing with the children was only partially rectified by four additional Officers and although the staff of 12 has only been in operation for some four months the estimation set out below will make clear the reason why the intentions of the scheme cannot be carried out unless provision is made to deal with the numbers accepting the offer of treatment.

Approximate number of children 6 years of age and over on Roll in Elementary and Special Schools	52,000	
Average rate of acceptance 70% ..	36,400	
Referred for treatment 93%	33,852	
Actually treated 79·5%	26,912	
To be dealt with at the clinics (approximately)		27,000
Eligible cases in Secondary Schools		1,100
Blind and Deaf and Home Office Schools ..		400
TOTAL		28,500

In considering these figures it is essential to bear in mind that Sir George Newman, until recently Chief Medical Officer to the Board of Education, has stated on several occasions that one dentist can not treat efficiently more than 1,500 to 2,000 children per year and also for the successful working of a school dental service the interval between inspections and treatment must not exceed 12 months.

The figures shown relate only to routine cases and do not represent the total work of the department for in addition some 7,000 to 8,000 children attend annually for casual treatment, the

majority of whom are under age children and therefore not systematically dealt with. Further, by arrangement with the Mental Health Services Committee about 200 children attending the Occupation Centres were treated.

The table on the following page indicates the work carried out by the department throughout the year.

It is interesting to note the treatment per 100 children treated compared with that for the whole of the country for the year 1934, as contained in the recent report of the Chief Medical Officer to the Board of Education.

SUMMARY OF WORK PER 100 CHILDREN TREATED

	Leeds.	Country generally.
Fillings in permanent teeth ..	130	67
,, deciduous teeth	·02	7
Extractions of permanent teeth ..	40	33
,, ,, deciduous teeth ..	180	155

Since only those children who have previously accepted the conditions of the scheme are presented for inspection in the schools, the saving in time has been appreciable and is calculated to amount to 64 sessions work approximately. The Heads of the different departments co-operate to ensure a steady flow and an average of 145 per session are inspected. The fact that 92·5% are referred for attention at the clinics is indicative of the thoroughness with which the inspection is carried out. Children who are absent at the time of the visit to the school are subsequently invited to the clinic for inspection.

The number of routine cases actually treated is a tribute to the condition in the revised policy in that the services of the clinics cannot be imposed upon by refusing systematic attention and later demanding casual work. The result may also in part be due to the steps taken to minimise the gap between the actual inspection and treatment, and to the trouble taken by the teachers.

Owing to variations in staff and other factors at different periods of the year it is not possible to make comparisons with previous years but in general it can be stated that the rate of work has increased all round.

Summary of the Work of the School Dental Service, 1935.

	No. Inspected	No. Referred	% to Inspected	No. Treated	% to Referred	Fillings	Fillings per child Treated	Permanent Teeth Extractions Unsaveable Teeth	Permanent Teeth Regulation Extractions	Temporary Teeth Extractions	Anaesthetics		Sessions*		Other Operations	Attendances for Treatment
											General	Regional	Inspection	Treatment		
1. Elementary ..	16,084	14,956	93·0	11,883	79·5	23,267	2·0	4,046	1,082	16,097	7,630	3,683	111½	3,657½	4,590	24,853
2. Secondary ..	988	883	89·4	623	70·6	1,858	3·0	263	93	107	247	376	7	245	224	1,287
3. Special	499	411	82·4	372	90·5	629	1·7	124	24	404	201	104	3	85	150	538
Total 1, 2, 3 ..	17,571	16,250	92·5	12,878	79·2	25,754	2·0	4,433	1,199	16,608	8,078	4,163	121½	3,987½	4,964	26,678
Miscellaneous (Occupation Centres and Remand Home) ..	8	5	62·5	81‡	—	50	·6	71	4	76	69	10	—	10	30	110
Casuals and Special Casuals§ ..	7,497	6,963	92·9	6,419 539	92·2	—	—	1,733 480	—	9,218 672	6,355 534	—	—	†	211	6,419
Grand Total	25,076	23,218	92·6	19,917	—	25,804	—	6,717	1,203	26,574	15,036	4,173	121½	3,997½	5,211	33,213

Average No. of Fillings per Session 8·5. Average attendance per Fillings Session 5·2

*In addition, 169½ sessions were spent in supervisory work, Dental Officers' Conferences, etc.
†Treatment of "Casuals" takes place at the end of Routine Treatment Sessions on two occasions per week in each Clinic. Approximately 630 hours were so employed.
‡Most of these cases were referred for treatment towards the end of 1934.
§Special Casuals are children who have refused treatment but are subsequently treated by Extractions for the relief of pain and by appointment only.

As stated in previous reports the work of the school dental officer is centred on the first permanent or "six year old molar" as this tooth forms the "key" or corner-stone of the dental arch, and every effort must be made to retain this tooth in a sound condition. The number of fillings includes 45 in temporary teeth and this small number must not be taken to indicate that fillings in these teeth are inadvisable or unnecessary but rather that the permanent teeth must come first. Until the staff are able to deal with all the carious permanent teeth the deciduous set must unfortunately be left alone so far as efforts to conserve them are concerned. A great deal of harm results from this but time will not allow of much being done to improve the position.

The standard of treatment now aimed at has meant the insertion of 11,464 more fillings than last year which along with 5,211 other operations, many of which take as long or even longer than a filling, represents a considerable amount of work.

Silver nitrate is used to a large extent in permanent teeth where for certain reasons it proves impossible to remove all decay and has the effect of arresting the progress of the tooth destruction. This deposition of silver nitrate is sometimes used on temporary teeth.

Silver alloy is used almost exclusively for fillings in posterior teeth and whenever possible these fillings are polished after insertion although children are not brought back again for the purpose. A polished filling has a much greater resistance to the disintegrating action of mouth fluids.

A large number of these metallic fillings are lined with cement to prevent thermal changes in the pulp of the tooth and in others, very "deep" ones, a primary lining or "capping" is also inserted.

Front or anterior teeth are filled with silicate which has the merit of being invisible.

Of the number treated, excluding casuals who generally require extractions for the relief of pain, 68% had fillings done and 71% had teeth extracted.

An average of 3·1 fillings was inserted per child treated for this type of work. Not taking into account children in the older groups who had persistently refused treatment it has been found that the age groups 7-8 and 11-12 required the greatest amount of conservation work. Various theories might be advanced to account

for this but in all likelihood the simplest explanations are the true ones. The great majority of children have turned seven years of age when they receive their first treatment and the 11-12 children have naturally by that age a great many more teeth in the arch.

Summary of Fillings.

	Number of Fillings.	Per cent. to total.	Number of teeth filled.
Silicate	538	2·1	452
Cement	493	1·9	414
Amalgam	13,030	50·5	10,744
Cement and Amalgam	11,320	43·9	9,508
Cement and Silicate ..	423	1·6	355
Total	25,804	—	21,743

Teeth are sometimes presented in a condition which, although not septic, renders them unsuitable for filling, and where it is desirable that they should be retained in the mouth, if only for a time, so that the formation of the arch may not be marred, other methods of conserving them must be resorted to. Hypoplastic molars, a condition where the crown of the tooth is pitted and "spikey" through imperfect calcification of the enamel forming a ready trap for food debris, are given a self-cleaning surface sometimes in conjunction with silver nitrate.

In all, by one method or another 21,842 permanent teeth have been made artifically sound which represents a ratio of permanent teeth saved to unsaveable permanent teeth extracted under routine treatment in the order of approximately 5 to 1.

Many children exhibit conditions of gingivitis and gum hypertrophy, often but not always due to lack of mouth cleanliness, and for these cases the atomisers and electric cautery on the Units have proved of great value.

In the few weeks since the installation of the X-Ray plant some 50 cases have benefited by its use. This addition to the ordinary methods of clinical diagnosis has proved invaluable in detecting the presence or otherwise of unerupted teeth, suspected antrums, root fillings, cysts, fractured teeth, facial injuries, frontal sinus cases, etc.

SUMMARY OF OTHER OPERATIONS.

Permanent teeth treated with Silver Nitrate	3,749
Temporary teeth treated with Silver Nitrate	41
Teeth given root treatment	8
Artificial crowns fitted	2
Teeth given self-cleaning surface, etc.	153
*Cases given Scaling and Polishing	221
Cases given special gum treatment	54
Teeth "capped" or given second lining	684
Cases where temporary dressings were applied to relieve pain, etc.	231
Surgical removal of impacted or mal-positioned teeth	7
Antrum treatment cases	3
Cyst removal	1
X-Ray cases (74 exposures)	49
†Miscellaneous	8
TOTAL	5,211

*In addition to those cases who attended by appointment for this treatment the teeth of every child are given a general polish when possible, on completion of treatment.

†These include the special treatment necessary for 3 diabetic children under insulin control and 2 hæmophiliacs, before and after extractions.

The Special Schools include the School for Blind and Deaf and the two Home Office Approved Schools for boys. It is interesting to note that the results of systematic dental treatment are seen to the best advantage in such schools. The reasons for this are that treatment is compulsory, diet is regular and carefully planned and the tooth brush is a routine part of the day's work. The results are actually much better than would appear from the figures quoted for during the year some fifty new boys came to the Home Office Schools who had received almost nothing in the way of dental attention until they came under our care.

Cases recommended by the Medical Officers for operative treatment of tonsils and adenoids or by the ear, nose and throat consultant are given some priority of attention. This also applies to those children who have been recommended for the James Graham Open Air School.

Treatment is also given for the relief of pain to patients from the Remand Home and the Training Institute for the Blind but amount to very few each year.

Anæsthesia.—The extraction of teeth is kept separate from the sessions for filling work and on the whole the advantages of this arrangement outweigh the disadvantages. Extractions have always,

except in the case of very loose teeth, been done under a general anæsthetic, nitrous oxide or " straight gas," and while it is advisable to have two operators present, general anæsthesia is undoubtedly the best method to employ for the painless removal of teeth when dealing with large numbers of children. It would be true to say that it is the only method advisable for children under any circumstances.

The " straight gas " administered to many thousands of children in Leeds has given remarkable results but those operating the simple stands were fully aware that not every child received a good anæsthetic. During the last twenty years experiments with various mixtures of gases have been going on continuously so that now a mixture of Nitrous Oxide and Oxygen has supplanted the use of Nitrous Oxide only. The machines used to administer this mixture of gases are expensive but the advantages are so great as to nullify any consideration of initial cost.

The two Officers who have been operating the McGill apparatus have reported accordingly :—

Mr. Moran reports :—

" The modern intermittent flow anæsthetic machine now in use in the Central Clinic has proved a great advance on the older type of gas apparatus. Although only installed in September the machine has been used for some 1,500 administrations with satisfactory results.

Amongst many improved features, the machine makes it possible to administer measured proportions of Oxygen with the Nitrous Oxide—a very valuable asset since it allows the patient to absorb sufficient of the latter gas to produce a proper degree of anæsthesia while avoiding asphyxia (suffocation) so often manifested where nitrous oxide alone is employed.

In those cases where the heart or respiratory passages are affected the admixture of Oxygen becomes essential in maintaining the blood pressure at a safe level and avoiding undue strain on the heart and lungs.

Young children present special difficulties to the anæsthetist since the anæsthetic would appear to be very rapidly eliminated from their systems leaving only a short period in which the operator may work. With the modern machine a longer administration may be given without asphyxia. It has been argued that air can be substituted for pure Oxygen, but since the four-fifths proportion

of inert nitrogen in air displaces a correspondingly large proportion of the nitrous oxide from the lungs the anæsthesia is seriously interrupted.

The advantages of instantly available pure Oxygen and Carbon Dioxide cannot be overestimated. The anæsthetist operating such a machine has an increased confidence in the knowledge that in case of emergency, the means to overcome this are at hand by merely touching a lever.

Time taken to produce anæsthesia is longer than where no Oxygen is used but the added safety more than justifies any consideration of the time factor."

Mr. Shaw also reports regarding this machine :—

" Gives a longer period of anæsthesia without the unpleasant feeling of swelling, etc. during induction. Also allows time in most cases to replace face mask and apply Oxygen and Carbon Dioxide so that the child may recover as he relapsed into unconsciousness, ' blowing the balloon up.' Recovery in this way banishes the uncomfortable feeling of dizziness and inability to understand what has happened and where, which most young people notice with Nitrous Oxide alone."

The efforts to achieve " painless dentistry " make interesting and sometimes humourous reading. The number and variety of methods advanced over a long period of years are an indication of the urgency of the problem for pain is one of the greatest single reasons behind the national prejudice to systematic dental attention or, where the value of this is admitted, conducing to the fatal attitude of " putting it off." The School Dental Officer has an added responsibility in that the great majority of children receive their first dental attention at his hands so that the ultimate attitude of the adult population will be largely formed in the school clinics. By the elimination of pain in association with dental operations more will be done to attain the ideal of a 100% acceptance rate than by any propaganda.

The dental officer has to keep this constantly in mind for a single youngster complaining of having been hurt will make bad patients of a score of others. Recently an alleged new method of painless cavity preparation has been given some prominence in the public press but a trial of the system, which is really an old one revived in a modified form, gave no better results than previous experience led one to expect.

The method known as "Regional" or "Block" anæsthesia which consists of the injection of a local anæsthetic into the main nerves supplying the teeth thereby desensitising the area to be operated upon, has proved a boon to both patients and dentists since its introduction into the clinics. The technique is not simple but an extension of its use is indicated by the results obtained.

Another system of rendering dental operations completely painless is known to dental science which unfortunately is rather expensive, but will in all probability prove as time goes on to be the final answer to the problem.

Parents can do much to assist the dentist by refraining from suggesting to the child in any way, such as by bribes, that an ordeal requiring courage is involved when a visit for treatment is contemplated.

Orthodontic Treatment.—Cases of overcrowding in the dental arches are sometimes treated with success by the extraction of sound permanent teeth. For this purpose 1,203 teeth were removed but as in past years where appliances to correct the irregularity are deemed necessary, the Leeds Dental School very kindly undertake the work. So far as possible only those cases whose parents express a real desire to have such attention for their children are referred to the Hospital, where some expense and inconvenience is caused if enthusiasm should wane.

The establishment of a second clinic by the Hospital Authorities to meet the large number of school children requiring regulation work has resulted in speeding up the rate at which the cases are dealt with and the co-operation of the Dental School in this expensive and highly skilled work is much appreciated. In the circumstances it is to be regretted that 15 cases have broken their promises to continue to attend until the work was completed.

SUMMARY OF ORTHODONTIC TREATMENT
(at Dental Hospital)

No. of children	124
Total attendance	1,817
Completed cases	46
Abandoned treatment	15
Continuing treatment	63

Refusals of Treatment.—The percentage of children who accept the offer of regular attention is distinctly good but it also serves to arouse interest as to what the remaining 30% intend to do with

regard to treatment. This figure has to be added to by reason of the fact that 4·5% of those who put " Yes " on the record card subsequently refuse to attend for treatment when invited to do so. A further 7·4% cease to attend after having had a certain amount of work done.

This change of mind can readily be understood to cause a serious inconvenience in the clinics for it represents a great waste of time. The reasons why parents alter their original decision in this manner has been given some attention but no new explanation is forthcoming. Although a variety of explanations are offered it is not difficult to detect the old prejudice to filling work. This prejudice is often merely an assumed attitude to cloak sheer laziness to bring the child to the clinic and in other cases it can, more charitably, be laid at the door of ignorance. Whatever the reason it is exceedingly difficult to overcome but it is significant that the conditions of the revised policy have done much to make such parents " think twice." Realisation of the fact that attention cannot be had on demand if " No " has been entered on the card is gradually having its effect and augurs well for the future acceptance rate.

One reason for the number of refusals is that quite a proportion of such parents do not trouble to read the pamphlet issued to them but as time progresses the working of the scheme is bound to become generally known.

It cannot be contended that those children for whom the offer of treatment is refused are sent to private practitioners for the evidences of this, other than extraction work, are negligible no matter what the grade of school.

Broken Appointments.—This subject is closely bound up with the previous one and is the cause of an even greater amount of disorganisation in the clinics. A great deal has been done in the endeavour to reduce this nuisance but it has to be recorded that 35% of appointments sent out last year were ignored. Many parents put " Yes " on the acceptance card with the deliberate mental reservation that the child will be allowed to attend for just what treatment they may think fit and others again allow the appointment to pass unheeded through ignorance of certain points in connection with teeth. Despite the explanatory pamphlet issued with the intention of making clear a few fundamental facts, such as that a child of six years of age has four permanent molars in the mouth, there are still a number of households reduced to a state of consternation upon the receipt of an invitation for such a child to attend for

fillings. The " mistake " is considered to have been dealt with by informing the clinic that as the child is so young they won't bother to have his first teeth filled.

In many cases failure to keep appointments is due to apathy on the part of the parents and their attitude is grossly unfair to those who do appreciate the work of the Service for many of them have a weary wait at the clinics through the necessity of having to invite more than can reasonably be dealt with. This uncertainty as to how many will appear for treatment is one of the greatest obstacles to efficiency the clinics have to contend with and is a definite waste of time.

Different methods have been tried to eliminate the nuisance and recently a new type of invitation form has been introduced in the hope that it will effect an improvement. The greatest influence however could be brought to bear by the Teachers and an earnest appeal is made to them for even greater co-operation in the coming year for it has been proved that their energies properly directed can largely reduce this wasted time. The suggestion is made that the Head Teacher or some responsible deputy might visit each classroom at the beginning of every session and assure himself that every child on the School List for that time has either left for the clinic or presents an explanation in writing from the parent for non-attendance. Such notes along with another showing any absentees through illness might be handed to some older child who is attending the clinic thereby informing those in charge immediately how many will have to be dealt with. The suggestion would occupy some minutes each day but would benefit everyone concerned.

Casuals and " Under-Age " Children.—The number of children attending for casual treatment has remained constant around 7,000 for a number of years with a definite upward tendency, during the past year. The reason for this rise lies in the fact that treatment for extractions only is not permissible as a routine part of the scheme. Some 600 children who had refused attention at the proper time were subsequently relieved of pain by tooth extraction and although these cases attended by appointment this is essentially " casual " work as distinct from that resulting from systematic inspection.

As in past years the greatest number of casuals are children in the under six years of age groups or who may have attained that age but have not yet been seen by the dentist. Nearly 10,000 deciduous teeth were extracted to relieve pain for these very young

patients for very often two adjacent teeth have to be removed through lack of earlier attention. In many cases, where the permanent molars have erupted these teeth are affected.

The extent of dental disease amongst these under age children is indicated by the results of an investigation carried out by Miss Knowles in the Hunslet Nursery School when it was found that 56% showed dental disease in varying degree, 26% being extensive. A further investigation, also by Miss Knowles, in one of the largest Infant Departments in the city, the results of which are set out in a table below, explains why the dental officers found it necessary to refer for treatment over 70% of children examined at six years of age, more than 30% being for attention to permanent teeth.

Dental Disease Infants Department of one School.

Age.	No. Examined.	Grade "A." Caries free.	Grade "B." Slight Caries.	Grade "C." Extensive caries.
5 years ..	(Total) 235	39	55	140
Per cent.	—	18	23	59

On the same subject Mr. Moran has also reported :—

"It is however noticeable that in the Infant Departments there are many outstandingly bad cases where not only the temporary teeth but also the permanent teeth are seriously affected. This condition is not surprising when it is found in many school entrants that the dental conditions are such as to necessitate multiple extractions in order to obtain some semblance of a healthy mouth. It would appear that a further increase in dental work for infants and pre-school children is desirable."

The facts indicated in the foregoing are food for thought for everyone interested in the dental welfare of children and have given rise to a great deal of discussion amongst the dental officers. A clear idea can be gained of what damage has been done in the average mouth before the children come within the scope of the scheme and unfortunately much of this is irretrievable.

In the interests of future and lasting efficiency it may be advisable before long seriously to consider the inclusion within the scope of the dental Service of these under age children for a routine

nspection and treatment. By this means the number of temporary ieeth extracted would be definitely reduced and one menace to the ermanent teeth minimised.

Propaganda.—Over a period of fifty years progress has undoubtedly been made in the education of the public to a realisation of the value of a sound set of natural teeth but in view of all that has been done in this direction, locally and nationally, the attitude of a section of the adult population is indeed surprising.

That some 35% of parents will still deny their children the opportunity to conserve their teeth and are prepared to allow them to be stripped of all masticating ability before reaching adolescence would appear to indicate that the costly campaign of dental education in recent years has failed in its object. This may well be so for experience in the clinics tends to prove that those parents concerned are proof against any argument or persuasion other than perhaps coercion. Educational efforts to be truly successful must be aimed directly at the children, suitably modified for the different age groups so that the whole conception of dentistry, diet and oral hygiene may be inculcated in their fresher and more receptive minds, to remain with them through adult life and be communicated by practice and precept in the home to their children in turn.

The teaching of dental matters to school children has been undertaken in several ways throughout the country. In many schools in Leeds a weekly talk about teeth is a regular feature of the curriculum and must prove of value. An endeavour is being made to secure greater co-operation between the Dental Service, the Teachers and the Parents so that a better understanding of the whole service may be imparted. Far too many children present themselves for treatment who have made no effort to clean their teeth for months and the wisdom of inserting fillings in such a mouth is open to grave doubt. It might be stated that the child who has not been taught how to care take of "fillings" need not trouble to have any inserted and the boy who has so little knowledge of or interest in the elementary principles of mouth hygiene as to present himself at the clinic for treatment with the debris of many highly carbo-hydrate meals obliterating his teeth might as well return home for his time could not be less usefully occupied. This must not be taken to mean that the regular use of the tooth brush and a daily intake of brown bread will eliminate dental disease but until more has been learned about the cause and cure of this widespread scourge these two items can usefully constitute a prominent feature of daily life.

On the subject of child instruction Mr. Moran writes :—

> " Despite a crowded curriculum the teachers are generally enthusiastic in assisting the dental Service. From previous experience I can state that the tooth-brush drill practised in some infant departments justifies itself by results and is greatly assisted by the use of suitable cupboards in the schools for storing the toilet necessities. Each child should have its own brush, cup and towel distinctly marked and be trained to take out and replace its own property. This, if carried out in *all* schools would form a habit in childhood likely to persist in after school life, as it would impress on them the advantages of cleanliness and attention to the mouth."

Last year the staff undertook the inspection of some thousands of entrants for the Dental Competition in connection with Children's Day and as in previous years prizes were presented by the " Yorkshire Evening Post " for those with the best cared for teeth. Consolation prizes took the form of a tooth brush and tooth paste. The interest aroused by this Competition is very great at the time and must tend to increase the general interest in the care of the teeth.

The Dental Board of the United Kingdom have done a great deal to educate the adult and child population in dental matters and last September—October they gave a series of lectures and demonstrations to about 8,000 children in Leeds. Gratitude must be expressed for this effort to assist us in our work although sufficient time has not yet elapsed to allow any deductions to be made.

Looking back through the year just reviewed one is encouraged to hope that the year just beginning will consolidate the foundations which have been laid. A great deal remains to be done and rapid strides cannot be expected. Much has been accomplished of great value for already a high percentage of the children in the younger age groups have been rendered dentally fit and should be so maintained with an annual inspection and treatment. It is to be hoped that steps will be taken to prevent a return to the old conditions of overloading and delay. It is gratifying to know that under the revised scheme such a large number of children will accept and attend for regular attention which allows one to look forward to the day when the outlook of the School Dental Service will become definitely " Preventive " as the greatest step forward from the present " Palliative " view.

I would like to record my appreciation of the loyalty and co-operation of all those who have assisted in the work of the Section

both inside and outside the clinics and particularly must I express my personal gratitude and that of the whole Staff to our Medical Officer, Dr. Stockwell, whose ready understanding of the many difficulties to be overcome has made a heavy task less onerous.

Infectious Sickness.

There is a welcome decrease in the total number of cases of infectious diseases during the year, especially in diphtheria and measles, although there are increases in mumps, whooping cough and influenza.

It has been pointed out before that some of the diseases appear in cycles and that after an epidemic, a lull may be expected until such time as there are sufficient unprotected children to make another epidemic possible. These diseases are always present and tend to become epidemic from time to time. Having the disease does usually render the child immune to a second attack, but there are always unprotected children because of the increase in population.

In certain diseases, it is proved that artificial safety can be produced and the recent example is that of diphtheria in which a high degree can be secured by the process of immunisation. It has never been claimed that this will do more than increase the resistance of the individual to infection, but in diphtheria we are now able to test his susceptibility, and here lies the way to safety.

During the last three or four years Leeds has been visited by a very severe type of this disease with a largely increased death rate, and although there may be somewhat of a lull at the moment we must expect a further epidemic in due course unless we can improve the immunity of every susceptible child. It may be that, for a period, the type of disease will be less severe, but there will be deaths and anyone who has seen children dying from diphtheria has only one wish and that is to prevent the disease. Leeds, through the Public Health Services, has offered facilities for such protection for some years, but the numbers protected have been lamentably small, and consequently early in 1935, the Education Committee agreed to co-operate.

It was decided that facilities should be provided for this work to be done by a special staff of the Health Committee on school premises, and with the usual hearty co-operation of the teaching profession this proved a great success. Previous facilities entailed several visits to some clinic by appointment, necessitating often long journeys, and had failed to bring about the desired result.

Owing largely to the efforts of the teaching profession 31,001 children under 15 were given full treatment in 1935, of whom 24,217 were completed in school. 1,199 were not completed owing to absence or some other causes, 1,211 failed to keep any appointment, 774 were not traced owing to removal, 207 were duplicated, and there were 1,057 cases in various stages on the 31st December.

As a start, some 1,400 children under 10 were tested as to their immunity, and the "safe" number found so small that it was decided to give the ordinary doses to all, but at 10 and over only children were treated whose response showed danger. All such children were given three 1 c.c. doses of T.A.F.

Finally, there are records of 9,889 cases who were given a final test which show that 95·74 per cent. were "fully protected" as evidenced by the Schick negative state. The others each received a further dose.

During the course of the work personal visits were paid by Dr. Sharpe to the 39 cases where unusual effects were reported—a remarkably small number compared with the total number of injections given. He made very careful examinations into all complaints however trivial and reports that no ill effects were found that could not be entirely alleviated by soaks of cold Saturated Magnesium Sulphate Solution to the arm or by internal administration of Epsom Salts. Not one untoward incident occurred during the whole campaign and, thanks to the enthusiastic co-operation of the teachers there was very little interference with school routine. I saw myself, in one school the whole class back in its own room in 15 minutes from the start.

Whilst probably fuller details will appear in the Annual Report of the Medical Officer of Health, the results up to date are worth recording.

We must remember that the safeguard is proved for the individual, and that unless there is a constant flow of young children for treatment, the position will swing back in a few years.

Infectious Sickness, 1935.

Total Number of New Cases.

Scarlet Fever	1,271
Diphtheria	873
Whooping Cough	1,700
Chicken Pox	2,230
Measles	1,069
Mumps	2,550
Influenza	1,694
TOTAL	11,387

Swab Report, 1935.

Clinic.	Positive.	Negative.	Total.
Central	2	35	37
Armley	9	45	54
Burley	14	86	100
East Leeds	24	215	239
Edgar Street	8	43	51
Holbeck	8	33	41
Hunslet	5	47	52
Meanwood Road	6	27	33
Total	76	531	607

Examination of Hairs in Ringworm Cases (All at own Laboratory).

Positive.	Negative.	More Hairs required.	Total.
22	17	9	48

Open Air Education.

There is little change to record, but there is still need for physical exercise to be taken out of doors whenever possible. Apparatus work may necessitate the use of indoor facilities, but apart from this greater benefit will accrue in the open air.

The School Camp was open as usual and 2,354 children attended including for the first time, a group of retarded children. This experiment proved successful and it is hoped that it will be repeated.

A table of weights is not given this year, as owing to a breakdown of the machine only about half the children were weighed.

I am not aware at the moment whether the new site is to be utilised this year. It has many advantages and some disadvantages, but a good lay-out should be possible and future developments should include a swimming pool.

Health Education

The two subjects, namely, Hygiene and Physical Training, which may have an especial bearing on the physical well-being of the community may be conveniently grouped together. They cannot be divorced from the school curriculum and yet place a great responsibility on the teacher of the Infants' Classes, for in their case she does not start on unbroken ground.

Both of these two subjects are matters which the mother must consider at the beginning of pregnancy, and only too often it is found that much has to be undone on entering school. The methods

of teaching them are outside the scope of the School Doctor, yet he must assess results in individual cases. For young children both subjects must be extremely practical and yet so devised that the child absorbs them into his daily life without knowing.

His hygiene lessons should be those which will assist his natural bodily requirements to the greatest benefit, and his exercises those which will attune his body and mind to their greatest activity.

One way the School Doctor can help is by individual advice at Routine Inspection to the class teacher, although it is realised that individual instruction on these subjects is impossible.

The latest pronouncement of the Board lays further responsibility on the teacher to whom the Medical Services will give all assistance in their power. Posture, for example, is one point in which both hygiene and physical training are concerned and yet how seldom is it realised. However good the physical training is, if the concomitant Hygiene or Science of the preservation of health is poor, the results will be unsatisfactory.

Formal Hygiene lessons, even in older children, are of little use if the practical part is not more strongly emphasised. A faulty spine due to bad hygiene will not be cured merely by exercises alone, especially group exercises, unless steps are taken to remove the cause, which may be due to a faulty desk, a bad position whilst sitting, inadequate rest and exercise especially in infancy, rickets, early tuberculosis, even mouth breathing amongst others. The condition of the back and spine is probably of more importance than that of the limbs. Therefore, it is necessary to emphasise the points of contact between Hygiene and Physical Training.

The modern idea of removing superfluous garments for exercise is admirable, but the Physical Training Teacher (unless present at the medical inspection) does not see naked spines as does the Doctor nor can she give individual remedial exercises. Such cases will mostly be referred to the Massage Staff whose future work will evolve more and more on active exercises and less on passive movements.

There is a close co-operation between the Physical Training Organiser and my Department, and much thought is being given to this problem.

Parents.—The number of parents present at routine inspection is still 75 per cent., revealing the interest taken in their children's welfare. This percentage would be increased even further if the

Co-operation.

12 year old boys were accompanied more frequently. There is no doubt that they do dissuade their mothers from coming, but as this is such an important examination from the point of view of suitable employment efforts will be made to overcome this difficulty.

The Medical Officers are always glad to give their advice to parents and especially so where there is any vocational contra-indication.

Only twenty children in all (9 boys and 11 girls) were withdrawn by their parents from routine examination, which is a smaller number than in any previous year.

It is always found that there is a more adequate response to treatment when parents are present at inspections.

Teachers.—Once again it is a pleasure to express our thanks to the teachers for their assistance, especially the Heads of Departments whose help has been very great.

If one dare offer one slight criticism, it is that Head Teachers do not always pass on necessary information to the Class Teacher concerned.

I still advocate the keeping of a list by the Class Teacher of all children who need special supervision, such as by wearing glasses as prescribed, by placing certain children near the teacher and in other ways. Such a list transferred each year as the child advances in school will enable each and every Class Teacher to have a better understanding. Names will be added or removed as requisite, but it is essential that the information shall be available.

Enquiry Officers.—Their assistance remains as thorough and ungrudging as ever, in spite of the increasing work that is put upon them.

Juvenile Employment Bureau.—During the year, the relations between the two Departments have become extremely intimate and events prove the advantage of the Juvenile Employment Bureau being in the same building as the Education Office, there being daily transference of information from one Department to the other.

Juvenile employment has not been the problem in Leeds that it has been in other areas, but the need for ensuring that every child shall obtain the most suitable employment has been fully investigated.

Most children are suitable for almost any form of employment, although there is no doubt that benefit both physical and moral would accrue if the age of employment were raised. There remains a number of children for whom some forms of employment are contra-indicated, and a system has been devised whereby all children who, at their 12 year old or leaving examination, have contra-indicating defects, are re-examined six months before they leave. To these are added by the Head Teacher children who have had a serious illness during their last year, so that there will be full information available as to occupations for which any child is not suitable. As a result of this examination, information is sent to the Juvenile Employment Bureau indicating by a code shown below certain conditions for which the child is unsuitable, not, it will be noted, forms of employment, the appropriate figure and letters being erased :—

PD	1	2	3	4
A	B	C	D	E
F	G	H	I	K

The letters PD are meant for physical defect, and the figures are used to denote :—

1. Diseases of the respiratory system.
2. Diseases of the cardio vascular system.
3. Diseases of the central nervous system.
4. Other system diseases.

The letters show the contra-indications and mean :—

A—Unsuitability for severe manual work.
B—Unsuitability for clerical work.
C—Unsuitability for exposure to bad weather.
D—Unsuitability for work in dusty atmosphere.
E—Unsuitability for work near moving machinery.
F—Unsuitability for prolonged standing.
G—Unsuitability for work involving eye strain.
H—Unsuitability for work requiring acute distant vision.
I—Unsuitability for work requiring acute hearing.
K—Unsuitability for work requiring nervous strain.

whilst to meet one objection which has arisen, in those cases unsuitable for handling food the letters PD are erased.

The system is quite experimental, but is already affording assistance in placing children and will be carefully watched.

Public Health Department.—An interesting experiment in co-operation has been made this year.

The East Leeds Clinic in Harehills Lane is now used jointly by the School Medical Service and the Maternity and Child Welfare Section of the Health Department. Whilst this has made slight rearrangements necessary, I am glad to say that work is progressing without friction and it seems likely that the joint usage will become permanent.

I shall support such joint usage wherever is is possible, the only essential being a mutual desire to overcome difficulties that are bound to arise and not to magnify them.

The Sub-Normal Child

The developments will be described under several headings.

One of the duties of the Service is to ascertain and classify children who for any reason cannot compete with their normal comrades, and to advocate such alterations in education as may be desirable in the child's best interests, but which is not always agreeable to the parents.

I suggest that the term " subnormal " is the right one to use as opposed to " abnormal " who may be defined as children outside the scope of the Education Acts, for whilst there is a definite duty to deal with the first named, most of the latter will not be educable. This definition would help to overcome difficulties that apply to children of the more severe mentally retarded groups to whom at present the same phrase is applied as with the much milder that can be taught to manage themselves. Although the difficulties that arise over retarded children are much lessened, they still exist especially in the minds of parents who have not yet realised the differences in the Special Schools of later years. Much propaganda is still needed before parents will understand that such schools can and do help these children enormously, and that no child is ever retained after he is proved to be ineducable, and that the ideal will be attained only when it is understood that Special Schools are intended to give the rather more than dull and backward children a full and sufficient education.

Phraseology may mean a great deal and the wrong word damage a child's future, and all subnormal children are liable to suffer

because they have not been in a normal school, with the result that they are denied opportunities that would frequently lead to them becoming respected members of the community. Crippling, subnormality, call it what you will, or any other word should mean that the child is given extra chances that will enable him to compete with his more fortunate brother so long as it is understood that, if he cannot accept those chances, he will become to some degree a charge on the community.

It is not possible to change legal terms in a moment, but it should be possible that there is understanding of these terms.

Retarded Children.—There are several points of interest to be recorded. First, that the School Camp was reserved for one week for these schools. It was an experiment that had been suggested for some time and was a great success. Owing to generous assistance from the Leeds Schools' Athletic Association and from private sources, the whole Camp was filled, in fact there were many more applications than vacancies, and there was consequently much competition for places.

It was very gratifying to watch the children's efforts always to attend school clean, and there is no doubt that the spirit of competition, which hitherto has been lacking, has had a great effect. It is to be hoped that opportunity will be given again this year.

Secondly, the spirit of competition has also been fostered in games, and much healthy rivalry was seen when, for the first time in Leeds, the four mixed Special Schools took part in a Skittle Ball Competition on the same day as the Girls' Games Association held their Annual Festival at Beckett Park. The children played the game in the best sense of the word and thanks are due to the Committee of the Association for giving them the opportunity, which was certainly worth while.

Swimming, too, has now become an almost universal practice amongst these children and again helps to remove that inferiority which has so often been a stumbling block.

The Hunslet Lane Senior Boys' School has made great strides in physical education, and now has its regular periods of organised games at Middleton. They have played matches but they have not yet become members of any League, but they do enter into their "House" activities with evident enjoyment. All these points are evidence of real progress.

Thirdly, all the Special Schools have been inspected by His Majesty's Inspectors during the year and the reports received must

be gratifying to the Committee as showing that the Schools are being used for the proper purpose, which may be described as that of helping lame dogs over stiles and not pushing paralysed ones over them.

I should like to take this opportunity of thanking Mr. Peters and Miss Moodie, as well as the other Inspectors who worked with them, for much valuable help since their visits.

The Senior Boys School is now a most flourishing institution, and the work done there not only reflects credit on the staff, but is giving the boys chances in life they have not had hitherto. Visitors must be impressed with the quality of the work and it can be expected with confidence that most of the boys will be able to manage themselves with little or no supervision.

Mr. Barker, the Headmaster, attended a special course during the year, and his assistants are hoping to follow suit.

As regards the girls, the position is not quite so satisfactory. Each of the four schools does have a visiting teacher for tailoring, but only on one half day a week and although the work is excellent there is not enough of it. In one school only, do the girls visit a Domestic Science Centre and even there the time is inadequate. As in the case of boys, at 11+ nearly half their time should be spent on the Handwork side. The domestic work they do in the School Kitchen is good, but they do need a full course by qualified teachers, who, realising their limitations, will work at a rather slower pace. Special School children should be those who, given rather better opportunities, will make good, and it is not economy to deny them such opportunities.

Two of the School buildings are unsatisfactory in that they are small and hedged round with high walls without real playing facilities. I shall continue this point later.

Once again, I would remind you of the need for educational psychologists, without whose services the work can never be complete.

In general, the after life of these children is very satisfactory and I hope the time is not far distant when the real point of Special Schools is better understood and when any stigma which an unkind world places on them and which is not and never has been contemplated by the Education Acts, disappears.

No child is retained in a Special School if his attainments reach such limits as are compatible with his return to ordinary school, nor after proof that he will need the after care that the Mental Health Services Committee affords.

Some members of the Committee may remember an important memorandum that was issued by the late Dr. Graham in 1928. Whilst many of the suggestions have borne fruit there are others which are still pressing, the most important of which is that of staffing. The tendency has been and still is for teachers either to spend the whole or none of their professional life in Special Schools, and can only be traced to the wrong conception of their character and function.

To quote the memorandum " It appears to have been thought that Special School service unfitted teachers for work in ordinary schools, partly because they had no opportunity of marching with the times and partly because continued contact with subnormal children lowered their standards. If there is any truth in these views, all the more reason why the teachers should be allowed to return to ordinary schools after a few years' service in Special Schools." I submit that this quotation is true to-day, and that Special School service should be regarded as a qualification for promotion and that even head teachers should not be allowed to remain indefinitely, but be considered as eligible for headships especially in Infant Departments, where their knowledge of the subnormal would prove of inestimable value to the community.

Summary of Examinations for Mental Conditions, 1935.

	Boys.	Girls.	Total.	%	% for 1934.
Certified to continue in attendance at Ordinary Elementary Schools	176	106	282	59·6	64·3
Certified for Day Special Schools	55	52	107	22·8	22·9
Certified as Imbeciles	6	2	8	1·7	2·6
Certified as Idiot	1	—	1	·2	—
Certified Mentally Defective but recommended for notification to the Mental Health Services Committee*	35	24	59	12·4	7·7
Certified Mentally Defective—Permitted to remain in Private Schools	6	9	15	3·1	1·4
Certified Mentally Defective—Permitted to leave Private Schools to go to work	1	—	1	·2	·1
Totals	280	193	473	—	—

* In addition to the examinations at Clinics, the Special Schools were visited periodically, and the following number of children were discharged as incapable of deriving further benefit from the instruction given. These numbers are included in the above Table.

	Boys.	Girls.	Total.
Feeble-minded (reached educational limit) ..	31	18	49
Feeble-minded (detrimental to interests of others)	3	1	4
Feeble-minded (also Cripple—permission given by Board of Education to notify)	1	—	1
TOTAL	35	19	54

Number of Children on Roll in Special Schools on 31st December, 1935.

SCHOOL.	NUMBER ON ROLL.		
	Leeds Cases.	Outside Cases.	Total.
Armley Special	83	1	84
East Leeds Special	61	2	63
Hunslet Hall Road Special	66	1	67
Hunslet Lane Senior Boys' Special ..	133	—	133
Lovell Road Special	56	—	56
SCHOOL FOR DEAF	53	45	98
SCHOOL FOR BLIND—			
Blind	19	47	66
Blenheim Walk Partially Sighted	9	32	41
Armley Partially Sighted	20	—	20
Roundhay Road Partially Sighted	45	—	45
PHYSICALLY DEFECTIVE—			
Potternewton	120	—	120
James Graham Open Air	239	—	239

In addition, the Education Authority is responsible for the maintenance of Leeds children in Residential Schools as follows :—

CRIPPLES—

Marguerite Home, Thorparch 2
Royal Liverpool Children's Hospital 1

EPILEPTICS—

Lingfield 3

MENTALLY DEFECTIVE—

Sandlebridge (The Mary Dendy Home) 2
Littleton House, Girton 1
Besford Court 1

DEAF—

Boston Spa 1

Position with regard to the disposal of Subnormal Children on 31st December, 1935.

Type.	At no School or Institution.	Attending Public Elementary Schools.	Attending Special Schools.	At Other Institution
Blind	—	—	19	—
Partially Sighted ..	—	40	74	—
Deaf	1	2	54	—
Partially Deaf ..	—	—	—	—
Epileptics	7	—	3	1
Mentally Defectives	121	54	405	24
Physically Defectives	47	2,073	383	51

Dr. Willcock reports :—

James Graham Open Air School

"During 1935 the accommodation at The James Graham Open Air School, Farnley, has remained at 25 residents and 215 day scholars. During the year 524 children have attended the School, of whom 154 were not charged fees owing to the family income being less than the Committee's scale. During the Spring Term the residents were boys—during the Summer and Autumn Terms girls.

During the year the rule that no children should be retained in the School for more than two consecutive terms, has been strictly adhered to. The original reason for this rule was the large number of children who had been certified as suitable for an open air school, and one of its effects has been that a very large number of children have now passed through the School since it was opened in 1932, and in this way the School has been made known and in a sense popularised over a wide area of the city. Another result of the rule has not been so satisfactory. It has entailed the readmission of certain children to the School after a short interval in the Elementary School. Of the children who attended the School during 1935, some 30 or 40 had previously attended the School for at least one period. It has always been fully realised that, for certain of the cases admitted to the School, two terms was much too short a period to allow one to expect more than, at best, a remission of the symptoms and an improvement in the general condition of the children. This applies specially to cases of chronic bronchitis, pulmonary fibrosis, bronchiectasis, and it has been only with reluctance that certain other cases—children who have been certified only recently quiescent or arrested cases of tuberculosis, and children whose home conditions were known to be so unfavourable as to expect a loss of the ground gained while in the Open Air School—have been discharged after only two terms.

For the reasons given above and in view of the fact that the number of children on the waiting list for the Open Air School has now been considerably reduced from the figure at which it stood when the School was first opened, it is felt that the period for which the children may be retained in the School should be increased to a year and that in certain cases children may be kept there for a longer consecutive period. At the same time it must be emphasised that only in exceptional cases is it intended to keep children at Farnley for more than a year, and that it is hoped that a number of the children will be found fit, as in the past, to return to their own schools after two or even only one term in the Open Air School. In this way the number of children waiting for admission to the School should be kept down to reasonable proportions.

During the year a review of children who had been returned from the Open Air School to the ordinary schools has been carried out at the Branch Clinics by the Medical Officers concerned. 260 children were reviewed, and of these 36 were recommended for a further period in the Open Air School, 132 were retained on the list for further observation, and 92 were reported as so improved as not to require further attention. This result shows that on the whole the benefit obtained while at Farnley is being maintained after return to the Elementary Schools, and is very gratifying evidence of the service which the School is rendering to the community.

As in previous years a table has been prepared showing the gains of weight of the children in the Open Air School during the year. While it is not suggested that gain in weight is the most important result to be desired from attendance at the School, still it is often very welcome evidence of improvement in the general condition of the children.

Table shewing gain in weight during each term.

Term.	Easter.	Summer.	Christmas.
	Lbs.	Lbs.	Lbs.
All children	2·89	3·34	3·91
Residents	4·17(Boys)	6·99 (Girls)	5·00 (Girls)
Day children	2·73	2·90	3·66
Boys	2·95	2·56	3·41
Girls	2·61	4·07	4·30
Rheumatism	3·60 (24)	5·42 (22)	5·44 (24)
Subnormal Nutrition and Debility	2·88 (137)	3·24 (131)	3·78 (122)
Pre-tubercular quiescent and arrested P.T., etc. ..	2·74 (45)	3·09 (39)	3·69 (39)
Bronchitis, etc.	2·62 (28)	2·61 (31)	3·75 (40)

The figures in brackets represent the number of cases.

The table compares very favourably with that given in the Report for 1934. One or two interesting points in it may be noted :—

1. For every term since the School was opened in 1932, the group of rheumatic cases has shown a greater gain in weight than the other groups in which the children have been classified. This is very definitely marked in the table shown in this Report. It may be explained that this group consists in the main of early cases of rheumatism. Children with well established heart disease are not considered suitable for the School under present conditions. The results obtained suggest that early cases of rheumatism, at any rate, benefit greatly from the regimen of open air school rooms, regular periods of rest, a carefully arranged dietary and in the cases of residents early bed time.

2. In last year's report it was pointed out that the residents showed 30 to 50 per cent. greater gains in weight than the day scholars. This year the difference is even greater. For the short Spring Term the average gain in the residents (boys) was 4·17 lbs. against 2·73 lbs. in the day children—in the summer when girls were residents the gain was actually 6·99 lbs. compared to 2·90 lbs. and in the Autumn Term 5·00 lbs. against 3 66 lbs.

When the School was first opened it was hoped to have 50 residents but in practice it was found that only 25 could be accommodated. In any future developments of the School it is extremely important that the desirability of increasing the number of residents should be kept in mind even though this would entail additional building and an increase in the resident staff.

Some details of two residents may perhaps be given. They are sisters aged 8½ and 13 years on admission in April, 1935. They were discharged in December. The elder had been under treatment for rheumatism and on admission had all the symptoms of incipient chorea. After two terms residence she was much more stable, there were no signs of chorea, and her heart was regular. She had gained 2½ inches in height and 31¼ lbs. in weight. The younger child was admitted with debility and bronchial catarrh. On discharge she had improved greatly in energy and alertness, and her chest was clear. She had gained half an inch in height and 15 lbs. in weight. Neither child had missed a single day's school.

The question of physical training and games is naturally one of great importance in the Open Air School. Full advantage is taken of the regular periods allowed for physical training in the

school time table by the teachers, and the results are very satisfactory but owing to the school hours in the Open Air School being shorter than those in the ordinary Elementary Schools the time which can be allotted to physical training is not as great as might be desired. The organisation of games too is not easy. It is a great pity that more use cannot be made of the large field in front of the School, but it is not drained and during a large part of the year is unfit for the children to use—the children's footwear being often very defective. The provision of more facilities for organised games would help to improve the physique and physical well-being of the children.

A note of the attendance at the School during the year may be of interest. During the Easter Term the attendance was 92·5 per cent., during the Summer Term (excluding August) 94·4 per cent. and during the Christmas Term 91·6 per cent. The School was kept open in the summer for two weeks after the Elementary Schools in the city were closed. During this period the attendance was 76 per cent. This may be regarded as very satisfactory, as many of the absentees would be on holiday with their families during Bank Holiday week end, and fully justifies keeping the School open during the first half of August.

The School appears to be greatly appreciated both by the children and by their parents. But it is only right to point out that it has been extremely disappointing on several occasions to find the parents unwilling for their children to continue in the School for a second period when it has been recommended by the Medical Officer. When enquiries have been made it has been found in nearly every such case that the reason for the refusal is financial. The fees for residents, especially, appear to be unduly heavy for working class homes and in view of the benefits which the residents obtain it is deplorable that the offer of residence in the School to suitable children should be refused for financial reasons."

Potternewton School for Physically Defective Children.

Dr. Bebb writes :—

" This year the number of children on roll was 119 (25 more than last year) admitted for the following conditions :—

Tuberculosis (quiescent or arrested) chiefly bones and joints	32
Paralysis	29
Heart Disease	21
Rickets and Curvature	20
Hæmophilia	1
Others	16
	119

There has been no increase in the cases of tuberculosis but the cases of heart disease and rickets have increased, the latter because children are now admitted much younger. The early heart cases are benefiting by suitable rest, and easy graduated exercises, proving the point that more good can be done if these cases are notified early. They show greater resistance and less fatigue.

All children with infantile paralysis, in addition to massage and electrical treatment, were put on radiant heat and it is interesting to note that no case of chilblains has been reported for the past two years.

The number of treatments given for all cases was 2,916. Baths 1,335. Spongings 202.

During the year 21 children have left :—

To Ordinary School	5
,, Secondary School	2
,, Mentally Defective School	2
,, Open Air School	2
,, Orthopædic Hospital	2
,, Killingbeck Sanatorium	1
,, Work	6
Notified to Mental Health Services	1
	21

Of the six who have left for work :—

1 went to Blouse Manufacturers.
1 went to Printers.
1 went to Millinery.
3 went to Tailoring.

The child with the "Dual Defect" still remains the great problem. At present eight have been certified as such and there are sixteen who are under observation and who will probably be certified later. The "very backward" number sixteen, due in part to their continual absence from school, and to their physical condition.

The total number of "Dual Defects" is sufficient in my opinion, to justify the beginning of a school for these cases. Their presence in any class must of necessity lead to a slowing down of the work and to a lowering of attainment. The children too would not feel that they were so definitely "inferior."

School dinners continue to give satisfaction and are much enjoyed. The Nutritional Quotient has gone up in nearly all cases; only a few show a stationary level. One case which has shown no increase for about two years now shows an upward curve through the addition of halibut oil to the diet. This general improvement is seen in the attendance, which for the past year has been 75 per cent.

The number at dinner varies from about 80 to 104. This means that the dining room though large is not big enough, and tables have had to be put in the corridor and kitchen. While 104 normal children might be seated in the dining room, it is impossible to seat a similar number of crippled children without much discomfort for them, and greater difficulty for Nurse and her assistant.

Thanks to the kindness of the Parks Committee a piece of land has been allotted to the School for recreation. While eminently suitable it has one serious drawback—it is much too far from the School. There is an interval of a quarter of an hour: 119 children have to visit lavatories, and by the time the badly crippled children have walked to the field, it is time to walk back again. Is it worth while? These are children who need the maximum amount of fresh air and sunshine, and it is a duty to see that they get it in abundance. Again, in wet weather there is no accommodation for these children for recreation, and no room big enough, or clear enough, where suitable physical instruction can be given. A covered-in recreation room is a real necessity.

Now there is another problem—that is, the inadequacy of the existing school buildings. There is a long waiting list of cases which need urgent treatment and which would benefit by an open air treatment, but there is no accommodation for them. No case is kept in the school longer than necessary, it is either sent to ordinary school, or to work, or, if suffering from a severe dual defect, notified to the Mental Health Services Committee."

Dr. Hargreaves and Mr. Jordan report:—

Stammerers' Class.

"During the year classes were held for one term each at Ellerby Lane, Meanwood Road and Bewerley Street Council Schools. The co-operation of the Head Teachers and the staff of the schools was much appreciated by the teacher in charge, and advisory work was done in cases of minor speech defects found in the schools visited.

Further activities in the visiting of homes and discussion of behaviour problems with parents were undertaken, but the distances involved in some cases made the home visiting rather difficult. Where this was impossible the parents were invited to visit Mr. Jordan at his home by appointment, and much useful data and discussion resulted. It was found that, while some parents were very helpful, it was impossible to alter certain environmental conditions which were definitely responsible for the children's maladjustments. For example, cases of friction with step-parents, divided families, and domestic unhappiness due to anti-social behaviour of parents, undue pampering, association with companions who were teaching wrongful practices, were met with and within the limits usually set, proved insuperable. We feel that it is in such cases that regression will inevitably occur, and the only solution possible would appear to be removal from unsatisfactory environment into the charge of persons capable of moulding a healthy personality, by controlling the child's future entirely to the one end, on sound psychological lines.

The classes were continued under Mr. Jordan's instruction, full time attendance in a group averaging twelve being the rule. Roughly 50 per cent. of the time was devoted to purely speech corrective work and normal educational work occupied the remainder. The experimental work done out of school on stammerers from six years old to sixty has resulted in a variation of method during the year so as to put the system adopted on a more sound psychological basis.

Originally the " Berquand " mechanical method was employed, but after observation and experiment with all known methods the following conclusions were reached :

1. The first stage must be the acceptance of the possibility of cure, by the child.
2. The child must be conditioned to his new surroundings with care, or he may feel hopeless instead of hopeful, not having a full understanding of the problem.
3. The parent must be enlisted as a helper and must strike a mean between over anxiety for cure and apathy.
4. The exercises and system must not produce any unnatural mode of speech, or the comments on this will cause relapse.
5. The support and encouragement of the school to which the child returns must be ensured and visits must be made by normal school teachers to see progress and receive advice as to how to help.

6. No method involving ultra dependence on others is sound, as withdrawal of help causes failure.

7. The child must be encouraged in all ways to normal self expression, and told he is regarded as in every way competent and useful.

8. The control of emotion must be the primary object as in its last analysis we now consider stammering to be an emotional trouble expressed in speech and not purely a speech defect.

9. Special coaching in reading, writing and arithmetic must be given during treatment to those children who feel inferior in these subjects, so as to change this " inferiority " into equality with others on return to school.

For these reasons the methods have been :—

1. *Auto suggestion.*—The child has received the suggestion of cure and has by persuasion, discussion and exercises, been helped to say the very things held previously to be impossible and has gone through a course of suggestion given when in a suitable mental state.

2. *Relaxation.*—Has been used to attain control of body through the mind to alleviate the excessive tension so often manifested in tic and convulsive movements and to secure that auto hypnosis necessary for positive suggestions to the subconscious mind.

(The principles of Dr. Schultze's " Das Autogene " Training have been employed throughout).

Relaxation exercises at home have been advised and we find many parents have tried them themselves.

3. *Respiratory Training.*—Following certain investigations as to the effect of full chest breathing on the balance of blood supply to the brain and more particularly to the speech motor area, which have been conducted in America and elsewhere, we have paid great attention to a good rhythm of breathing, and have called the child's attention to the practice of a new mode of breathing. This calls for the maximum of work at the bases of the lungs and a steady control of the expiration by the diaphragmatic muscles, thus obviating the spasms and jerks so often found in stammering speech.

4. *Individual psychology* has been used as far as time would allow to seek a solution to the question "Is the stammer a compensation for inferiority or anxiety, and if so what inferiority or anxiety is present?" Detailed questionnaires have been filled up and the results studied very minutely but the veracity of certain information, particularly as to (*a*) the onset of a stammer (*b*) the circumstances at the time, is very hard to assess, and the work is yet experimental. We can only say so far that the influence of imitation is, in these present cases, a distinct menace, and in twenty-one cases out of forty-two either friends or relatives stammered.

Of seven fathers who were "cured" six were still of imperfect speech and this contact with the affliction militated against the child's cure.

The evidences of lack of proper training before school age were in many cases overpowering, and the parents named such points as "temper," "lack of obedience," "pugnacity," etc. as desirable for elimination. Our view is that a normally trained child from a normal home shows none of these in an undue degree, and that a child who stammers accuses directly his home or school environment, and that these should be adjusted to the stammerer early on, rather than that he should be forced into fitting into an unsuitable environment.

Malocclusion.—Decided irregularity and lack of symmetry of bite of jaws was found in 90 per cent. of cases in two classes studied. We believe that whatever the cause (dummies, comforters, thumb sucking, etc.) the child who suffers from this while learning to speak will develop uncertainty of speech due to excessive difficulty in producing many frontal sounds, and so develop the mental anxiety which is present in stammering.

Investigations are proceeding on all cases of stammering noted under 7 years of age and referred to us by parents or teachers.

NUMBERS AND RESULTS.

Number admitted to classes during the year	35
Number found excellent on discharge ..	20
Very great improvement	6
Great improvement	5
Fair improvement	3
No change	1

As before we attempted to supervise cases after treatment has ceased by invitation to a revision for each of three succeeding months, but parents fear of distance or other causes have led to poor response. Certain parents however have kept in touch with Mr. Jordan for at least a year and the result has been gratifying in most cases.

Boys from two Secondary Schools have been admitted and in one case a discharge was made in five weeks with the concurrence of his Headmaster and the School Medical Officer, who had examined his speech improvement critically.

As it was felt desirable to supervise more fully the further treatment of school leavers the Committee approved the opening of an Evening Class in September, 1935, for the youths and girls who desired to attend. On the matter becoming known, adults up to fifty and of attainments up to University standard, of both sexes including two married ladies, enrolled themselves. The numbers have since necessitated the opening of three classes with a total enrolment of thirty-four, and an average of 90 per cent. attendance. The classes are for one and a half hours per week, and are run on slightly different lines, but with the same essential technique. So far, in every case where the methods advised have been regularly followed, a decided improvement is reported and in one case a man of forty-seven who was rejected in 1917, on account of " speech disability " has been enabled to speak publicly in Chapel and at work for the first time in thirty years. He has given valuable help in advising the younger men of the class.

Unfortunately several of the students have been treated before by various systems, and the result has been very hard to undo. In one case psychoanalysis has been pursued most exhaustively, but the stammer remains. Another case was " cured " by a much advertised professor, in a week. He is now worse than at first, and attributes this to the unsound version of the Berquand method used on him.

The comparison of the two types of class, day, full-time and evening, part-time would be of interest, were there any common ground for the discussion, but where one is authoritative and compelling, the other is only attended by those who have " a will to cure " and the technique more purely of suggestion. In the day classes, due to consideration of mobility, the work must as a rule be envisaged as that of one term, and no reliance placed on support or help beyond that period, whereas the evening classes are based

on the idea of attendance until gradual improvement warrants the cessation of attendance and personal attainment is the only test of this. I suggest that with an attendance of one and a half hours weekly the attainment of a satisfactory result in bad cases in a period of two years will be highly satisfactory to the pupil as that will be at the most 120 hours of instruction."

I should like to express my appreciation of this report in view of the fact that Mr. Jordan's services are no longer available and to add certain suggestions that they make.

Firstly, they suggest a need for an experimental comparison for at least two years of the following schemes :—

(1) Full-time class—speech only.
(2) Full-time class—half speech, half lessons.
(3) Part-time classes—speech only.
(4) Psychological treatment under appropriate conditions.

on the grounds that

(1) No one known method will cure every case.
(2) Environment is the retarding factor.
(3) Psychiatry and Psychology must play their part.

Cleft Palates.

At the request of the Faculty of the Leeds Infirmary, arrangements were made for a course of special instruction for children who have had operative treatment for cleft palate.

The approval of the Board of Education being obtained, the class was commenced in September at the Blenheim Walk School under Mrs. R. Andrews, a qualified teacher with a long experience of correcting all kinds of defective speech. Two afternoons a week were set aside for this work ; the class was divided into two sections, each section having a one hour session on each of these afternoons.

The number on roll (at December 31st) was thirteen, eight boys and five girls, the ages varying from 5 to 13 years. There were twenty-eight meetings and the children have made 71 per cent. of the possible attendances. This is particularly good for in three cases the attendance was very seriously affected by epidemic sickness.

The children are interested and decidedly keen on their work. The parents co-operate remarkably well and their efforts to help the pupils in their home practices between lessons are much to be commended. The pleasurable excitement with which the parent of one little boy related that he had been permitted to read aloud in his class in the normal school and had received a few words of commendation indicates the real help that the normal teacher can give in this work.

The following considerations make the work largely individual in character :—

(*a*) The age range with differences of attitude and powers of endurance.

(*b*) Intelligence, powers of imitation and quick response.

(*c*) In some cases cleft palate is combined with Hare Lip, and in some the operative treatment has been more successful than in others.

(*d*) In cases of numerous operations (*e.g.*, one case has had six operations in seven years) pressure of any kind is not advisable.

(*e*) Temperaments vary in their reaction to the operative treatment and to the treatment of their playmates and other contacts not always kind.

(*f*) Some have no teeth due to recent operations.

Mrs. Andrews is decidedly of the opinion that the experiment justifies itself. Each case has made definite progress and some show very marked improvement. It is too early to say definitely what degree of efficiency each case will reach but the outlook is promising. The good attendance, the appreciation of the parents and those who have visited the class at work tend to confirm that view.

A detailed account of the scope of the work together with a general paper on Speech Defects is in course of preparation.

Blind, Partially Sighted and Myopes.

Dr. Wood reports :—

"Total number on roll :—

Blenheim Walk	107
Roundhay Road	45
Armley	19
	171

These children have all been examined by Mr. Black and placed in the three categories :—

	Leeds Cases.			Other Authorities Blenheim.
	Roundhay Road	Blenheim	Armley	
Certifiable Blind ..	—	19	—	47
Partially Sighted ..	15	8	3	16
Myopes	30	1	16	16
	45	28	19	79

The 79 children from outside Authorities are all at Blenheim Walk.

There were 24 admissions during the year :—

	Leeds.	Other Authorities
Blind	1 ..	10
Partially Sighted ..	2 ..	—
Myopes	7 ..	4

21 children left during the year :—

To Technical Schools	5
,, Normal Schools	4
,, Work	7
At Home (ill)	2
Dead	1
Left Leeds	2

It will be noted that four cases have returned to ordinary schools during the year, being considered fit to take their places there.

Children are always taught in classes suitable to their capacity and this means that blind, myopes and partially sighted are taught together, although by different methods. No child is taught on "blind" lines unless there is reason to believe that he will come within the strict definitions of the Blind Persons Act.

We have tried out two experimental booklets prepared for the use of the partially sighted by the National Institute for the Blind and we find that spacing was the keynote for legibility rather than specially large type. Careful investigation by teachers of the partially sighted is proceeding along these lines and much time has been spent in finding suitable books.

Another interesting experiment is being made into the use of magnifying lenses in front of the book, as well as by the use of the Episcope which is a lantern enabling the page of a book to be projected on to the screen with considerable magnification. The objection to this at present is that only one page can be used at once, thus restricting the class to the pace of the slowest reader. It may well be that the use of a suitable magnifying lens used as an addition to and not in substitution of adequate spectacles will prove of educational benefit.

The lighting of a classroom used by partially sighted children is one of the most important points, and proper lighting in their homes is even more important. Experiments are being made which may give valuable help to school lighting generally.

No child is certified for attendance either at the Blind or Partially Sighted School except by Mr. Black—the Consulting Ophthalmic Surgeon, and it is to be regretted that parents still decline to accept his advice and it has not been the practice in Leeds to use more than moral pressure up to date. Further attempts will be made by interviews to secure better acquiescence, but parents should realise that the advice is good and is only given in the interests of the child.

Mr. Black has prepared a very interesting memorandum on the subject of the treatment of partially sighted children, but as it concerns more than the Medical Service, Dr. Stockwell proposes to present it separately at an early date. Consequently, I shall make no further remarks in this report on the subject of reorganisation.

There remains, however, one class to discuss, namely, children who have just too much sight to obtain the benefits of the Blind Persons Act. They have so little vision that employment is difficult owing to their limitations. Residential accommodation for some of these " near blinds " and serious myopes would be a benefit because proper feeding, regular hours and proper rest are essential.

The research into rate of increase in the degree of myopia is still continuing. The new set of figures obtained during 1935. have been combined with those obtained in past years and the average rate of increase in the various age groups obtained.

Annual Increase of degree of Myopia in children observed over the years 1932-33-34-35.

Age.	Number of Eyes.		Average Rate of Increase.	
	R.	L.	R.	L.
6– 7	59	57	·56	·53
7– 8	119	118	·47	·52
8– 9	299	302	·50	·53
9–10	566	565	·46	·48
10–11	573	562	·46	·48
11–12	521	522	·43	·44
12–13	439	439	·41	·43
13–14	176	175	·35	·34
14 and over	43	42	·42	·46

Total number of eyes investigated, 5,577.

It is proposed during the present year to continue as above, while those myopes seen by one member of the Refraction Staff are in addition to be weighed and measured. When this group of children come for their annual retest in 1937, the same procedure will take place and we shall have the nucleus of research, which it is hoped, will show some connection between the rate of general growth and growth of the eyeball, *i.e.* increase in the degree of myopia.

The average rate of increase for the myopes attending the Roundhay Road (Partially Sighted) School is given below combined with previous observations. These numbers are still very small but there seems to be very little evidence in them that the altered curriculum makes any difference in the rate of increase.

Partially Sighted Schools
(44 Children).

Age.	Number of Eyes.		Average Rate of Increase.	
	R.	L.	R.	L.
6– 7	1	1	—	—
7– 8	2	2	·49	·58
8– 9	7	7	·26	·13
9–10	10	10	·15	·27
10–11	5	5	·42	·47
11–12	8	8	·13	—
12–13	10	10	·45	·38
13–14	4	4	·06	·06
Over 14	2	2	—	—

Of the above eyes 63 showed no change.

Deaf.

Mr. Andrews reports :—

"Number on roll 98

Admissions during the year .. 19

Age Groups.	Leeds.	Other Authorities.
4— 5 ..	2 ..	1
5— 6 ..	3 ..	1
6— 7 ..	— ..	3
7— 8 ..	2 ..	—
9—10 ..	1 ..	1
10—11 ..	1 ..	—
11—12 ..	1 ..	—
12—13 ..	— ..	2
15 ..	1 ..	—
	—	—
	11 ..	8
	—	—

It is very pleasing to record that in all cases over the 6—7 Group there are excellent reasons for their late admission. Either they have acquired deafness or have been previously instructed and moved to this district. It seems to point to the fact that parents are at last realising the importance of the early admission.

We were reminded by Mr. Lumsden, His Majesty's Inspector, on a recent visit that the junior classrooms are much too small for real activity in learning. The children on roll under 8 are, five boarders (plus two enrolled after this report), and 8 Day.

With the tendency for earlier admission, we should find a Nursery School a distinct advantage in dealing with these young children.

I venture to suggest that an examination of the accommodation of the whole building would emphasise the necessity of building a Special School on modern lines as soon as this building can be used to advantage for other purposes.

Leeds deaf (old classification)—

Totally	35	Congenital	..	31	Acquired ..	4
Partially	18	Congenital	..	11	Acquired ..	7
	53			42		11

The "Multitone" classification of the children is as follows—last year's figures in brackets :—

	Leeds.		Other Authorities.		Total.
1. Hearing conversation	3 (3)	..	4 (5)	..	7
2. Hearing known language and likely to develop to 1	12 (11)	..	11 (11)	..	23
3. Hearing voice and able to differentiate certain vowels	6 (4)	..	5 (4)	..	11
4. Acknowledging vibrations ..	10 (9)	..	13 (9)	..	23
5. No response	8 (7)	..	11 (11)	..	19
6. Unsatisfactory evidence ..	12 (8)	..	1 (2)	..	13
7. Obviously hearing (? mentality at fault) ..	2 (3)	..	— (—)	..	2
	53		45		98

The " Deaf Aid " class of twelve children has had practically a full year of instruction by hearing methods. Without an audiometer it is quite impossible to give a scientific record of its affect upon the actual hearing of the children. There is no doubt of its effect upon their speech and language development. The Radiogram has been used extensively for developing rhythmic speech, and the class has quite a repertoire of nursery rhymes, songs and choruses. I have every confidence that, as their known language develops, these children whom I classify as 2 will develop to 1. The success of this class has prompted me to request additional apparatus to enable the other cases under 2 and 3 to be on full time aural instruction."

There is no doubt that a new era is opening for some of our deaf children. Russian scientists claim to be curing deafness by transmitting doses of short wave high frequency sounds from a special Broadcasting Station. An Austrian Professor claims to be returning " born deaf " children to normal schools after a period of special treatment. Making all allowances for " journalistic licence," there is no smoke without fire. I feel that, if some of our physicists at the University were interested in the subject, there is new field for investigation.

Leavers.—There were eight leavers during the year, three boys and five girls. One boy is a Tailor's apprentice, one a Polisher and the other of low mentality, unemployed. Two girls are employed in some branch of tailoring, one a winder in a mill, and two discharged as mentally unsuitable.

At his periodical visits to the Deaf School, Mr. Sharp makes his notes on the cases and agrees with the above classification.

All cases are seen by him and records made as soon as possible after admission, and annually afterwards and progress or the reverse noted.

The Multitone.—An instrument for providing instruction by amplified speech, has been very successful and another set to enable a further class to be set up is urgently required. It is not a toy and will not work miracles, but it does enable children with only a small amount of hearing to be educated on hearing lines and to keep them " ear minded." So far as present observations go, it has the further advantage of making their speech far more intelligible and there is never a lack of volunteers for any demonstration. It is interesting to record that the teacher in charge is using almost normal methods with them. Whilst it is still too soon to make

final pronouncements, it is quite certain that the trial justifies expansion and I, therefore, ask your permission for a further installation.

An instrument known as the Audiometer is also urgently needed. This enables us to find much more accurately the degree of hearing possessed by the individual.

Dr. Prince reports :—

Nursery School and Nursery Classes.

"During the past year the three new Nursery Classes have become well established. Throughout the process of organisation thought has been given to the wider problems which might arise if a more general application of Nursery methods to Infants' Schools should be contemplated.

The Nursery School witnesses the change from the nursling to the school child. Fullest efficiency can only be realised if the liaison between home and school is complete. Each child at this age is to the highest degree an individual, and in need of individual study and guidance. In order that each entrant may receive the necessary attention, admissions and promotions are being spread as evenly as possible throughout the year, and a detailed case history is prepared for each new comer under the following heads :— housing, economic status, family situation, medical history of individual and of family, development of speech, bodily control and temperamental trends.

The figures which follow relate to 286 children in whose case all enquiries have been completed. Mothers have been very willing to attend medical inspections and provide information.

The economic status of the parents varies, on the one hand from Kirkstall Road, where the skilled workers out number the unskilled and unemployed in the proportion of two to one, to St. Peter's Square on the other hand, where the unskilled and unemployed preponderate in the proportion of three to one.

Housing conditions are indicated by the fact that, of this group, 89 children had hot water installed in the home, and 82 had baths installed. Small yards or gardens were attached to the homes of 91 children. The majority of these plots, while capable of accommodating a perambulator, would not provide room for a play-pen. The remainder of the houses opened directly on to the street. Under these circumstances the value of school wash rooms and playgrounds hardly needs to be stressed.

Infant Welfare Centres had been attended regularly by 89 of the children and occasionally by 57. Eighty-four children had never attended any centre. More than half of these children had ceased attendance at some time prior to commencing school.

Signs of mental retardation or maladjustment were noted in 79 cases. This figure ignores transient emotional disturbances associated with adjustment to the school life. Further investigation of the mental condition is required in the case of 32 retarded children.

Left handedness was noted in 25 children, and ambidexterity in 22. Elementary habit training was needed in 21 cases.

The total physical defects noted at the first routine inspection of this group numbered 597. Of these 126 were expected to be directly benefitted by the school regime. Clinic treatment, including dentistry, was indicated in 85 cases.

Catarrhal affections of the upper respiratory tract were noted at the time of the first inspection in 184 cases, and catarrh of the lungs in 42 cases.

Defects due to faulty feeding were noted in 96 children. Though some of these children were pale and under weight, many were of a heavy build. The latter group included 86 cases showing rickety deformities of the bones. Further evidence of unsatisfactory diet was provided by 76 cases of gross dental caries.

As nutrition is generally believed to be the most important single factor in the nurture of children the question of diet was investigated with some care.

The daily consumption of fresh milk in the home was found to be half a pint or more in 137 cases, and less than half a pint in 149 cases. The details are as follows :—

1 pint daily ..	.. ..	28 children.
¾ „ „ ..	.. ..	24 „
½ „ „ ..	.. ..	85 „
¼ „ or less daily	..	75 „
"Sundays only"	.. ..	28 „
Tinned milk only	.. ..	37 „

Tinned milk was rarely used for any purpose other than flavouring tea. Attempts to persuade mothers that fresh milk provided good value for money proved singularly unsuccessful.

Breakfast menus were generally unsatisfactory. In this group 88 children received a certain amount of protein in the form of milk, egg or bacon. The majority of the rest breakfasted on bread, with butter, dripping, tinned milk and tea. Fourteen children refused breakfast altogether. This was most frequently the case in the poorest homes, and appeared to be due either to digestive disturbances or to sleep which was defective in quantity or quality.

In view of the known defects of the children's diets a mid-day meal has been made a feature of each Nursery Class. The dinners are prepared at the Central Kitchen except in the case of Green Lane, and the Hunslet Nursery School, where the numbers on roll justify the preparation of the meal on the school premises. By the judicious choice of containers and menus the meals reach school in a thoroughly appetising and digestible condition.

The protein content of the meal is intentionally high. It is fixed at 2½ ozs., of meat or 4 ozs. of fish (undressed weights). The supply of green vegetables, butter and eggs is generous. Carbohydrates are reduced to a minimum. Each meal contains 4 ozs. of milk, a hard rusk and a portion of fresh fruit or salad. The meal is supplemented during the day by a third of a pint of milk and 2 drachms of pure Cod Liver Oil.

School dinners have been taken by 193 children in the group of 286. Of this number 75 were excused payments under the Committee's scale. The daily charge to "dinner" children is 3½d.; "non-dinner" children almost without exception, take the supplementary milk and Cod Liver Oil, for which they make payments.

The children are weighed and measured monthly. The weight charts form a useful epitome of the child's physical progress, showing the commencement or discontinuation of free meals, school dinners or supplementary feeding, and the incidence of illness, absences from school and holidays. An unsatisfactory weight chart has often led to investigations which revealed some unsuspected source of the trouble.

The "dinner" children show a slight but definite advantage over the "non-dinner" group in the weight gained during the year, but the weight chart does not give an adequate idea of the improvement in nutrition. As was previously indicated some of the heaviest children are flabby and badly nourished. The improved nutrition is

shown by increased muscular tone, improved posture, clearer skins and increased energy. In the classes where recipients of free meals predominate the general bearing of the group is in marked contrast with that observed when the nursery régime was instituted fourteen months ago.

In the course of the year's work certain conclusions regarding the converted Infants' Classes have been formulated. Equipment and accommodation are of the first importance, but an Infants' Class cannot be converted into a Nursery Class by structural alterations and the provision of much needed domestic equipment. In the absence of a practical knowledge of nursery hygiene on the part of the staff, and adequate medical supervision of seemingly unimportant domestic details such a procedure might have unfortunate results.

One matter which will continue to exercise the mind of the Medical Officer is the danger of infection. Until it is possible for the children to spend a substantial proportion of their time out of doors this will continue to be a serious problem especially in view of the fact that infection during the nursery years has more serious after results than infection at a later age. The danger would be much reduced if french windows gave easy access to verandahs, where the children could come and go under observation of the staff, who are necessarily employed indoors to a considerable extent. The possibility of encouraging outdoor activity by the provision of sand pits, climbing frames and garden plots, remains to be explored."

Nursery Schools—Summary of Routine Examinations, 1935.

	No. of Children Examined.	No. of Defects Referred for Treatment.	No. of Defects Referred for Observation.	No. of Children with Defects.	No. of Children Referred for Treatment.	No. of Children Referred for Observation.	No. of Children without Defects.
Nursery School	40	8	48	37	6	23	3
Nursery Classes	130	43	112	114	31	54	16

Secondary Schools.

All Statutory duties are fulfilled as regards inspection and treatment of pupils attending Schools for Higher Education, and there are no changes to report. 2,374 pupils were presented for full routine examination, and 1,788 were reinspected.

Special Place pupils were given the opportunity of Dental Inspection and Treatment and 1,003 accepted the offer.

Summary of Receipts from Parents towards the cost of Treatment of Children through the agencies of the School Medical Service.

	1935.			1934.		
	£	s.	d.	£	s.	d.
Refraction Treatment and Supply of Spectacles	917	1	3	910	10	3
Dental Treatment	607	1	0	492	7	4
Minor Ailments and X-ray Treatment ..	17	19	9	17	1	5
Supply of Malt and Cod Liver Oil	153	18	0	164	7	9
Treatment of Tonsils and Adenoids ..	42	11	0	64	12	0
Orthopædic Treatment—Operations, Appliances, etc.	42	0	1	62	6	0
Massage	17	11	10	19	11	6
TOTAL CASH RECEIVED £	1,798	2	11	1,730	16	3

Miscellaneous.

There are no changes to record in the methods of dealing with successful scholarship candidates or with prospective entrants to the various Training Colleges under your care, but it is gratifying to report that our efforts under the latter heading have been received so well by the Principals. There can be few better judges as to the fitness of a prospective teacher than the Doctor who is in daily contact with the work expected of them.

The ruling that all entrants to the teaching profession in the city must be passed by the School Medical Officer will put further work on us, but every effort will be made to ensure satisfactory results.

The arrangements with the Mental Health Services Committee ceased during 1935, and have not been renewed. The work at the Remand Home continues to be of importance and the remarks of the Chairman of the Juvenile Bench in his report have been much appreciated by my colleagues and myself. 49 children have been examined and reported on during the year either as to suitability for Approved Schools or for other reasons. Great care is necessary at these examinations for often the future of the delinquent is at stake.

The removal of the Home to much more adequate conditions has now taken place, but it has one disadvantage in that it is now not possible to have a boy brought down for examination at a few minutes' notice.

Children's Day.—The usual activities of the department in Children's Day were continued. 1,223 children in all were examined,

881 by the School Medical Officers, 87 by Doctors of the Maternity and Child Welfare Service and 255 children from outside Leeds were examined by Dr. Wear. 318 children attended for re-examination in order to decide the winners for the 200 silver spoons presented by the Yorkshire Evening Post. The winners were finally selected by Dr. Maxwell Telling, Dr. Gladys Russell and Dr. Rhoda Adamson, to whom I should like to offer my thanks. In addition, 2,055 children presented themselves for the Dental Competition which was judged by the Dental Officers.

Every opportunity was taken to impress on mothers that the silver spoons were awarded for mothercraft and not for good looking or well dressed babies.

Conclusion.

There are various suggestions in the body of the Report that call for recapitulation. The first point to be mentioned is that of the treatment of rheumatism and the prevention of heart disease.

I will quote from a recent letter of Dr. Vining's—" If we are going to prevent heart disease developing I feel it is no good waiting till the heart shows that it has been attacked. We must concentrate upon the child whose health shows that it is being attacked by the rheumatic germ however slight that evidence may be, and we should place him under the best conditions possible before he showed any signs of heart trouble. Unfortunately, there are many of these children for whom Open Air Schools would be a great help. But I should like to see something more than this and the ideal and more certain method would be to provide a Residential School and keep them there for a year or two at least.

I appreciate the difficulties and the expense but in the long run it would be money well spent."

He goes on to say that, whilst slum clearance will in the long run make some impression, rheumatism has always occurred with great frequency in the families of the better artisan class, and that proper food is probably the most important factor.

At The James Graham Open Air School we have always some of these cases and up to date they have shown the best results of all the types included therein. But resident accommodation there is limited, and I think it is generally felt by the Visiting Committee that there is need for more kitchen accommodation than exists at present as well as better provision for the resident domestic staff. I, therefore, hope that you will consider the question of a new block on the Estate which will serve two purposes, first, the necessary

accommodation for the rheumatic children and second, sleeping quarters for an increased number of children attending the Open Air School.

I have pointed out elsewhere that, whilst separate classes are advisable for the rheumatic cases as well as distinct dormitories or wards, the supervision can be left quite safely in the capable hands of the Matron and Head Teacher.

I would suggest for your consideration the question of accommodation for two groups of fifty each as a very desirable basis on which to work. The incidence of heart cases based on the findings of last year's Routine Inspection was 1 per cent. or approximately 600 in the City.

May I remind you that these rheumatic cases will not often be " bed " cases although they will of necessity spend more time in bed than their fellows. They should be out of bed for some hours each day, able to take part in their own school activities as well as have some exercise every day. Whilst dormitory supervision will be advisable there need be no night nurse.

Their feeding could be done from Lawns House and in many ways establishment charges reduced. The Open Air School has largely overcome parental objections and as Dr. Willcock remarks, the time has come when children should be retained, where advisable, for longer periods. Further, at present, on account of limited sleeping rooms, we are compelled to restrict residents to one sex at a time.

I have always been given to understand that, when the Lawns House Estate was bought, the idea was to utilise it entirely for those children whom I have previously described as " Subnormal " and I would venture to recall that suggestion to you in the hope that an adequate scheme may be developed forthwith, even if it is not all completed at once.

The Potternewton Park School for the Physically Defectives is already overcrowded ; there is a waiting list for admission which is growing every week and there are no vacancies. Their opportunities for recreation, especially in bad weather, are very small, and the entrance not without danger. It also contains that difficult group—the Dual Defects—which, with a complete ascertainment throughout the City will tend to increase, but will never be big enough to warrant a separate establishment for Leeds alone. The question, therefore, of moving this School to Lawns House deserves your consideration.

Again, the Blenheim Walk School for Blind and Deaf has altered its function a great deal lately. The actual numbers of "Blind" children appear to be decreasing, and the pupils to-day are more "Partially Sighted" than ever.

Conditions suited to the blind are not always to the advantage of the partially sighted, who require to use their eyes to the best advantage as they will have to work as sighted persons, and there is no doubt they would benefit by transfer to the Lawns House Estate.

It will be seen, I hope, that I have outlined enough points to establish the value of the Estate, although there are many others.

The question of bringing all subnormal children together for more adequate classification, and better handwork and domestic facilities cannot be forgotten, and the accommodation for epileptics all over the country is inadequate.

At present, pupils at Potternewton Park and Lawns House are conveyed by 'buses and having only one point of delivery should mean that the same number of children would travel a shorter distance, as each round could be lessened. Stigma, still present unfortunately, would be much reduced if various types were transported together, each child on arrival being given the education best suited to his capabilities, and devised to minimise his affliction so that he may become a useful member of the community.

On behalf of myself and my colleagues, I desire, Mr. Chairman—Ladies and Gentlemen—to thank you all for the way you have listened to our suggestions, and to the Director and the Administrative and Inspecting Staffs for much valuable assistance.

I have the honour to sign myself,

Your obedient Servant,

G. E. St. CLAIR STOCKWELL,
School Medical Officer.

APPENDIX A.

MEDICAL INSPECTION RETURNS

YEAR ENDED 31st DECEMBER, 1935.

TABLE I.

Medical Inspections of Children attending Public Elementary Schools

A.—Routine Medical Inspections.

NUMBER OF INSPECTIONS IN THE PRESCRIBED GROUPS.	
Entrants	6,845
Second Age Group	5,573
Third Age Group	5,798
TOTAL	18,216
NUMBER OF OTHER ROUTINE INSPECTIONS	1,767
GRAND TOTAL	19,983

B.—Other Inspections.

NUMBER OF SPECIAL INSPECTIONS	20,411
NUMBER OF RE-INSPECTIONS	30,118
TOTAL	50 529

C.—Children Found to Require Treatment.

NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).	
PRESCRIBED GROUPS.	
Entrants	2,337
Second Age Group	1,890
Third Age Group	1,828
TOTAL (Prescribed Groups)	6,055
OTHER ROUTINE INSPECTIONS	595
GRAND TOTAL	6,650

TABLE II.

A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1935.

Defect or Disease.	Routine Inspections. Number of Defects. Requiring Treatment. (2)	Routine Inspections. Number of Defects. Requiring to be kept under Observation but not Requiring Treatment. (3)	Special Inspections. Number of Defects. Requiring Treatment. (4)	Special Inspections. Number of Defects. Requiring to be kept under Observation but not Requiring Treatment. (5)
(1)				
Skin — (1) Ringworm—Scalp	—	—	102	—
Skin — (2) ,, Body	5	—	174	—
Skin — (3) Scabies	14	—	514	—
Skin — (4) Impetigo	51	7	1,169	—
Skin — (5) Other Diseases (Non-Tuberculous)	345	158	8,459	—
Skin — Totals (Heads 1 to 5)	415	165	10,418	—
Eye — (6) Blepharitis	114	22	372	—
Eye — (7) Conjunctivitis	28	1	356	—
Eye — (8) Keratitis	4	1	2	—
Eye — (9) Corneal Opacities	1	2	3	—
Eye — (10) Other Conditions (excluding Defective Vision and Squint)	50	21	662	—
Eye — Totals (Heads 6 to 10)	197	47	1,395	—
(11) Defective Vision (excluding Squint)	1,790	1,547	5,323	3
Nose and Throat — (12) Squint	212	181	13	1
Ear — (13) Defective Hearing	298	90	121	—
Ear — (14) Otitis Media	20	1	328	—
Ear — (15) Other Ear Diseases	301	22	1,050	—
Nose and Throat — (16) Chronic Tonsillitis only	697	1,259	194	—
Nose and Throat — (17) Adenoids only	20	4	81	—
Nose and Throat — (18) Chronic Tonsillitis and Adenoids	223	63	643	—
Nose and Throat — (19) Other Conditions	1,836	1,004	1,007	—
(20) Enlarged Cervical Glands (Non-Tuberculous)	130	203	200	—
(21) Defective Speech	26	170	78	—
Heart and Circulation — Heart Disease: (22) Organic	111	82	72	—
Heart and Circulation — (23) Functional	21	275	15	1
Heart and Circulation — (24) Anæmia	72	46	41	1
Lungs — (25) Bronchitis	332	221	107	—
Lungs — (26) Other Non-Tuberculous Diseases	53	30	2	—
Tuberculosis — Pulmonary: (27) Definite	6	1	11	—
Tuberculosis — (28) Suspected	—	—	24	—
Tuberculosis — Non-Pulmonary: (29) Glands	10	2	6	—
Tuberculosis — (30) Bones and Joints	4	—	26	—
Tuberculosis — (31) Skin	2	—	3	—
Tuberculosis — (32) Other Forms	1	1	—	—
Tuberculosis — Totals (Heads 29 to 32)	17	3	35	—
Nervous System — (33) Epilepsy	10	3	23	—
Nervous System — (34) Chorea	11	4	22	—
Nervous System — (35) Other Conditions	91	242	35	—
Deformities — (36) Rickets	84	25	495	—
Deformities — (37) Spinal Curvature	79	96	217	—
Deformities — (38) Other Forms	1,094	692	475	—
(39) Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	827	1,377	6,326	2
Total	8,973	7,823	28,751	8

B.—Classification of the Nutrition of Children Inspected During the Year in the Routine Age Groups.

Age-Groups.	Number of Children Inspected.	A (Excellent).		B (Normal).		C (Slightly subnormal).		D (Bad).	
		No.	%	No.	%	No.	%	No.	%
Entrants	6,845	683	10·0	5,303	77·5	842	12·3	17	·2
Second Age-group ..	5,573	536	9·6	4,035	72·4	958	17·2	44	·8
Third Age-group ..	5,798	812	14·0	4,089	70·5	876	15·1	21	·4
Other Routine Inspections	1,767	181	10·2	1,257	71·1	319	18·1	10	·6
Total	19,983	2,212	11·0	14,684	73·5	2,995	15·0	92	·5

Of the 2,995 cases classified "C" (slightly subnormal) :—
417 were referred for treatment.
555 were referred for observation.
2,023 no action deemed necessary.
Of the 92 cases classified "D" (Bad) :—
53 were referred for treatment.
18 were referred for observation.
21 no action was recommended.

TABLE III.

Return of all Exceptional Children in the Area, 1935.

Blind Children.

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
19	—	—	—	19

Partially Sighted Children.

At Certified Schools for the Blind.	At Certified Schools for the Partially Sighted.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total
—	74	40 (*a*)	—	—	114

Deaf Children.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
54	2	—	1	57

Partially Deaf Children.

At Certified Schools for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
—	—	—	—	—	—

Mentally Defective Children—Feeble-minded Children.

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
405	54 (*b*)	24 (*c*)	121 (*d*)	604

Epileptic Children—Children Suffering from Severe Epilepsy.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
3	—	1	7	11

TABLE III—continued

Physically Defective Children.
A.—Tuberculous Children.
I.—Children Suffering from Pulmonary Tuberculosis.
(Including pleura and intra-thoracic glands.)

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
—	—	33	10	43

II.—Children suffering from Non-Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
23	45	11	17	96

B.—Delicate Children.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
235	1,415 (*e*)	6	1	1,657

C.—Crippled Children.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
99	223	1	4	327

D.—Children with Heart Disease.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
26	390	—	15	431

Children suffering from Multiple Defects.

Combination of Defect.	At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
Deaf and Mental ..	2	—	—	—	2
Cripple and Mental ..	11	—	1	1	13 (*f*)
Epilepsy and Mental ..	4	—	—	—	4
Heart and Mental ..	6	—	—	—	6
Cripple and Heart ..	1	—	—	—	1

(*a*) These children have been recommended for attendance at Partially Sighted Classes but parents object.

(*b*) Twenty-four of these children were admitted to Special Schools on the 7th January, 1936, 1 was certified mentally defective, but owing to age was allowed to remain in ordinary school under supervision, and will be reviewed from time to time up to 16 years of age. Twenty-nine are awaiting admission to Special Schools.

(*c*) These children have been placed in Private Schools by their parents, and are examined annually by the School Medical Officer.

(*d*) These children have left the Special Schools on license to take up approved employment. They will be under supervision until reaching 16 years of age.

(*e*) This includes 24 children on whom a diagnosis of intra thoracic tuberculosis has been made by a Tuberculosis Officer, all of whom are certified as non-infective and are attending ordinary schools.

(*f*) In addition to these, there are 14 children at the School for Crippled Children who are under the observation of the School Medical Officer regarding their mental conditions. These have not yet been certified as dual cases.

During the three terms at The James Graham Open-Air School in 1935, 524 children have attended. The number shown in the Table represents the children in attendance at the end of the year.

TABLE IV.

Treatment Tables, 1935.

Group I.—Minor Ailments (excluding Uncleanliness, for which see Table VI.).

Disease or Defect.	Number of Defects Treated, or Under Treatment during the Year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Skin—			
Ringworm—Scalp—			
(i.) X-ray Treatment. If none indicate by dash	15	—	15
(ii.) Other Treatment	80	9	89
Ringworm—Body	166	13	179
Scabies	479	40	519
Impetigo	1,163	54	1,217
Other skin disease	8,404	311	8,715
Minor Eye Defects (External and other, but excluding cases falling in Group II.) ..	1,334	266	1,600
Minor Ear Defects	1,451	656	2,107
Miscellaneous (*e.g.*, minor injuries, bruises, sores, chilblains, etc.)	3,827	1,677	5,504
Total	16,919	3,026	19,945

Group II.—Defective Vision and Squint (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

	No. of Defects Dealt with.		
	Under the Authority's Scheme.	Otherwise.	Total.
ERRORS OF REFRACTION (including squint). (Operations for squint should be recorded separately in the body of the School Medical Officer's Report)	5,273	314	5,587
Other defect or disease of the eyes (excluding those recorded in Group I.)	—	—	—
Total	5,273	314	5,587

	Under the Authority's Scheme.	Otherwise.	Total.
No. of children for whom spectacles were (*a*) Prescribed	3,975	148	4,123
(*b*) Obtained	4,543*	148	4,691

* Includes alterations to lenses and spectacles replaced without further refraction

TABLE IV.—continued

Group III.—Treatment of Defects of Nose and Throat.

Number of Defects.													
Received Operative Treatment.												Received other forms of Treatment.	Total number Treated.
Under the Authority's Scheme in Clinic or Hospital.				By Private Practitioner or Hospital, apart from the Authority's Scheme.				Total.					
(i.)	(ii.)	(iii.)	(iv.)	(i.)	(ii.)	(iii.)	(iv.)	(i.)	(ii.)	(iii.)	(iv.)		
2	3	92	4	26	5	1,416	55	28	8	1,508	59	3,613	5,216

(i.) Tonsils only. (ii.) Adenoids only. (iii.) Tonsils and Adenoids. (iv.) Other defects of the nose and throat.

Group IV.—Orthopædic and Postural Defects.

	Under the Authority's Scheme.			Otherwise.			Total number Treated
	Residential Treatment with Education	Residential Treatment without Education	Non-Residential Treatment at an Orthopædic Clinic.	Residential Treatment with Education	Residential Treatment without Education	Non-Residential Treatment at an Orthopædic Clinic.	
Number of children treated	6	31	551	59	406	415	1,468

Table V.—Dental Inspection and Treatment.

(1) Number of children inspected by the Dentist :
(*a*) Routine age-groups.

AGE	5	6	7	8	9	10	11	12	13	14	Total
Number	—	1,691	2,000	2,215	2,159	2,189	2,065	1,870	1,757	138	16,084

(*b*) Specials 7,480

(*c*) TOTAL (Routine and Specials) 23,564

(2) Number found to require treatment 21,902*

(3) Number actually treated .. .. 18,819†

(4) Attendances made by children for treatment 33,072

(5) Half-days devoted to :—

Inspection	111½
Treatment	3,657½
TOTAL ..	‡3,769

(6) Fillings :—

Permanent Teeth ..	23,230
Temporary Teeth ..	37
TOTAL ..	23,267

(7) Extractions :—

Permanent Teeth ..	7,317
Temporary Teeth ..	25,959
TOTAL ..	33,276

(8) Administrations of general anæsthetics for extractions 14,519

(9) Other Operations :—

Permanent Teeth ..	5,170
Temporary Teeth ..	41
TOTAL	5,211

* Includes 6,946 Casuals.
† ,, 6,402 ,,
‡ In addition 169½ sessions were spent in supervisory work, D.O.'s Conferences, etc.

TABLE VI.—Uncleanliness and Verminous Conditions.

(1) Average Number of Visits per School made during the year by the School Nurses	43
(2) Total Number of Examinations of Children in the Schools by School Nurses	178,580
(3) Number of Individual Children found unclean	9,604
(4) Number of Children cleansed under arrangements made by the Local Education Authority	2,717
(5) Number of Cases in which legal proceedings were taken :—	
(*a*) Under the Education Act, 1921	94
(*b*) Under School Attendance Byelaws	119

TABLE VII.—Other Forms of Treatment.

Defect.	Number of Defects Treated or under Treatment during the Year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Heart and Circulation	—	366	366
Lungs	1	696	697
Malnutrition	602	1,044	1,646
Other Defects	671	2,844	3,515
Total	1,274	4,950	6,224

TABLE VIII.

Return of Attendances at Medical Clinics, 1935.

CLINIC.	ARMLEY.			BURLEY.			EAST LEEDS.			EDGAR ST.			HOLBECK.			HUNSLET.			MEANWOOD RD.			CENTRAL.			TOTAL.			Cases Outstanding 31st Dec., 1935.
Number of Attendances	15,155 (14,839)			18,549 (19,381)			16,752 (17,507)			31,491 (33,569)			20,459 (30,602)			*31,373 (31,041)			17,439 (21,502)			12,744 (12,927)			163,962 (181,368)			
DEFECTS.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances.	Cleared.	No. of Cases	No. of Attendances.	Cleared.	No. of Cases.	No. of Attendances	Cleared.	
Malnutrition	129	423	48	126	1,941	47	85	266	33	276	3,166	183	104	4,650	21	301	8,569	105	167	3,004	40	—	—	—	1,188	22,019	477	711
Uncleanliness of Head	385	1,250	376	381	1,090	361	149	392	149	558	1,626	520	502	1,873	495	218	675	210	549	2,155	525	—	—	—	2,742	9,061	2,636	106
Uncleanliness of Body	—	—	—	2	5	2	1	1	1	15	24	14	—	—	—	22	50	22	33	48	33	—	—	—	73	128	72	1
Nose and Throat Defects	92	188	84	82	330	80	92	205	90	172	471	144	60	217	41	297	4,578	188	24	25	18	1,114	1,303	338	1,933	7,317	983	950
External Eye Diseases	194	1,636	176	151	1,839	138	162	940	155	364	1,547	319	157	1,617	136	241	1,772	209	143	1,058	127	—	—	—	1,412	10,409	1,260	152
Ear Diseases	194	1,574	179	148	2,152	127	102	1,322	84	373	3,074	328	96	1,185	73	226	2,577	159	165	1,693	145	91	215	12	1,395	13,792	1,107	288
Teeth (see Dental, pp. 38, 91, 97)	1	1	1	—	—	—	9	11	9	4	5	1	—	—	—	13	13	11	4	4	4	—	—	—	31	34	26	5
Heart and Circulation	17	27	10	6	48	6	29	55	26	3	10	—	6	16	4	10	11	10	—	—	—	57	97	7	128	264	63	65
Lung Diseases	24	39	24	6	9	6	32	63	32	4	5	2	6	9	—	41	65	27	2	5	1	29	35	15	144	230	107	37
Nervous System ..	8	22	6	—	—	—	9	19	9	2	5	2	1	1	—	3	5	1	—	—	—	57	87	1	80	139	19	61
Impetigo	171	1,226	153	120	1,041	114	148	1,354	142	279	2,760	213	119	958	99	141	1,083	115	203	1,350	176	—	—	—	1,181	9,772	1,012	169
Scabies	24	74	20	54	310	49	31	188	29	79	304	75	33	242	30	56	251	51	110	417	101	127	359	121	514	2,145	476	38
Other Skin Diseases ..	854	4,552	826	550	3,598	512	933	5,645	883	2,318	11,618	2,092	731	3,301	659	2,163	6,183	1,833	948	4,407	893	4	7	4	8,501	39,371	7,702	799
Minor Injuries	352	1,537	336	570	2,585	553	495	2,070	472	769	3,036	713	492	2,169	470	627	2,585	592	596	2,161	575	—	—	—	3,901	16,143	3,711	190
Ringworm of Head ..	12	88	12	9	54	8	21	190	20	36	256	30	—	—	—	4	23	4	6	29	6	19	127	13	107	767	93	14
Ringworm of Body ..	18	125	18	23	296	21	19	196	16	53	431	40	4	73	4	48	171	45	10	62	8	—	—	—	175	1,354	152	23
Enlarged Cerv. Glands (Non-Tuber.) ..	3	67	3	76	233	48	41	98	39	31	71	29	12	20	11	26	179	24	10	17	7	—	—	—	199	685	161	38
Rickets	29	608	6	18	547	6	24	366	16	37	634	19	42	1,549	16	29	328	8	1	1	—	315	1,096	68	495	5,129	139	359
Deformities	37	854	2	39	971	4	71	1,853	39	64	883	53	44	950	17	30	533	15	—	—	—	406	1,941	101	691	7,985	231	460
Tuberculosis (Non-Pulmonary)	2	2	2	—	—	—	3	5	3	1	2	1	13	27	5	—	—	—	1	3	—	15	17	2	35	50	13	22
Speech	—	—	—	—	—	—	2	2	2	1	1	1	—	—	—	—	—	—	—	—	—	75	75	61	78	78	64	14
Vision and Squint ..	704	752	702	794	813	793	619	678	599	845	875	845	778	790	771	695	697	690	21	21	20	1,107	1,111	1,101	5,563	5,737	5,521	42
Hearing	23	73	19	7	38	7	33	296	31	—	—	—	3	3	2	2	9	2	3	3	—	49	70	15	120	492	76	44
Miscellaneous	28	37	17	351	649	338	327	537	311	403	687	373	265	749	251	510	1,016	446	432	976	383	120	191	30	2,436	4,842	2,155	281
Mental Cases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	473	473	473	473	473	473	—
Employment Cases ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	882	902	882	882	902	882	—
Scholarship Cases ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	524	570	524	524	570	524	—
Camp Cases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,527	2,527	2,527	2,527	2,527	2,527	—
Children's Day Examinations ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,223	1,541	1,223	1,223	1,541	1,223	—
TOTALS	3,301	15,155	3,020	3,513	18,549	3,220	3,437	16,752	3,190	6,687	31,491	5,997	3,468	20,459	3,105	5,703	31,373	4,767	3,428	17,439	3,062	9,214	12,744	7,524	38,751	163,962	33,885	4,866

The figures in brackets represent those for 1934.

*Includes 7,995 attendances at the Middleton Sub-Clinic.

TABLE IX.

Number of Notices issued to Parents of Children Reported to have Defects during 1935.

(1) Elementary and Special Schools.

SCHOOL MEDICAL OFFICERS' CASES—			
First Notices		8,154	
Second Notices		1,092	
			9,246
DEFECTIVE VISION CASES			12,171
SCHOOL NURSES' CASES—			
Uncleanliness of Head—			
First Notices	9,400		
Second Notices	5,144		
Special Notices	1,062		
Final Notices	3,044		
		18,650	
Uncleanliness of Body—			
First Notices	840		
Second Notices	151		
Final Notices	48		
		1,039	
			19,689
SCHOOL DENTAL OFFICERS' CASES			37,935

(2) Seconday Schools.

DEFECTIVE VISION CASES	195
SCHOOL DENTAL OFFICERS' CASES	1,797
TOTAL	81,033

TABLE X.

Number of Exclusions, 1935.

DEFECT.	REFERRED FOR EXCLUSION BY		TOTAL.
	School Medical Officers.	School Nurses.	
Uncleanliness of Head ..	—	2,367	2,367
Uncleanliness of Body ..	—	87	87
Ringworm	16	23	39
External Eye Diseases ..	10	17	27
Scabies	109	162	271
Other Skin Diseases	32	183	215
Other Diseases	10	11	21
TOTAL 1935	177	2,850	3,027
TOTAL 1934	227	2,856	3,083

TABLE XI.

Average Height.

Age last Birthday.	Elementary Schools.			
	Number Measured.		Inches.	
	Boys.	Girls.	Boys.	Girls.
4	1,053 (*1,073*)	1,013 (*1,004*)	39·0 (*39·5*)	39·4 (*39·2*)
5	1,445 (*1,392*)	1,515 (*1,393*)	41·8 (*41·8*)	41·5 (*41·4*)
8	2,830 (*2,926*)	2,743 (*2,704*)	48·4 (*48·9*)	48·2 (*48·1*)
12	2,605 (*2,971*)	2,748 (*2,957*)	55·4 (*55·1*)	56·2 (*55·8*)

The figures in brackets are those for 1934.

TABLE XII.

Average Weight.

Age last Birthday.	Elementary Schools.			
	Number Weighed.		Lbs.	
	Boys.	Girls.	Boys.	Girls.
4	1,053 (*1,073*)	1,013 (*1,004*)	37·2 (*37·3*)	36·1 (*36·0*)
5	1,445 (*1,392*)	1,515 (*1,393*)	40·5 (*40·6*)	39·2 (*39·0*)
8	2,830 (*2,926*)	2,743 (*2,704*)	54·2 (*54·3*)	52·8 (*52·9*)
12	2,605 (*2,971*)	2,748 (*2,957*)	76·6 (*75·8*)	79·0 (*78·4*)

The figures in brackets are those for 1934.

TABLE XIII.

A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1935.

HIGHER EDUCATION.

Defect or Disease.	No. of Defects Requiring Treatment.	No. of Defects to be kept under Observation but not Requiring Treatment.
Malnutrition	7	63
Skin—		
Ringworm—Scalp	—	—
Body	—	—
Scabies	—	—
Impetigo	—	—
Other Diseases (non-tuberculous)	29	22
Eye—		
Blepharitis	6	—
Conjunctivitis	—	—
Keratitis	1	—
Corneal Opacities	—	—
Defective Vision (excluding Squint)	308	213
Squint	9	11
Other Conditions	2	2
Ear—		
Defective Hearing	16	4
Otitis Media	—	—
Other Ear Diseases	14	1
Nose and Throat—		
Chronic Tonsillitis only	21	57
Adenoids only	—	—
Enlarged Tonsils and Adenoids	2	4
Other Conditions	71	49
Enlarged Cervical Glands (non-tuberculous)	4	9
Defective Speech	1	7
Teeth—Dental Diseases (*see* Table XIV.)	—	—
Heart and Circulation—		
Heart Disease—Organic	8	9
Functional	7	34
Anæmia	4	8
Lungs—		
Bronchitis	4	13
Other non-tuberculous diseases	3	4
Tuberculosis—		
Pulmonary—Definite	—	—
Suspected	—	—
Non-Pulmonary—Glands	1	—
Spine	—	—
Hip	—	1
Other Bones and Joints	—	—
Skin	—	—
Other Forms	—	—
Nervous System—		
Epilepsy	—	1
Chorea	—	—
Other Conditions	10	31
Deformities—		
Rickets	1	—
Spinal Curvature	38	13
Other Forms	241	66
Other Diseases and Defects	75	98

B—Number of individual children found at Routine Medical Inspection to require treatment

(excluding Uncleanliness and Dental Diseases).

Number of Children.		Percentage of Children found to Require Treatment.
Inspected.	Found to Require Treatment.	
2,374	696	29·3

Classification of the Nutrition of the Children Inspected.

A (Excellent)		B (Normal).		C (Slightly Subnormal).		D (Bad).	
428	18·0%	1,522	64·1%	419	17·7%	5	·2%

Table XIV.

Higher Education

Dental Inspection and Treatment.

(1) Number of children inspected by the Dentists—

(*a*) Routine Age Groups—

Age	10	11	12	13	14 and over	Total
Number	7	68	168	265	480	988

(*b*) Specials	15
(*c*) Total (Routine and Specials)	1,003
(2) Number found to require treatment	898
(3) Number actually treated	641
(4) Attendances made by children for treatment	1,299
(5) Half days devoted to—	
Inspection	7
Treatment	245
(6) Fillings—	
Permanent Teeth	1,853
Temporary Teeth	5
(7) Extractions—	
Permanent Teeth	375
Temporary Teeth	128
(8) Administrations of General Anæthetics for extractions ..	247
(9) Other Operations—	
Permanent Teeth	—
Temporary Teeth	—

TABLE XV.

Routine Medical Inspection in Special Schools.

Number of Children.		Percentage of Children found to Require Treatment.
Inspected.	Found to Require Treatment.*	
516	202	39.1

*Excluding Uncleanliness and Dental Diseases.

TABLE XVI.

Dental Inspection in Special Schools.

Number of Children.		Percentage of Children found to Require Treatment.
Inspected.	Found to Require Treatment.	
499	411	82.4

APPENDIX B.

PHYSICAL EDUCATION.
ANNUAL REPORT, 1935.

Since the inception of the Physical Education Department sixteen years ago, there has been no period of such decided promise, such encouragement in future development and such generally wide support as the year 1935, which will ever be remembered as a stepping stone in the history of this Department and in the development of Physical Education in Leeds.

A comprehensive report of the year's work, indicating the effect of this increased support, is described under appropriate headings as follows :—

A.—Physical Training in the Schools.
(1) Accommodation.
(2) Teachers' Classes.
(3) Apparatus.
B.—Central Council of Recreative Physical Training.
C.—Board of Education Circular 1445.
D.—Swimming Instruction.
E.—The School Camp.
F.—Other Activities.
Play Centres.
Leeds Swedish Gymnastic Association.
Leeds Physical Education Circle.
Leeds Elementary Schools' Girls' Games Association.
The Keep Fit Movement.
G.—Conclusion.

A.—Physical Training in the Schools.

(1) *Accommodation.*—It has been reported frequently that the standard of work in Leeds varies considerably ; in fact in many departments the work will compare favourably with that of any school in the country ; on the other hand there are too many departments where the Physical Exercise period is dull, uninspiring and purposeless, and cannot rightly be described as Physical Training. The basis of all school physical training should be the regularity of the lesson and the first essential in that lesson is strong muscular work properly directed. No department can participate in regular uninterrupted training unless there is indoor accommodation, and all schools in Leeds without such accommodation suffer from year to year a definite setback to progression in Physical Training owing to the unsettled weather during the winter months. At the same time the standard of work does not solely depend on accommodation as we have on record some excellent work in departments where accommodation is very unsatisfactory. The keen

teacher, with special training and the correct interpretation of the spirit of the work, will make some progress under unfavourable conditions. It has always been one of the pressing duties of the Organising Staff to create a more even distribution of enthusiasm for Physical Training in the Schools of the City with a corresponding increase in the general standard of work. We have made more headway in 1935 than in any other year. The standard of Physical Training depends essentially on two factors: (*a*) The Teacher. (*b*) Accommodation.

The problem of teachers' classes is explored below.

Accommodation will improve gradually as new schools are erected with ample provision of gymnasia and sports facilities. Class rooms in the older buildings which become vacant owing to the redistribution of the school population on the new housing estates may be suitable for conversion to provide indoor accommodation for Physical Training. Meantime to meet pressing needs, the list of rooms rented for Physical Training detailed in the 1933 report has increased considerably.

(2) *Teachers' Classes.*—The training of teachers has always been one of the first considerations of this Department. The national drive given to Physical Training by the Board of Education Circular 1445 and the formation of the Central Council of Recreative Physical Training, will create an increased demand for suitably qualified teachers, and this problem will no doubt receive even more attention than hitherto. A brief survey, therefore, is submitted of this important branch of our work.

"The policy outlined in last year's Report—of giving further instruction to teachers—has been continued. It was originally intended to continue the Day Courses for teachers that commenced the previous year, but this was not possible owing to the withdrawal of so many teachers for courses in other subjects. The only alternative was instruction outside school hours—no mean test of the enthusiasm of the teachers for the subject" (1931 Report, page 69). With one exception this policy of training teachers outside school hours has been adhered to for the last five years, with marked success, for we have succeeded in acquiring a high quality rather than quantity, although no less than 530 men and 1,332 women have paid for further instruction. It is maintained that Physical Training will never attain a high standard of performance throughout the school life of the child until all Physical Training in every school department is in the hands of teachers with a natural aptitude for the work. We have proved that such teachers will readily attend evening classes, and that they generally give a correct

interpretation of the principles underlying the work and aim at a high standard, and if these teachers were given more opportunity of instruction in the schools there would be an immediate improvement in the general standard of work throughout the city.

Dr. Cyril Norwood, speaking at the Conference of the National Council of Recreative Physical Training in London on 11th October, 1935, stated that he did not believe serious progress would be made with the health and physical well-being of the nation until Physical education was made a serious business in all schools. Teachers specially trained under the scheme adopted in Leeds since 1931 *will* make it a serious business in the schools, particularly if they are given more opportunities. In short, the foundation has been laid in Leeds for the launching of a comprehensive scheme for the development of physical fitness, not only for the school child but for the adolescent and the general public.

Physical Education requires teachers of the highest quality—those who will maintain its correct appreciation, vigour, and thoroughness, maintain its best traditions and show in their lives its great cultural value. The Physical Education Staff will always remember that fine body of Leeds Teachers who gave their support when Physical Education did not receive the general recognition and widespread support that is indicated for the future.

The standard of work accomplished by these teachers in the schools is not only pleasing to the casual observer but will bear the close scrutiny of the experienced specialist, which after all is the only standard which can be considered satisfactory.

Evening Classes.—Evening classes have been very well attended. The standard of work shows a marked improvement as all teachers engaged in Physical Training in Evening Schools are specially qualified. The following enrolments have been made at the various classes :—

		No.
(*a*) Teachers' Classes.		
Men	(5)	133
Women	(8)	287
(*b*) Thoresby Evening Institute.		
Men		132
Women		173
(*c*) Evening Institutes.		
Men		1,011
Women		527
Recreative Physical Training Classes.		
Youths of post school age		155
Girls of post school age		215

The classes organised in Thoresby Evening Institute emphasise year by year the urgency of providing a modern and fully equipped gymnasium in the centre of the city. It is anticipated that it will not be possible to cater adequately for the demand for additional evening classes in physical training in the near future unless some additional accommodation is acquired.

(3) *Apparatus.*—The policy of supplying apparatus as required, rather than granting a complete supply to all Departments, has been continued. The demand for apparatus naturally varies with the facilities for conducting the Physical Training lesson, and the degree of enthusiasm and efficiency in the lesson.

The increase in demand for apparatus in Leeds (from £350 in 1930 to £1,135 in 1934) is due mainly to the following three reasons :—

(*a*) Introduction of Senior School Work requiring portable "heavy" apparatus.

(*b*) Introduction of the 1933 Syllabus demanding a more comprehensive scheme.

(*c*) Increase in enthusiasm for the work generally.

During the last month experiments have been carried out with (1) a laceless football, and (2) a rubber landing mat.

There has always been difficulty in keeping footballs properly inflated. This new type of football can be inflated with an ordinary cycle pump in a few minutes without the tedious process of unlacing the ball, untying and retying the neck of the bladder and replacing and having to borrow a football inflator. The introduction of this ball will not only increase the life of the football but will save much time and worry, particularly in the Girls' Departments.

The new type of rubber mat is non-slipping and more hygienic than the fibre mat at present supplied. It is much more expensive, however; its "life" has not yet been adequately tested, and moreover the storage problem is difficult as the mat should not be suspended.

An increase in Physical Training apparatus is indicated, for "If the provision of adequate facilities is allowed to lag too far behind the ability of the teachers to give an improved and modern training, there is bound to be eventually some waning of enthusiasm, some tendency to stagnation, and some check to the pioneering enterprise that has been so much encouraged by the wider opportunities held out to teachers by school reorganisation." (Annual Report of the Chief Medical Officer of the Board of Education, 1934, p. 35).

The Committee can rest assured, however, that the apparatus supplied is put to good use, appreciated by teachers and scholars alike. No instance is known where this apparatus is procured at such a reasonable price as in Leeds.

B.—The Central Council of Recreative Physical Training.

Intimation was first given of the formation of such a national body at the Annual Conference of the National Association of Organisers of Physical Training in London last March. Some publicity has been given to the project and its aims are by now more widely known. In April last a circular was sent from the Central Council to all Organisers of Physical Training asking for support and offering suggestions, among which were the following :—

(1) To develop contact with various organisations indulging in any form of Physical Training, and extend the benefits to thousands who have not yet been drawn into any organisation.

(2) The development of recreational physical activities of young people of post school age.

In July a letter was sent to the Secretary offering the support of every member of the Leeds Physical Training Department, and including answers to a comprehensive questionnaire. Response to the suggestions of the Central Council has been made in Leeds in directions detailed below :—

(1) Developing "contacts." Work of a purely voluntary nature has been undertaken by the Chief Organiser as follows :—

(*a*) Lecturer in Physical Education to the Course for Leaders of the National Association of Boys' Clubs, held at Beckett Park, from Saturday, 7th September, to Saturday, 14th September, 1935.

(*b*) Lecture Demonstration to the Annual Conference of the Yorkshire Association of Boys' Clubs, Harlow Manor, Harrogate, 23rd November, 1935.

(*c*) Organising and conducting a Leaders' Course in Physical Training for the Red Triangle Sports Federation (continuing until Easter, 1936).

(*d*) Organising Secretary of the Leeds Social Services Camp Committee (Camp for Unemployed at Scarborough).

At the request of Mr. W. Parsons, J.P., Chairman of the Juvenile Court, the Chief Organiser has arranged an experiment to test the effect of Physical Training on juvenile delinquents. Seven

qualified men teachers volunteered for this work, and a class is being held every Friday evening at the new gymnasium recently opened at the Church of England Temperance Society's Boys' Home at 84, Cardigan Road, Leeds.

In addition contact has been made with the Y.M.C.A. in the form of Lecture-Demonstrations and classes in modern Physical Education.

(2) *Physical Education for the Adolescent.*—It is to be deplored that many of our school children, having left school with a real liking for sound Physical Training, could not continue their activities on similar lines owing to lack of facilities. The Evening Institute has not catered for this in the past, it has only provided for various subjects—a grouped course—and Physical Training may or may not have been one of the subjects taken. It is claimed that many adolescents would ultimately respond to such a scheme as the following for, no matter what the occupation, it may be considered one's duty to keep fit, and incidentally the responsibility of the country to assist.

A scheme was launched in Leeds last September whereby old boys and girls from selected schools can return to their old school for one hour's Physical Training per week at a cost of 2/- per session, about one penny per evening, and irrespective of any grouped course or other subject. The scheme was introduced at eight centres—4 for boys and 4 for girls—and, although in its infancy, it holds promise of complete success. The future indicates a greater demand for these classes and the scheme will be extended next year

The scheme may prove a foundation for the development of an A1 citizen in Leeds, for it maintains a continuity of training between the school child and the adult, maintains the sure background of the comprehensive health education recommended by the Board, and is proving a definite "contact" between clubs and various associations and specialists in Physical Welfare employed by the Committee.

The new housing estates equipped with modern school buildings and gymnasia hold out tremendous possibilities for the scheme.

Although no activities have been arranged under the direct auspices of the Central Council of Recreative Physical Training, the effect of the formation of the Council is shown in the extension of the work of this Department. We have responded to the Council's recommendations without having to call on the Council for financial assistance. We are building a sure foundation for the development

and extension of Recreative Physical Training and welding it to the comprehensive scheme in operation in the day and evening institutions under the authority of the Education Committee. It must be apparent that in districts "organised" as in Leeds, there is not the need for appealing to the Central Council for advice and assistance as there is in districts where the services of a local Organiser of Physical Training are not available. We are ready and eager to develop activities under the direct auspices of the Central Council of Recreative Physical Training when demand and opportunity arise.

C.—Board of Education Circular 1445—Physical Education.

This issue of this circular will be received by all Organisers of Physical Training with acclamation, and it is felt that its effect in Leeds will be to give more widespread support to the schemes detailed in this Report from year to year, and to assist in the extension of them.

Since space will only permit of a general survey of the anticipated effect of the circular on the work in Leeds, the salient features indicated by the following extracts are herewith considered.

(1) *The Daily Lesson.*—"There should be a daily period of organised physical activity in every elementary school." It is noted that the Board does not merely recommend physical activity, but that it must be *organised*. Again one must look for an improvement in method of instruction to keep pace with increased amount of time devoted to the subject.

(2) *Playing Fields and Organised Games.*—"The need for adequate playing fields, especially for older boys and girls, is generally recognised."

The problem in Leeds was explored in the 1931 Report following a memorandum sent to all school departments in the City with suggestions for conducting the Organised Games Period. Satisfactory progress cannot be expected until facilities are provided. What is implied by such terms as "adequate playing fields," "satisfactory arrangements for playing games"? A football field is no more a field for organised games than is a mere pond a modern swimming bath. We must break away from the conception that the provision for the organised games period can be made by merely renting local football pitches, cricket grounds or sports enclosures, and realise that "adequate provision" implies, first the securing

of a suitable area of grass land, with good regular surface, within reasonable distance of several schools. The ground, unless adjoining a school which has the amenities, should then be equipped with shelter (or class rooms), conveniences, storage for apparatus—with a permanent groundsman who is responsible for marking out and keeping the turf in good order. The *organised* games period can then be developed on sound lines and take its place in the comprehensive scheme of health education.

The ground attached to Middleton Council Senior School provides a great opportunity for the development of such a scheme of organised play, and a comprehensive plan is being prepared.

In regard to Clarke's Field, at Beeston, recently purchased by the Committee, the conditioning of the surface, with the general recommendations above mentioned, merit consideration.

"Even where the arrangements for playing games are satisfactory, games cannot be regarded as enough. They should be based upon a foundation of fitness, which is best laid by a *training* in physical exercises and gymnastics."

The properly conducted organised games period is the link between the physical training lesson and the major game, whether it be football, cricket, netball, rounders, or any similar activity. The proper provision for the organised games period would strengthen that link, assist in the adequate provision for the major games, and prove without doubt the second part of the above quotation from Circular 1445.

(3) *Physical Education for the Adolescent.*—"The Board regard it as a matter of national importance that more consideration should be given to the development of facilities for physical training and games among young people who have left school."

It is anticipated that the extension of the scheme outlined in the paragraph "Physical Education for the Adolescent" (p. 103) will largely cater for this requirement. In addition the leaders' classes already mentioned in connection with the National Association of Boys' Clubs and the Red Triangle Sports Federation, will no doubt extend to other outside Associations.

The Unemployed.—It is perhaps not widely known that the unemployed can join the recreational classes free of charge. Moreover, several classes for unemployed are already in operation

at the Y.M.C.A. It would be interesting to see the unemployed taking their physical training side by side with those in employment, where they can benefit not only physically but mentally through social contact under more ideal conditions. This view might be tested by offering a " Keep Fit " class for men at the Training College during the summer, and inviting the unemployed to join free of charge.

(4) *Organising Staff.*—" The appointment of a sufficient number of qualified men and women Organisers should be regarded as an indispensable part of the provision for physical education made by all Authorities. . . . . His work should not be limited to Elementary Schools or even to pupils of any type, but should extend to young people both employed and unemployed, who have left school. His services should be freely available to voluntary organisations and for co-ordinating their schemes with those of the Authority."

Since the reduction in the Organising Staff in 1923 and the further reduction in 1929, the Physical Education Department has been relatively under-staffed. In spite of this, the work has progressed and extended, due to the fact that the organisers are developing into a closely knit, loyal unit. The extraneous work indicated in the future, some of which has already been undertaken, stresses the urgency of the appointment of an additional man to bring the Staff to its normal strength (1933 Report, page 76). This appeal should receive consideration and its justification is that this Department is primarily responsible not only for the development of Physical Education in the City (for scholars, adolescents and adults), but also for the Demonstrations on the Roundhay Park Arena on Children's Day, a task requiring an annual output of more than one third of the time and energy of this Department.

D.—Swimming Instruction.

As in previous years the Education Committee and Baths and Property Committee have co-operated in providing instruction in Swimming for elementary school children of the City.

The swimming season extended from Monday, 29th April to Friday, 11th October, a period of 18 school weeks, but owing to special arrangements made in each school for the celebration of the King's Jubilee the attendance at the various Baths during the week commencing 6th May was far below the average.

Owing to the situation in various parts of the City of the nine public baths and three school baths where instruction is given to

elementary school children, practically every school has an opportunity of participating in this important branch of Physical Education. With the tendency for the school population to move out to the suburbs owing to slum clearance and the contributory cause mentioned above, there has been a slight decrease in the total number of attendances at the Baths this year. Even so, there has been an increase in the number of certificates gained, particularly at the school baths, thus indicating a higher standard of instruction with more attention to the average pupil, or the natural increase following an increased attendance the previous year.

Year.	Attendances during School Hours.	No. of Weeks.	Average Weekly Attendance.	No. of Certificates Gained.				
				Prof.	1st.	2nd.	3rd.	Total.
1931	156,738	19	8,249·4	45	972	1,428	2,644	5,089
1932	169,244	20	8,462·2	83	1,152	1,851	2,994	6,080
1933	174,085	18	9,671·3	127	1,387	2,013	3,442	6,969
1934	176,464	18	9,803·5	176	1,516	2,277	3,493	7,462
1935	165,639	18	9,202·2	250	1,657	2,360	3,637	7,904

Generally speaking the lessons in the public baths are given by the Baths' Managers and members of their staffs, who are responsible in addition to their ordinary duties for the instruction of the school children attending their respective baths; whilst those in the school baths are given by teachers, two men and two women, who are withdrawn from their ordinary class teaching during the swimming season. On certain days the two men assist with the instruction of boys in the public baths. The teachers and most of the baths' instructors hold qualifications of either the Royal Life Saving Society or of the Amateur Swimming Association.

Instruction is given on school days between the hours of 9.45 a.m. and 12 o'clock noon, and between 1.30 p.m. and 4.30 p.m. Each lesson is of 45 minutes duration, which allows for approximately 25 minutes actual instruction.

The lessons given in the public baths maintain as high a standard as can be expected with the difficulties which have to be overcome. The baths are open to members of the public whilst the lessons are in progress and the instruction of a large class of children cannot be carried out with the fullest efficiency under such conditions. The facilities provided for boys and girls are not equal as girls may attend only on certain days at the public baths.

This year, for the first time, arrangements have been made for children attending the Special Schools to receive instruction in swimming. This has been much appreciated by the head teachers, assistant teachers and children of the schools concerned. The highly satisfactory results as shown by the number of certificates gained indicate that such activities as swimming may well prove of particular value in the mental training as well as physicaf development of this type of child.

SPECIAL SCHOOLS.

NO. OF CERTIFICATES GAINED.

	1st Class.	2nd Class.	3rd Class.	Total.
Boys	10	17	27	54
Girls	1	2	10	13
	11	19	37	67

Examinations and Awards.—Certificates of various grades are awarded by the Education Committee to children who are successful in reaching the desired standard of proficiency. Examinations have been held periodically during the season by members of the Physical Training Staff and the Director of Public Baths.

Details of the conditions for the award of swimming certificates are as follows, but consideration is being given to these conditions with a view to improving the standard necessary for obtaining them :—

THIRD CLASS OR ELEMENTARY CERTIFICATE—
Swim 25 yards, maintaining breast stroke throughout.

SECOND CLASS OR HIGHER CERTIFICATE—
(*a*) Dive and swim 75 yards without pause or rest, maintaining breast stroke throughout.
(*b*) Swim 25 yards on the back, using both arms and legs.

FIRST CLASS OR SPECIAL CERTIFICATE—
(*a*) Neat Dive.
(*b*) Swim 100 yards without pause or rest, maintaining breast stroke throughout.
(*c*) Swim 50 yards on the back, using both arms and legs.
(*d*) Dive from the surface and recover an object from a depth of four feet.
(*e*) R.L.S.S. " first method " of Rescue of a drowning person.
Blind children are required to swim one length of the bath supporting a tired swimmer in place of (*a*) and (*e*).

PROFICIENCY CERTIFICATE—
(*a*) Swim 100 yards Free Style in the standard time of 110 seconds for boys and 120 seconds for girls.
(*b*) Perform the first methods of Release and Rescue (R.L.S.S.) for a distance of 20 yards.

Certificates were awarded to children attending the various Baths as follows :—

Bath.	No. of days a week on which instruction is given.		Certificates Awarded.							
			Boys.				Girls.			
	Boys.	Girls.	Prof.	1st.	2nd.	3rd.	Prof.	1st.	2nd.	3rd.
Armley ..	3½	2½	27	138	168	265	24	114	174	215
Blenheim ..	1	4	6	51	62	83	20	118	166	260
Bramley ..	2	2	5	17	43	87	10	35	47	85
Cookridge St.	2	1	24	66	81	116	1	15	30	64
Darley Street	2	3	4	50	78	101	4	72	137	176
Holbeck ..	4	1	9	79	141	211	6	50	65	129
Hunslet ..	4	2	14	116	148	264	4	50	64	120
Hunslet Lane	1	4	2	34	61	69	26	93	155	227
Kirkstall Road	4	1	24	145	170	244	2	17	30	73
Meanwood Rd.	4	3	11	135	184	263	8	66	97	160
Roundhay Open Air ..	½	½	—	1	2	4	—	—	—	6
Union St. ..	3½	—	4	57	85	145	—	—	—	—
York Road ..	3½	1	12	90	110	172	3	48	62	98
	35	25	142	979	1,333	2,024	108	678	1,027	1,613

TOTAL : Boys .. 4,478 ; Girls .. 3,426.
GRAND TOTAL .. 7,904 (1934—7,462).

The steady increase in the number of children attending for swimming instruction reported from year to year calls for a corresponding closer attention to the implement of instruction. Recommendations have been submitted for a review of the examinations and conditions of award with regard to the issuing of the various swimming certificates granted by the Education Committee. Certain structural repairs and alterations have also been recommended at all the School Baths, the lighting, ventilation, dressing accommodation and condition of the water being particularly unsatisfactory. In view of the increased numbers of children attending these baths the necessity for the proposed renovations becomes a matter of great urgency.

Competitive Swimming.—The Annual Swimming Galas were organised as in previous years by a Joint Committee of the Baths and Property Committee and the Leeds Elementary Schools' Swimming Association. Seven District Galas were held at various Baths at the end of the summer term. The Semi-Final Gala was held at Cookridge Street Baths and the Final Gala at the Armley Baths in September.

The Yorkshire Schools' Amateur Swimming Association held its Annual Gala (the eleventh) at Beverley Road Baths, Hull, on Saturday, 28th September. For the first time since the inception of the County contests, Leeds won the Yorkshire Championship.

Further particulars of competitive swimming will be found in the Education Committee's "Report on Swimming Instruction" presented to the Elementary Education Sub-Committee at the November meeting, and the Annual Report of the Leeds Elementary Schools' Swimming Association.

E.—The School Camp.

The Camp which accommodates 60 girls and 72 boys each week reopened on Monday, 13th May, and closed on 23rd September, a period of 19 weeks. During the season 2,354 children spent a week there; 342 children attended free of charge, their fees being borne by the Leeds Elementary Schools' Athletic Association.

The usual scheme of educational work was carried out, by which full use was made of the facilities in the district for practical lessons in History, Geography and Nature Study. Rambles to various places of interest in the locality were arranged for this purpose.

This year for the first time a week was set apart for the children attending the Special Schools. Owing to a special grant from the Leeds Elementary Schools' Athletic Association augmented by voluntary contributions, it was possible to accommodate a full complement of children from these schools at a reduced charge of 5/- per head. Special arrangements were made regarding transport, medical inspection, payment of fees, and schemes of work at the Camp; the teachers concerned gave their full support to the experiment and ensured a full staff of visiting teachers. Owing to the success of the experiment it is proposed to establish a "special schools week" as an annual feature of the camp.

It is of interest to note that what will perhaps be the last season at Windsover Farm has been one of the happiest and most successful since the erection of the Camp on this site in 1923. It is only natural to assume that the new site at Leyfield Farm, Middleton, near Ilkley, must possess many advantages over the present site to merit the great expense of removal such a comparatively short distance of about two miles.

F.—Other Activities.

Play Centres.—The following six Play Centres were re-opened in October:—

Park Lane C. Beckett Street C. Isles Lane C. Low Road C.	Organised by the Education Committee.
Hunslet Lane C. Woodhouse C.	Organised by the Yorkshire Ladies' Council of Education

These Centres are open from 5 p.m. to 7 p.m. on three evenings a week, Monday, Wednesday and Thursday, and are taking an average of more than 2,000 children from the streets each evening they are open, at a time when traffic is perhaps most congested. The educational activities include handwork (woodwork, basketry, needlework, raffia work, etc.) and housewifery. The tone of the Play Centres is high and the pleasure that the children derive is shown by the eagerness to attend; the only spur to regular attendance is the interest and enjoyment of the children, as no compulsion whatever is exercised.

Leeds Swedish Gymnastics Association.—This Association has now 46 members, all of whom hold the Diploma of a recognised Physical Training College. The following extract is quoted from the Annual Report of the Honorary Secretary :—

> "The only event of importance undertaken by the Association last session was a first Gymnastic Rally, held on 23rd March, 1935. Nine girls' secondary schools took part the and work by girls from Form I. to Form VI. was shown. Miss Fountain, Principal of Chelsea Physical Training College, commented on the work of each class and addressed the girls as a whole on the general principles of Physical Education, laying particular stress on good posture. For a first venture the Rally was a great success."

Leeds Physical Education Circle.—The above-named Circle which functions every other year has now a membership of 550, including teachers from Batley, Morley, Wakefield and Harrogate. The following programme has been arranged for the season :—

Opening Lecture on "The Co-Education of Mind and Body," by L. P. Jacks, Esq., M.A., LL.D., D.Litt., D.D., formerly Principal of Manchester College, Oxford.

Lecture-Demonstration on "Physical Training for Girls," by Miss M. Wardle, H.M.I.

Lecture-Demonstration on "Scandinavian Dancing," by Miss Elsa Nordquist, formerly member of the Staff of the Physical Training College, Silkeborg, Denmark.

Three Physical Education Films, based on the Board of Education Syllabus, showing typical lessons of Girls,' Boys' and Infants' Work.

Lecture-Demonstration on "Keep Fit Work," by Miss N. Reed, Organiser of Physical Training for Sunderland.

Lecture-Demonstration on "Greek Dancing," by the Principals of the Torch School of Dance, Leeds.

Lecture-Demonstration on "Infant Work," by Miss K. M. P. Tuck, member of the Staff of the Dartford Physical Training College.

Lecture-Demonstration on "Field Games," by Miss Thorpe, Organiser of Physical Training, Birmingham.

Demonstration by the students of the Carnegie Hall Physical Training College, and Lecture by E. Major, Esq., Warden of Carnegie Hall.

Up to the time of writing the attendances at the Demonstrations have broken all records.

Leeds Elementary Schools' Girls' Games Association.—The Girls' Games Association continues to exert a powerful influence on the health and physique of the school girl, due in no small degree to the close co-operation between the Association and the Physical Education scheme which is being developed in the Schools. The Special Schools were invited to join in the activities of this Association and took part in the Annual Tournament at Beckett Park, Leeds, on the 19th July, 1935. The Chief Inspector of Schools, stated in a short address to the gathering that if the Girls' Games Association had done nothing more than provide the means of enjoyment, eagerness and physical benefit that had been brought to the Special School Children, it had more than justified its existence.

The Keep Fit Movement.—The Keep Fit Movement has received considerable publicity of late, and has shown recent rapid development. It may be advisable at this juncture to attempt a definition of the term " Keep Fit." Whilst all physical activity tends to promote fitness, the term " Keep Fit " generally applies to those classes which are less formal in character than the normal physical training lesson, although the fundamental principles of the work should be in evidence. Keep Fit classes, therefore, are intended for adult men and women in all walks of life, employed and unemployed, who wish periodically to spend an hour in pursuit of physical fitness, health and enjoyment, in company with their fellows, but do not wish to reach a high standard of gymnastic ability, and therefore do not require such a progressive form of training. The exercises are of a less strenuous variety, and there is generally no apparatus work. Registration may be for the full session, for a shorter period, or may be dispensed with.

The Keep Fit Movement thus described will no doubt appeal to a large number who would not enrol for formal classes in an evening institute ; it therefore provides an opportunity of healthful enjoyment to a large section of the community who could not obtain it otherwise so cheaply. A comprehensive scheme of health education must cater for all—a scheme for the adolescent (recreative physical training) has already been introduced (see page 103) and will develop as opportunities improve ; The Keep Fit Movement has received the close consideration of this Department and a scheme for its development will be launched in the near future.

Conclusion—In developing any comprehensive scheme of Physical Education it must be remembered that the ultimate instrument through which the scheme can be put into operation, is the teacher. The progressive success attained in recent years, and the promise

of future progress, indicates a general application of some form of specialisation in instruction. The more advanced the work, the more efficient should be the instruction, and since the subject is the delicate organism of the human body—particularly of the child—it is imperative that the teacher should possess some knowledge of anatomy and physiology. This is an instance where co-operation with the Medical Section can be developed, and was stressed by the Chief Organiser of Physical Education in an address to the School Medical Officers on the 6th November. It is claimed that the scheme for training of teachers outlined earlier in the Report will provide the efficient instrument of instruction and tend to obviate any risk of strain during the Physical Training lesson.

The necessity for regular progressive training is emphasised. Not until every child in every class, in every school, receives regular instruction in Physical Training throughout its school life, can the effects of the scheme be seen. Health-mindedness in the nation is best developed by acquiring it during school life, and the foundations of a comprehensive scheme for acquiring it are laid, waiting for the accommodation required to put the scheme into operation.

With regard to co-operation with outside organisations and the development of physical fitness for the adult, it must be emphasised that there is no intention of interfering with methods already employed. Individuals and organisations seek their own way to physical health and if they are satisfied with their pursuits there appears no reason to seek advice or assistance. On the other hand some provision might be made for assisting those organisations who require it, and the Board's Circular 1445 states that the Organiser of Physical Training should be a recognised guide and adviser for the community as a whole in matters relating to physical exercise, and recreation, and his services should be freely available to voluntary organisations. It is in this spirit that this Department wishes to act.

In concluding this report emphasis should be laid on the following salient points :—

(1) The necessity for immediate addition to the Staff of this Department in order that—

(*a*) The Organising Staff can visit with more even regularity the evening institutes, all school departments, swimming baths and playing fields.

(*b*) The Government's extended programme can be put into operation, including :—

(i.) The improvement in the standard of physical training in the schools.

(ii.) The extension of classes for adolescents and adults—including employed and unemployed.

(iii.) Assisting voluntary organisations and co-ordinating their schemes with those of the Authority.

(iv.) Training of competent teachers and leaders for the above.

(2). Improvement in the accommodation and facilities for—

(*a*) Physical Training in schools and evening institutes.

(*b*) The Organised Games Period.

(*c*) Swimming.

This report would not be complete without reference to the excellent voluntary work which goes on year by year outside school hours, for the physical welfare of the children. Leeds is singularly fortunate in possessing a large band of teachers who give unreservedly of their spare time in the promotion of inter-school competitive games and activities.

Finally I wish to express on behalf of my colleagues in the Department our thanks for the support given by the Director of Education, the Education Committee, and our appreciation of the goodwill and co-operation of the teachers of the City.

SIDNEY SHAW,

Chief Organiser of

Physical Education.

February, 1936.

APPENDIX C.

EMPLOYMENT OF CHILDREN.

PART II.

CHILDREN AND YOUNG PERSONS ACT, 1933.

The new Bye-Laws consequent upon the passing of the Children and Young Persons Act, 1933, have been in operation since the 1st November, 1934, and after a full year's experience, have proved very workable, so much so, that for the first time since Bye-Laws regulating the employment of children were adopted in Leeds there has been only one prosecution throughout the year.

Speaking generally, there is evidence of desire, by employers who require the services of school children, to co-operate with the Local Authority in administering the regulations.

The number of children between the ages of 12 and 14 years employed at the end of 1934 was 960. During the past year there has been a greater demand for child labour, and on the 31st December, 1935, the number employed was 1,017. Of these 995 were boys and 22 were girls. Last year the figures were 939 and 21 respectively.

During the year, 882 children were examined by the School Medical Service in order to ascertain their fitness for employment. Of these 864 were boys and 18 were girls, involving in all 902 examinations. One boy was refused permission to work on account of definite cardiac weakness, and in 69 other cases where children were found to be suffering from minor ailments, the certificates for employment were deferred until the defects were remedied.

The following defects were discovered :—

Skin Disease	2
Flat Foot	2
Heart trouble	2
Defective Vision	37
Miscellaneous complaints ..	26
	69

The 1,017 children were employed in the following occupations :—

Employment of Children.

Year ended 31st December, 1935.

Nature of Employment.	Hours	Boys.	Girls.	Total.
Newspapers	†7–8 a.m.	460	1	461
,, ...	5–7 p.m.	290	9	299
Milk	†7–8 a.m.	9	—	9
,, ...	5–7 p.m.	9	—	9
Grocers	5–7 p.m.	60	1	61
Greengrocers	5–7 p.m.	38	1	39
Butchers	5–7 p.m.	31	—	31
Bakers and Confectioners	5–7 p.m.	42	2	44
*Various	5–7 p.m.	56	8	64
Totals ..		995	22	1,017

NOTE.—*(*a*) Employed as messengers for chemists, doctors, drapers, milliners, tailors, florists, laundries, etc.

†(*b*) Children employed before school hours may be employed in the afternoon only between 5 and 6 p.m.

(*c*) No child may be employed on any Saturday or other school holiday for more than four hours or before 7 a.m. or after 7 p.m., provided that the employment is so arranged that the child is free for rest and recreation for a continuous period of not less than five hours.

Reports were submitted by the Employment Inspectors and members of the police force in respect of 195 offences discovered. They were as follows :—

76 related to the employment of children outside permitted hours.
37 where employers failed to send the required notification of employment to the Local Education Authority.
25 for not being in possession of Employment Card and Badge.
22 for illegally employing children under the age of 12 years.
19 in respect of illegal street trading.
13 for illegal employment on Sunday.
3 in respect of illegal employment in prohibited occupations.

195 Total.

Warning Notices were served in 41 cases; 36 employers, 4 parents and 5 youths were interviewed by the Committee. The remainder were dealt with by verbal warnings from the Inspectors at the time of the offence.

In the administration of the regulations, members of the City Police Force render invaluable help, particularly in cases where employers are inclined to risk employment of school children before the hour of 7 o'clock in the morning and on Sundays.

Children employed in Public Entertainments.

During the year ended 31st December, 1935, 167 children have been employed in accordance with licences granted under the provisions of the Children and Young Persons Act, Employment in Entertainments Regulations. Of these 116 were visitors to the city and had been granted licences by other Education Authorities. They were children employed in pantomime and at the Paramount Theatre.

The remainder (51) were local children who were employed chiefly in Leeds. Six of the licences were granted to enable the children to be employed in pantomime in other areas, and 45 obtained licences for employment in entertainments in Leeds.

At the end of the year, 19 licences were in force in respect of Leeds children. The health of the children was invariably good. Proper attention is being paid by licensing authorities to the need for issuing to the children on tour schemes of school work. Matrons accompanying visiting children have discharged their duties satisfactorily and observed the conditions of the licences.

Forty-six visits were made to the various places of entertainment in the city. Dressing rooms at the theatres and apartments where the children stayed were duly inspected and approved.

The services of children ranging from 3 to 14 years of age continue to be extensively used in connection with entertainments reported to be promoted for objects other than the private profit of the promoters, but until legislation is put on the Statute Book whereby Local Authorities may require notification of all performances in which the services of children are employed and the purpose of such entertainments, it is impossible to afford to these children protection equal to that provided by the Act for children on licence.

J. H. CAPES,

Superintendent of Enquiry,
Employment and Welfare Section.