[Report 1933] / School Health Service, Leicestershire County.

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LEICESTERSHIRE
COUNTY COUNCIL EDUCATION
COMMITTEE

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

FOR THE YEAR

1933

J. A. FAIRER, M.D., D.P.H.

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Alfred Tacey, Printer, Leicester.

17 FRIAR LANE,
LEICESTER.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

In presenting my School Annual Report for the year 1933 I would call attention to the steady increase in the work of the School Medical Service.

In January, the newly erected Combined School Clinic and Health Centre at Melton Mowbray was opened. This Health Centre is rather larger than the similar one built at Coalville and has proved equally successful. Plans are now being prepared for the erection of a corresponding Centre at Hinckley. The Hinckley building, owing to the larger school and infant population in that area will have a more commodious waiting hall and an additional doctor's room. This Centre at Hinckley has been a pressing need for some years and its completion will facilitate the work not only of the School Medical and Dental Services but also that of the Child Welfare and Tuberculosis Departments which have all been handicapped by unsuitable hired premises. It is hoped to form an Orthopædic Clinic here to undertake similar work to that performed at Coalville and Melton Mowbray. This clinic, with the co-operation of the Leicester and Loughborough clinics will complete the Orthopædic Scheme, and make adequate provision for all cripples wherever resident throughout the County.

The Cripple Desk Chairs designed by Dr. Cowan, particulars of which were given in last year's report have proved of great value. Ten children are now attending school who otherwise would have remained at home or had to be maintained at considerable cost at Certified Special Schools for Cripples.

I am indebted to the Medical Officers for the following special reports :—

Dr. C. Walters on "Amblyopia ex Anopsia—Without Squint."
Dr. Mary E. Weston on "Teaching of Sex Hygiene in Schools."

The work of the Dental Staff has steadily increased and with the suggested appointment of a fifth Dental Surgeon in the coming year it is hoped that all Public Elementary School children will be inspected and every child treated. It has always seemed unfair that owing to lack of staff many of the children in small rural schools have had no dental treatment whilst their neighbours, more fortunately placed near large populous centres, have had the full benefit from the work of the dental staff.

I am pleased to report that there has been no change in the Medical, Dental or Nursing staffs during the year—constant changes have a tendency to retard the work of the School Medical Service.

I would like to thank the whole of my staff for their loyalty and zeal, and in particular Dr. Cowan and Mr. Thornton the chief clerk of the School Department for collecting the statistics and compiling this report.

To the Chairman and Committee I would like to express my appreciation of their continued consideration and support which so largely contributes to the harmonious working of the whole of the School Medical Service.

I have the honour to be,

Your obedient servant,

J. A. FAIRER,
School Medical Officer.

February, 1934.

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REPORT.

I.—GENERAL STATISTICS.

Population of the County.

The Estimated population of Leicestershire for the year 1932 was 306,800. The Borough of Loughborough with a population of 27,200 is the only separate authority for Elementary Education within the administrative County. The total population with which the County Education Committee is concerned for the purpose of Elementary Education is therefore 279,600.

Number of Schools and Scholars.

There are 294 Elementary Schools in the County area, 114 Council Schools and 180 Voluntary Schools. The average number of children on the rolls of Elementary Schools during the year 1933 was 40,522 and the average attendance was 36,549 or 90.2 per cent.

II.—STAFF OF THE SCHOOL MEDICAL SERVICE.

School Medical Officer :

J. A. Fairer, M.D., D.P.H. (County Medical Officer of Health).

Deputy School Medical Officer :

K. Cowan, M.D., D.P.H. (Deputy County Medical Officer of Health).

Senior Assistant School Medical Officer and Assistant County Medical Officer of Health :

D. G. Anderson, M.B., B.Ch., D.P.H.

Assistant School Medical Officers :

S. E. Murray, M.B., B.S., L.M.S.S.A.

J. B. Dalton, M.B., Ch.B.

Mary E. Weston, M.B., B.S.

Constance Walters, B.Sc., M.B., B.Ch. (School Oculist).

School Dental Surgeon :

P. Ashton, L.D.S.

Assistant School Dental Surgeons :

A. E. Ward, L.D.S.
C. L. R. McLellan, L.D.S.
D. R. A. Wilcox, L.D.S.

The above officers are all employed full time in the services of the Authority. Dr. Murray and Dr. Dalton devote the whole of their time to School Medical work. Dr. Weston devotes two-thirds of her time to School Medical work and one-third to Maternity and Child Welfare. The work of Dr. Walters is equally divided between the Maternity and Child Welfare Service and the examination and treatment of school children suffering from defective eyesight. The work of Dr. Cowan and Dr. Anderson is chiefly concerned with the general administration of the service and the control of its special branches. These two Officers have other duties in the Public Health Service and only a portion of their time is allotted to School Medical work.

School Nurses.

*Mrs. Warren (Superintendent).
†Miss A. Addy, S.R.N.
Mrs. A. D. Antrobus, S.R.N.
Miss A. J. Bailey, S.R.N.
†Miss C. E. Bangham, S.R.N.
Mrs. S. J. Bourne, S.R.N.
Mrs. P. Brunsdon, S.R.N.
†*Miss G. E. Butler, S.R.N.
*Mrs. F. E. Cade.
†*Miss G. I. Carryer, S.R.N.
†Miss V. L. Davies, S.R.N.
Miss A. M. Dilworth, S.R.N.
Miss E. V. Feakin, S.R.N.
Miss L. Fox, S.R.N.
Miss T. M. Griffiths, S.R.N.
*Miss K. A. Marsh, S.R.N.
†Miss W. C. Porter, S.R.N.
Miss E. H. Seabrook, S.R.N.
Miss W. A. Simmons, S.R.N.
Mrs. E. E. Wright, S.R.N.

All the above are fully trained Nurses and hold the certificate of the Central Midwives' Board. Those marked * hold the Certificate of Sanitary Inspector, and those marked † have the Health Visitors Certificate (Ministry of Health). The Superintendent holds the Child Welfare Workers Certificate.

III.—CO-ORDINATION.

The growth and development of various health services undertaken by Local Authorities has had its effect in altering the outlook and extending the scope of each service.

Public Health Departments have grown up as a series of individual efforts directed against various forms of ill health and disease ; efforts which have come into being at different times and which have had as their object some particular form of preventive work. With each new activity imposed by legislation or otherwise, concentration on the particular object in view has been apt to obscure the relationship of this work with other forms of prevention even in the same department.

The School Medical Service in its early form concentrated mainly upon inspection and relatively little treatment was carried out by the Local Authority. Justification for the work was based to a large extent upon the benefit to be derived educationally from the improved health of school children and therefore from its inception there has always existed a certain measure of co-ordination and co-operation with the Education Authority. This co-operation has formed the basis for dealing with the exceptional child whether mentally or physically afflicted, In addition co-operation has been sought and reciprocation offered by school attendance departments to the mutual benefit of each.

The advent of Maternity and Child Welfare services upon an organised basis offered an exceptional opportunity for complete co-ordination between this service and the school medical services. The aim of the former service was the prevention of infant ill health and mortality and for some time infant welfare workers were satisfied with this objective and the larger and equally important aim of co-ordination with the school medical service, and the complete medical supervision of the child from infancy to adolescence showed a tendency to be overlooked. Admittedly, the question of complete supervision of the infant and child life of the country raised difficulties which did not exist where the work dealt exclusively with Infant Welfare or with the health of the School Child ; but it is unfortunate that the necessity for definite co-ordination between these services was not foreseen and acted upon at the outset.

One of the main difficulties in securing real co-ordination is the incompleteness of the Maternity and Child Welfare Service, particu-

larly in regard to medical supervision during the last two or three years of pre-school life. During early infancy and perhaps up to two years Medical Officers are afforded the opportunity of supervising children who are brought to Infant Welfare Centres, but after the second year there is a decided falling off in regularity of attendance and supervision is no longer feasible. Again a large proportion of mothers do not avail themselves of Infant Welfare Centres. Thus when the child reaches the entrant stage at school there is either a complete or partial blank in so far as an authentic medical history is available and what is even more serious, conditions which might have been obviated or at least failed to progress if medical attention had been available, are discovered by the School Medical Officer.

Notwithstanding the incompleteness of the Infant Welfare Services a large measure of co-operation can be effected if full use is made of the existing facilities.

In this County both departments are administered by the same officers and with the exception of Dr. Murray and Dr. Dalton, who have no duties in the Maternity and Child Welfare Service the clinical work is carried out by the same Medical Officers and the Nursing Staff is common to both departments.

Arrangements are in operation for the transfer of medical notes from the Infant Welfare cards used by Medical Officers at Infant Welfare Centres to the Medical Inspection Schedules upon the child attaining school age. These cards are returned from the Infant Welfare Centres immediately upon the child attaining the age of five years or previously upon the health visitor becoming aware that the child has commenced to attend school. This information is available to the School Medical Officers but of course only deals with those school entrants who have attended Infant Welfare Centres, and as mentioned previously is largely concerned with the first two years of the child's life.

This limitation in scope is offset to some extent by further measures for dealing with information obtained from the supervision carried out by health visitors. The Birth Enquiry Cards used by the Health Visitors during the first year of the infant's life and the Infant Record Cards in use during the subsequent four years are filed in a card index system according to the month and year of birth. These cards, which contain a complete record of previous visits by the Nursing Staff throughout the entire pre-school life of

the child are thus available each month for transfer to the school medical department as the children attain five years.

Whilst this supervision is not entirely medical a great deal of useful information is obtained by School Medical Officers concerning the previous history of the children not only with regard to their health but also concerning their environment. In addition Health Visitors are instructed to refer the names of all exceptional children to the Central Office with a view to their being followed up by the Medical Staff.

This system of supervision and transfer of information serves two objects ; it is immediately useful in securing that medical treatment, orthopædic and opthalmic, is available through the Local Authority and other forms through private practitioners, to those children who require it and the previous history of the child during the whole period of pre-school life is transferred to the School Medical Department.

It is not suggested that this measure of co-ordination is a complete one, but it is as full as is possible under existing conditions and is such as to be capable of extension concurrently with extension of the Maternity and Child Welfare Services. It has been found eminently useful in practice and presents no untoward difficulty in administration. Moreover it adds greatly to the value of each visit carried out by the Health Visiting Staff when it is realised that all the records made will be of further use, when the child reaches school, and not merely destroyed.

Co-operation is also maintained with the Tuberculosis Department. Reports are made to the School Medical Officer on the condition of children referred to the Tuberculosis Dispensaries together with advice as to their fitness for school, and reports on the condition of children in attendance at school suffering from Tuberculosis are transmitted to the Tuberculosis Department by the School Medical Officers.

In a subsequent section of this report dealing with Infectious Diseases the necessity for close co-ordination between the School Medical Department, School Authorities and District Medical Officers of Health is emphasised. Many difficulties arise in effecting control of the spread of infectious diseases and without close co-operation between the various agencies available these difficulties become exaggerated and disorganisation is bound to result.

IV.—MEDICAL INSPECTION.

The schedule of Medical Inspection has been completed on the lines laid down by the Board of Education. Routine Medical Inspection and the examination of "special" children presented by the Head Teachers is carried out on the school premises. Each school in the county has been visited by the Medical Officers of the Department at least once during the year and the major portion of the time of the Medical Officers has been taken up with this work.

As was the case last year a certain amount of each Medical Officer's time has been allotted to the examination of physically and mentally defective children. In order to keep the registers of these children up to date, periodic re-inspections are essential and in many cases this involves visits being paid to the homes of the children. In rural districts such home visiting occupies a great deal of time which must be allowed for in making arrangements for the completion of routine inspections in the schools.

The total number of children examined on routine inspection during the year was :—

Elementary Schools, 14,202 as compared with 12,200 last year.

Secondary Schools, 1,693 as compared with 1,925 last year.

(Statistical particulars will be found in Table I. at the end of the report.)

No particular difficulty has been experienced during the year in the work of medical inspection and undue dislocation of school routine has been avoided in so far as possible. Each child when inspected is withdrawn from school for about half-an-hour and when re-inspected for not more than a few minutes. Small rural schools present a less easy problem than modern schools in populous areas, which are equipped with a medical inspection room ; but allowing for all the circumstances of limited accommodation and concurrent teaching it can be said that the work has proceeded with remarkable smoothness.

V.—FINDINGS OF MEDICAL INSPECTION.

(*a*) *Uncleanliness.*

During the year 200 cases of uncleanliness were discovered at Routine and special inspections. In addition to these cases referred to the School Nurses by the Assistant School Medical Officers the

nurses carried out inspections of 101,115 children in the schools of whom 4,678 were found to be unclean. In 1932 the nurses made 98,345 inspections and 4,931 children were found to be unclean.

There has been some improvement during the year as evidenced by the fact that although more inspections were undertaken by the nurses fewer children were found to be unclean.

During the year it was found necessary to exclude 12 cases of a serious nature from schools. In each case the child is re-examined at the end of a stated period and, if fit, is certified to be so by an Assistant School Medical Officer.

Owing to the uncertainty of obtaining a conviction, prosecutions for uncleanliness are not undertaken by this Department. When the child has been excluded from school and the parents have been warned the child is re-examined by a Medical Officer at the end of the period of exclusion. If no improvement is manifest the parents are prosecuted by the School Attendance Officer for non-attendance at School. This practice is confined to incorrigible offenders and meets with a fair degree of success, but the salutary effect of the example of a direct prosecution for uncleanliness and the consequent publicity obtained is lost. The N.S.P.C.C. in conjunction with the Medical Officers have been able in many instances to secure improvement amongst the worst families and the society has lent its aid in several cases during the year.

Nit combs are loaned to the parents in certain cases by the school nurses and have been of service not only in cleansing individual children but in enlightening the parents with regard to the fact that it is possible with a little extra care to keep children's heads free from nits. These combs can also be purchased from the department at cost price.

(*b*) *Minor ailments.*

Cases of minor ailments discovered at the routine and special inspections are referred where possible to the school clinics for treatment or to their own doctors in areas where no school clinic is available.

In addition, children suffering from minor ailments are referred by Nurses, Teachers and School Attendance Officers. These cases include minor injuries, bruises, sores, impetigo, etc. The majority

of cases of external eye diseases are referred direct to the County Oculist and only cases of a very minor nature are treated at the School Clinic.

(*c*) *Tonsils and Adenoids.*

As a result of routine and special inspections 1,147 cases of Nose and Throat defects were referred for treatment. This total comprised 628 children with enlarged tonsils only, 105 with adenoids only, 313 with enlarged tonsils and adenoids and 101 suffering from some other condition of the nose and throat. In addition 994 children were found with a defect of the nose and throat requiring to be kept under observation.

Amongst the routine examinations 1,731 or 12.2 per cent. of the children were reported as having some defect of the nose and throat. Operative treatment was recommended in 5.4 per cent. of these cases. The corresponding figure for 1932 was 7.3 per cent.

The number of cases detected at special inspections was 376 for treatment and 34 to be kept under observation.

(*d*) *Tuberculosis.*

At routine inspection only one case of definite Pulmonary Tuberculosis was discovered but six children examined as specials were found to show definite signs of this disease. In addition 18 cases suspected by the Assistant School Medical Officers of having the disease were referred to the Tuberculosis Medical Officers for diagnosis.

Other forms of Tuberculosis reported were Glands 4 ; Spine 2 ; Hip 2 ; Skin 1 ; Other bones and Joints 1 and other forms 2.

(*e*) *Vision.*

During Routine and Special inspections 1,060 children were referred to the Oculist for refraction. It was also discovered that 449 children had some degree of refractive error requiring to be kept under observation. The number of cases of squint referred to the oculist was 194.

(*f*) *External Eye Diseases.*

The number of cases of external eye disease referred to the Oculist was 237 ; of these 82 were referred from routine inspections and 155 from the examination of specials.

This total consisted of 117 cases of Blepharitis, 42 cases of Conjunctivitis, one case of Corneal Opacity and 76 cases of other conditions. Observation was advised in a further 45 cases.

(*g*) *Ear Disease and Hearing.*

Under this heading 230 cases were referred for treatment, 45 cases of defective hearing, 143 of Otitis Media and 42 other diseases of the ear.

A further 31 cases were reported as requiring to be kept under observation.

(*h*) *Dental Defects.*

Only cases of a very urgent nature are referred for treatment and 189 such cases were referred during the year. The majority of these cases were detected as specials, only 30 cases being referred from routine inspections

The returns also show that 1,677 children had caries of more than three teeth.

(*i*) *Crippling Defects.*

The number of cases reported during the year was 49; for treatment 29 and for observation 20. Of the cases for treatment 5 were diagnosed as Rickets, one as Spinal Curvature and 43 were other forms of crippling defect.

(*j*) *Delicate Children.*

Consequent upon the alteration of the statistical tables required by the Board of Education it has been necessary to add to the register of delicate children in the County the names of those tuberculous children, other than surgical tuberculosis, who are no longer in need of treatment.

This has involved the addition of 146 cases to this register who would otherwise have been included under the heading of Tuberculous Children (Table III.).

The ascertainment and accurate classification of delicate children is a matter of considerable difficulty, not only with regard to the standards adopted by various Authorities and Medical Officers, as to what is meant by a delicate child, but also, with regard to the allocation of sufficient time to the medical staff to enable them to re-inspect the large number of children in this category at sufficiently frequent intervals.

VI.—INFECTIOUS DISEASE.

The most noteworthy feature under this heading was the serious epidemic of Influenza in the early months of the year. The epidemic which affected the whole country in greater or less degree reached serious proportions in the latter part of January and the beginning of February. Most of the cases were of a mild type and the period of absence from school of sufferers was a short one. It was not therefore found necessary to close any schools on account of this disease but certificates of low attendance due to the prevalence of Influenza were issued to 132 schools and the number of children affected by the certificates was 17,783. These figures give some idea of the widespread nature of the epidemic, practically every area in the county being affected to some extent.

A gratifying feature has been the absence of Smallpox, no case having occurred during the year. This is the first year since 1929 during which there have been no cases of Smallpox notified in the County.

It was only found necessary to close 6 schools during the year for the causes set out in the following table :—

Disease.	No. of Schools.	Average Closure in "School days."	No. of Children Affected.
Whooping Cough	1	15	65
Measles	2	8	30
Scarlet Fever	3	8	254
	6		349

Certificates of low attendance due to the prevalence of infectious diseases are issued and the following is a summary for the year :—

Disease.	No. of Schools.	Average Period in "School days."	No. of Children Affected.
Chicken Pox	6	7	457
Coughs and Colds	4	5	285
Influenza	132	6	17,783
Influenza and Measles	1	4	150

Summary continued—

Disease.	No. of Schools.	Average Period in "School days."	No. of Children Affected.
Influenza and Chicken Pox	1	9	84
Measles	16	7	1,085
Mumps	2	4	286
Scarlet Fever	4	8	168
Whooping Cough	6	7	375
	172		20,673

Apart from the epidemic of Influenza mentioned above the disease which had the greatest effect in the reduction of School attendance was Measles. Sixteen schools and 1,085 children were affected by the certificates of lowered attendance issued in respect of this disease.

During the year special visits were made to four schools on account of outbreaks of Diphtheria. A total of 226 throat swabs were taken from the throats of children at the schools during the investigation for the detection of infection in contacts and carriers and submitted to bacteriological examination in the County Laboratory.

Attention was called in the report of last year to the possibilities of the spread of infectious disease amongst children in attendance at Central Schools. In a special report on "Central Schools and Epidemic Disease," Dr. Cowan, the Deputy School Medical Officer outlined certain features in the organisation of these schools which might have a serious effect when infectious diseases are prevalent.

It was stated "That the formation of central schools which day by day drain a considerable proportion of the population from scattered outlying villages into a central area, there to be confined together for many hours in the same building may be a source of potential danger when infectious disease becomes prevalent."

That the alleged danger is indeed a real one has been proved by experience during the year. An outbreak of Scarlet Fever occurred in a small village in the County and notwithstanding the precautions taken with regard to the exclusion of contacts from the village school the disease spread to the Central School in the area which the senior children of the village attended. A complaint was received

from the area by the Board of Education and referred by them to this department. It was pointed out to the Board that all possible precautions were taken and their attention was called to the special report mentioned above. The Board of Education replied that these contingencies were covered in Part II. of the "Memorandum on Closure of and Exclusion from School" issued by them. I feel that whilst this may be so to some extent there is need for more definite regulations to cover the exclusion of senior children attending Central Schools from a remote area where infectious disease has occurred and for the elimination of the possibilities of spread of infectious disease from the Central School to remote districts when such disease has occurred in the former.

VII.—FOLLOWING UP.

Satisfactory results from the system of medical inspection are dependent upon the provision of treatment for defects discovered. Mere inspection and diagnosis are comparatively useless if no further steps are taken to ensure that remedial measures are carried out to alleviate such conditions as are capable of cure or amelioration. The system of following up such defects therefore is a very important factor in the organisation of the school medical service.

When a child is discovered to be suffering from some abnormal condition which requires treatment the parent is notified of the nature of the defect on a special form and advised to consult his own doctor. Information is appended of the provision made by the Local Authority for the treatment of certain defects.

Parents may avail themselves of the facilities provided by the Authority and in such cases no further following up of the case is necessary.

Cases in which treatment is not actually undertaken by the department are referred to the School Nurses for following up. These children may have secured treatment privately or may not have had any treatment. The homes of the latter children are visited by the School Nurse and during the year 3,281 such visits have been made.

These visits are classified as follows :—

First visits	2,620
Second visits	280
Third visits	103
Special visits	278

Where parents are recalcitrant and the defect is such as to be causing unnecessary suffering to the child it may be necessary to refer the case to the N.S.P.C.C.

Home visits are carried out by Medical Officers for the purpose of examining physically and mentally defective children and for following up purposes in special cases. During the year a number of new cases have been added to the registers and as many of these children are not fit to attend school these examinations have entailed a considerable amount of home visiting.

Periodic re-inspections of all children found to be suffering from any defect requiring observation or treatment are carried out in the schools by the Medical Officers. By means of this system of re-inspection in school and following up of cases in their own homes sufficient pressure is brought to bear on the parents to ensure a realisation of the necessity for treatment and the response is on the whole a gratifying one. There is, of course, a certain percentage of less enlightened or obdurate parent whom no amount of following up or persuasion will affect, and in these cases unless the defect is sufficiently severe to warrant drastic action the department is powerless and the children must suffer. Happily this type forms a diminishing minority and as good results are made more apparent from extensions of facilities for treatment and the greater numbers who avail themselves of the provision made ; it is to be hoped that this type will become more health conscious and realise the benefits to be derived from the service.

VIII.—MEDICAL TREATMENT.

(*a*) *Minor Ailments.*

Cases in this category continue to receive treatment at the school clinics at Lubbesthorpe, Hinckley, Coalville and Melton Mowbray. A clinic is also held at the Central Office in Leicester on Saturday mornings for the examination and treatment of urgent cases referred either by the Teachers, School Nurses or the Medical Officers themselves. This clinic has proved very useful for the further examination and investigation of difficult cases encountered in the schools.

Early in the year a new Health Centre was opened at Melton Mowbray. A minor ailment clinic is held on the new premises on two half days per week and the better facilities provided have enabled the work to be undertaken with much greater ease.

The number of minor defects treated at the Clinics is given in Table IV. The total of 1,709 is 115 more than last year when 1,594 defects were treated.

The number of attendances at the clinics is as follows :—

	Children	Attendances
Hinckley School Clinic	315	856
Lubbesthorpe School Clinic	771	2,005
Coalville School Clinic	295	1,281
Melton Mowbray School Clinic	431	1,781
Central Office	226	282

The clinics at Coalville, Melton and Lubbesthorpe are held twice per week, the School Nurse being in sole charge of the second session. Hinckley and the office clinics are held on one morning each week—Tuesday and Saturday respectively.

(*b*) *Tonsils and Adenoids.*

During the year the Assistant School Medical Officers have referred 1,147 cases for operative treatment, Tonsils only, 628 ; Adenoids only, 105 ; Tonsils and Adenoids, 313 and other condition of the Nose and Throat, 101.

Last year 1,275 cases were referred for treatment, there has thus been a further decrease in the numbers of cases so referred. I stated last year that the Assistant School Medical Officers were adopting a more conservative standard with regard to the cases referred for operation and this accounts for the fall in the numbers from 1,592 referred in 1931 to 1,147 referred during the past year.

The total number of children who received operative treatment during the year was 406 and with the exception of 68 arranged privately all were carried out under the Authority's scheme.

The operations undertaken under the Authority's Scheme were performed in the Leicester City Clinic, the Loughborough General Hospital and the various Cottage Hospitals as follows :—

Leicester City Clinic	292
Melton Cottage Hospital	24
Loughborough General Hospital	6
Ashby Cottage Hospital.....	9
Market Harborough Cottage Hospital	3
Hinckley Cottage Hospital	2
Lutterworth Cottage Hospital	2

These 338 cases cost approximately £437, but of this amount £204 was contributed by the parents leaving a net amount of £233 chargeable to the Committee. The previously adopted scale of charges is still in operation and has worked very satisfactorily.

During the last six years the number of children on whom tonsillectomy was performed was 2,697 and of this number 2,253 were dealt with under the Authority's scheme.

In this County every precaution has been taken to ensure that the possibility of unnecessary operative interference in these cases is reduced to a minimum. The attention of the Assistant School Medical Officers has been drawn to the remarks on this subject by the Chief Medical Officer to the Board of Education in his Annual Report on the Health of the School Child. Every case prior to operation is certified as requiring operation by an Assistant School Medical Officer and is then referred to the operating surgeon for an examination and a final opinion as to whether or not he confirms the diagnosis made. No operation is undertaken without these preliminary examinations even though the case has been referred by a private practitioner.

The possibility of the condition of the nose and throat clearing up with conservative treatment is considered in each case and where necessary such treatment is advised and the case placed under observation and re-examined at the end of the stated period. I do not consider that an excessive amount of operative treatment for enlarged tonsils and adenoids has ever been carried out under this Authority's scheme and therefore no drastic action to cut down the numbers being so treated has been deemed either necessary or advisable.

(c) *Tuberculosis.*

The supervision and treatment of tuberculous children is undertaken by the County Tuberculosis Medical Officers. Cases either definite or suspected, found at routine or special examinations are referred to the Tuberculosis Department for examination by these Officers.

The County Sanatorium at Markfield has accommodation for the treatment of 22 children and facilities are available for education, the Sanatorium being provided with a schoolroom and a special teacher. During the year, 63 school children were admitted to Markfield Sanatorium.

Surgical cases are admitted to the Orthopædic Hospitals at Coleshill, Harlow Wood and Leicester ; 19 such cases received treatment at these institutions.

Out-patient treatment for these children is provided at the Orthopædic Clinics at Coalville, Melton Mowbray, Loughborough and Leicester, and at the Leicester Royal Infirmary.

(*d*) *Skin Diseases.*

The most common skin condition encountered at the school clinics is Impetigo and 228 such cases received treatment during the year. Cases of this disease met with in areas where no clinic is available are referred for treatment to private practitioners and 76 cases of this description were dealt with.

There has been a slight decrease in the number of cases of Scabies treated at the School Clinics, sixteen such cases having been treated this year in comparison with nineteen last year.

Facilities are available for the treatment of Ringworm by X-Ray at Leicester City Clinic and three cases were cured by this method during the year.

Local treatment of ringworm of the scalp and body is carried out at the various school clinics by the Assistant School Medical Officers and 48 cases attended for treatment. This treatment necessitates in many cases prolonged absence from school. Mention was made in my report of last year of the experimental use of a lotion of Salicylic acid, glycerine and surgical spirit and Ungentum Cuprosal for the treatment of ringworm of the scalp. This treatment suggested by Dr. Grasby in the British Medical Journal in 1932, has met with a varying degree of success and its use is still being continued in certain selected cases.

The only treatment which holds forth any real hope of cure in a short period is treatment by X-Ray, but in a large rural area there are many difficulties associated with this form of treatment at a central clinic. There is also a certain reluctance among parents to submit their children to X-Ray treatment when they realise that a temporary alopecia will result.

The Assistant School Medical Officers avail themselves of the facilities in the County laboratory for the microscopic examination

of specimens of hair for diagnosis in suspicious cases of ringworm. During the year 135 specimens of hair were submitted for examination of which 66 were positive.

The number of cases of other forms of skin disease which received some form of treatment was 156.

IX.—THE COUNTY DENTAL SCHEME.

During the present year it has not been possible to visit every school included in the Dental Scheme. Owing to the unfortunate illness and consequent absence from duty of Mr. Wilcox the visits to four schools had of necessity to be postponed but with the exception of these four, inspections and treatment have been carried out in all the other schools at present included in the scheme.

The children in these four schools will be inspected and treated as early as possible during the ensuing year, thus reducing the interval between visits to little more than the usual twelve months.

One additional school was included in the scheme during the year and it is hoped that it will be possible to carry out the routine inspection and treatment of the children in attendance without any undue interference with the present programme.

Although less schools have been visited this year compared with 1932 it will be noticed in Table IV., Group IV. that approximately 1,000 more children have been inspected under the routine age groups.

This is accounted for by the fact that additional age groups in schools recently included in the scheme, are now being included and that large numbers of children have been transferred to the Central Schools from areas not systematically visited.

The number of cases attending the Saturday morning clinics as specials has again increased. The number was 1,039, as compared with 876 for last year.

A considerable number of parents continue to avail themselves of the facilities provided for treatment at the Central Office Clinic. The Dental Officers themselves also find this clinic most useful and refer quite a number of children to it. Such cases usually require extractions under general anæsthetics or attend schools where the premises do not readily lend themselves for this type of treatment.

With the opening of the new Health Centre at Melton Mowbray it was decided to hold a Dental Clinic on these premises, every Saturday morning. Unfortunately, the results did not justify our earlier expectations and very few children presented themselves for treatment. It was therefore necessary to somewhat modify these arrangements and a clinic is now held on the first Saturday in each month. At present this provision appears to be quite adequate but if at any future time the number of cases warrant additional sessions being held the necessary arrangements will be made.

It will be noted this year that the number of extractions of permanent teeth has increased from 1,022 to 1,308. This increase is largely due to the removal of the first premolar in older children to allow the canine tooth to develop and so procure a more regular dentition.

To prevent overcrowding the Dental Staff recommend the extraction of the four six year old molars although possibly only one or two are so badly decayed as to be unsavable. Obviously a large number of these teeth extracted are perfectly sound, but it must be borne in mind that whenever a tooth is extracted the opposing one becomes functionless and in all probability will cause trouble in later life. It was this possibility that influenced my staff in their decision to pursue the policy of symmetrical extraction.

I would like to point out that the extraction of many of these teeth could be avoided by the provision of mechanical regulation appliances, but it would be practically impossible in a scattered area like Leicestershire to ensure the necessary supervision of such appliances if they were inserted. It is also a debatable point as to whether it would be justifiable to expend public money on this treatment until such a time as every child in the county has the opportunity of leaving school with a sound set of teeth.

Nitrous Oxide Gas was administered in 117 cases as against 194 in the previous year. Special days are devoted to this work and clinics were held at Melton Mowbray, Hinckley, Kegworth, Coalville, Thurmaston and Lutterworth. A Medical Officer is present at each session and every child is carefully examined before undergoing treatment.

Complete treatment was given during the year to 10,605 children, necessitating 12,803 attendances.

The number of refusals is less this year than last year, the percentage having fallen from 25 to 23. This reduction in the number of cases refusing treatment, although slight, is very gratifying and is a great incentive to the Dental Officers to further reduce this figure. As I pointed out last year there is, unfortunately, no means of compelling parents to accept preventive measures and consequently the refusals of treatment are considerably more than one would like. The policy of refusing treatment to any case marked as an "old refusal" may appear somewhat drastic, but it is only by these methods that parents are made to realise that the aim of the scheme is prevention. It is remarkable how many of these parents accept treatment for the younger members of the family which should eventually help in reducing the number of refusals.

Attention was called last year to the practicability of using a caravan for the purpose of treating the children attending rural schools and the advantage or otherwise of collecting children from such schools, for the treatment at various centres. Considerable attention has been given to this first question and I think I can definitely state that after taking into consideration all the circumstances it would be impracticable. The chief difficulty appears to be the finding of suitable accommodation for a caravan near enough to the school premises. Access to the playgrounds in these schools is impossible as in most cases there are either steps or very small gates which could not be negotiated. Suitable sites could of necessity be found but the time wasted by the staff in these efforts would certainly not justify the results.

With regard to the second proposal the fact that the number of central schools is increasing and easy facilities for transport have been provided for the children makes dental treatment at a centre more practicable.

It is now a matter for serious consideration whether the saving of time in the frequent removal of equipment and the conservation of the energy of the staff would not justify the conveyance of children from small rural schools to convenient centres.

In conclusion I would again thank the Medical Staff, Head Teachers, and School Nurses for their assistance during the year and also to express my appreciation of the loyal support I have received from my Dental Staff.

PERCY ASHTON,
School Dental Surgeon.

X.—TREATMENT OF DEFECTIVE VISION.

A considerable amount of work has been undertaken in the above direction during the year under review. Not only has the Oculist dealt with the majority of cases referred by the Assistant School Medical Officers from their routine inspections but it has also been possible to re-inspect 1,400 cases refracted two or more years ago. These 1,400 children are fully dealt with under the heading re-inspections.

All children found at routine or special inspections with refractive errors or other diseases of the eye are immediately referred to the Oculist for refraction.

During the year a total of 1,491 cases were referred by the Assistant School Medical Officers, 1,015 from routine and 476 from special inspections. This total includes the following :—Blepharitis 117, Conjunctivitis 42, Keratitis 1, Corneal Opacities 1, Defective Vision 1,060, Squint 194, and other conditions 76. Last year it was pointed out that no case of Keratitis was found to require treatment and this year only one such case came to the notice of the Assistant School Medical Officers.

Of the total of 1,491 cases 476 were discovered during the examination of specials.

In addition to the cases referred by the Assistant School Medical Officers, the Oculist herself found 802 children requiring further examination as the result of re-inspections.

Arrangements were made for 1,961 cases to be examined by the Oculist but of this number 68 were either absent, refused, or were not properly prepared with atropine ointment. Examinations were therefore completed in 1,893 cases.

The results of the examination of these 1,893 cases are summarised as follows :—

Glasses not necessary	203	228
Present glasses satisfactory	25	
Refractive errors only and requiring glasses	1,576	1,665
Other diseases of the eye and refractive errors requiring correction	89	
		1,893

It will be noted that 1,665 cases actually required correction by glasses. This total comprised :—

1,122 (67.37%) cases of Hypermetropia
347 (20.84%) cases of Myopia
157 (9.43%) cases of Mixed Astigmatism
39 (2.34%) cases of Anisometropia

Amongst the new cases a record has also been taken of the children suffering from some degree of Strabismus. The figures are as follows :—

Internal concomitant Strabismus	86
External ,, ,, ...	5
Internal alternating ,, ...	71
External ,, ,, ...	3
	165

The following summary may be of interest as it refers to the conditions of the old cases as compared with the new cases refracted for the first time during the year.

Condition	Old Cases	New Cases
Hypermetropia.....	498	624
Myopia	155	192
Mixed Astigmatism	74	83
Anisomitropia	17	22
	744	921

A summary of the new cases refracted during each of the last five years is as follows :—

	Hypermetropia.	Myopia.	Mixed Astigmatism.	Anisometropia.	Squint.
1929	75.5%	17.7%	6.8%	—	19%
1930	79.1%	12.4%	4.5%	3.98%	19%
1931	72.5%	17.0%	9.7%	1.35%	17%
1932	70.4%	21.4%	6.13%	1.52%	17%
1933	67.37%	20.84%	9.43%	2.34%	9.9%

The steady fall in the number of hypermetropes is due to the fact that a certain number of milder cases suffering from eyestrain are

treated symptomatically by the oculist or Assistant School Medical Officers before being referred for refraction. The treatment is undoubtedly satisfactory in a numbei of the cases.

The rising percentage of myopes is probably accounted for by the endeavours of the oculist to examine these children annually instead of seeing them in the course of the usual two yearly inspections.

During the examination of children with defects other than refractive errors, the following diseases were diagnosed. They are arranged under their anatomical headings :—

Eyelids.

Styes 18 ; Blepharitis 41 ; Blepharitis and Styes 5 ; Ptosis 5 ; Meibomian Cyst 1.

Conjunctiva.

Conjunctivitis 3 ; Conjunctival Cyst 1.

Cornea.

Corneal nebulæ 6 ; Conical cornea 1 ; Corneal ulcer 2.

Uveal Tract.

Coloboma iridis 1 ; Leucoma adherens 1 ; Disseminated Chorioiditis 1.

Lens.

Posterior polar cataract 1 ; Congenital cataracts 2.

Optic Nerve.

Optic Atrophy 1.

Muscular apparatus.

Nystagmus Retina 1 ; Retinitis proliferans 1.

The same procedure with regard to the provision of glasses obtained as in previous years.

Of the 1,665 children for whom glasses were prescribed 1,538 have actually been obtained :—shellite frames 499 ; gold frames 102 ; nickel frames 536 and new lenses 401.

Included in the number of nickel glasses obtained are 304 supplied free of charge by the Defective Children Sub-Committee. In every other case the glasses were obtained through the department but paid for by the parents themselves.

It will be noticed that a large number only required lenses, the frames in each case being in good repair and accurate as regards

fitting. New frames are only recommended where the child has outgrown the present ones or the parents desire a change of type or style.

This year the department has undertaken the repairs of broken or damaged spectacles but only at the expense of the parents. A considerable amount of work has been performed in this direction at a very low cost to the parents. All such repairs are carried out by the opticians employed by the Committee.

The number of parents who have obtained suitable glasses for their children is very gratifying, especially in view of the financial conditions at present existing in this country.

In addition to the 1,538 pairs of glasses supplied through the department 27 parents obtained glasses privately on being given the prescription.

It is more than possible that quite a number of the remaining 127 children for whom glasses were prescribed will eventually be provided for by their parents or will apply to the Committee for financial assistance.

All cases where glasses are not provided within a reasonable period are reviewed by the oculist and only in cases where the child's eyesight is likely to become seriously affected (in short sighted children) is pressure brought to bear on the parents. Such cases are referred to the Officers of the N.S.P.C.C., whose tactful enquiries usually have the desired effect in securing treatment for the children.

RE-INSPECTIONS.

As was forecast in my Report for last year considerable efforts have been made during 1933 to re-inspect as many old cases as possible. These children comprised those refracted in the years 1930 and 1931 and a minority who were examined during 1929 and whom —for various reasons—it was not possible to retest last year.

The majority of these "retests" were re-examined by the Oculist herself during the course of her routine visits to schools, and the remainder were referred by the Assistant School Medical Officers from their routine inspections.

A total of 1,400 cases were investigated but it was found that 101 children had left school, 88 were absent at the time of inspection, 38

refused to have any further treatment and 18 were receiving treatment privately.

The remaining 1,155 children were all seen by the Oculist and classified under the following groups :—

(1) For further refraction	802
(2) Had worn glasses but were no longer necessary	115
(3) Glasses not necessary at the first inspection and still unnecessary	110
(4) Glasses not obtained and case not severe enough for insistence on treatment	28
(5) Present glasses satisfactory	100

Of the 802 cases in group (1) 744 have been refracted during the year and found to require a change of one or both lenses. The remaining 58 will be refracted as early as convenient during next year.

The 115 cases in group (2) were found sufficiently improved to be able to discard their spectacles altogether. This number is very gratifying and proves the value of re-inspection.

Such cases include children who previously suffered from headaches, styes, blepharitis etc., with a low degree of hypermetropia and normal vision. It is considered advisable that when the accompanying symptoms have cleared up for at least six months that the child may gradually learn to do without glasses. If the symptoms recur the glasses are resumed but if not the parents are not advised to make any further provision.

Group (3) refers to cases with slight defects who did not require glasses at their first inspection and whose condition on re-inspection was still considered satisfactory without the aid of glasses.

Fortunately, we do not meet with many parents who definitely refuse treatment or glasses, but as is expected amongst a large number of children one occasionally discovers this type of parent. In group (4) are included 28 cases whose parents did not obtain glasses as a result of the first examination. All these children on re-testing still showed refractive errors but not of such a degree as to warrant pressure being brought to bear on the parents to obtain treatment.

In group (5) are included those children who were wearing glasses previously prescribed and who on re-examination were found not to require any change of lenses.

XI.—COUNTY ORTHOPÆDIC SCHEME.

This branch of the work, whilst still in the stage of development, has shown gratifying results and may be numbered amongst the most successful activities of the School Medical Service.

Many difficulties have been encountered particularly with regard to long stay hospital cases. The severe epidemic of Anterior Poliomyelitis which occured in the County in 1926 whilst accelerating the inception of an orthopædic scheme also added enormously to its difficulties in the early stages. Many cases of severe crippling defect had to be dealt with and a large percentage of these required in-patient treatment, very often of a prolonged nature.

No orthopædic hospital was in existence in the County and the demand for hospital beds had to be met by co-operation with existing orthopædic services in other areas. Moreover the expenditure per case was unduly high and the results obtained very often appeared to the lay mind to be small in comparison with the expense incurred.

It is gratifying to know that the scheme is now dealing with a much greater proportion of early cases and that apart from surgical Tuberculosis very few patients require prolonged treatment in hospital.

The arrangements made for the early ascertainment of crippling defects have proved of great value in the attainment of this end. If prolonged periods of expensive treatment are to be avoided, cases must be procured for treatment at an early stage of defect and before the grosser types of sequelæ manifest themselves.

With this object in view special arrangements are in force for the ascertainment and treatment of defects amongst pre-school children in the County. The Health Visiting Staff notify each case of deformity or disability to the Central Office irrespective of any other action taken with regard to orthopædic treatment. This enables every case to be followed up by the medical staff, if necessary, and appropriate treatment to be offered. Health Visitors and Secretaries of Infant Welfare Centres have been circularised regarding the importance of securing medical treatment for slight deformi-

ties and talks have been given at the Welfare Centres by Medical Officers on Orthopædics and the necessity for early treatment emphasised. These measures are additional to the routine medical work at Infant Welfare Centres and to home visiting by Medical Officers.

The increase in the number of cases notified to the Department as a result of these measures is very striking. In 1931, before the initiation of the special arrangements detailed above, the number of cases of crippling defect and deformity amongst pre-school children notified during the year was 37. In 1932 when the new arrangement was brought into force, the number of notifications received was 116 and in 1933 this figure has risen to 131. These figures include cases notified from all sources and a large number are infants in a very early stage of defect. Not all the cases notified were suitable for orthopædic treatment but even in these instances some other defect was present requiring some form of medical treatment or supervision.

I feel confident that the continuation and where possible, the extension of these arrangements will go far towards ensuring that no child suffering from a crippling defect or deformity will be allowed to reach school age without having had facilities for orthopædic treatment offered to the parents and that the incidence of crippling in the schools of the County will consequently show a decline in the future.

An important factor in dealing successfully with the treatment of crippling defects and deformities is that of continuity. This can be secured only where the same Orthopædic Surgeon and staff deal with the patient throughout the whole period of treatment, and where the out-patient clinics work in co-ordination with a parent orthopædic hospital.

Owing to the lack of facilities, mentioned previously, for in-patient hospital treatment it was impossible to evolve a scheme where a chain of out-patient clinics were served by a central hospital in the County. This difficulty has been overcome by ensuring that each of the out-patient clinics mentioned below forms a clinical unit with a parent hospital under the direction of the same Orthopædic Surgeon, so that patients both prior to and after discharge from hospital are supervised by the same staff. The general administration of all the various units is centralised in the Health Department at Leicester.

During the past year the Leicester City Authority officially opened a new and fully equipped orthopædic wing at the City General

Hospital, Leicester. There is in existence already a measure of co-operation between the County and City Authorities for both out-patient and in-patient treatment of certain County cases at the City Orthopædic Clinic and at the City General Hospital. The latter is also used by the County Authority as the parent hospital for the out-patient Clinic at Melton Mowbray. Further co-operation along these lines as new out-patient clinics are opened will eventuate in the centralisation of most of the orthopædic work, both clinical and administrative, with headquarters at Leicester.

In January of this year a new Health Centre was opened at Melton Mowbray. In the design which is on similar lines to that already in existence at Coalville, particular attention has been paid to the arrangements for orthopædic treatment. The building is used as a school clinic, infant welfare centre and tuberculosis dispensary and therefore certain rooms have to be utilised for dual purposes. The orthopædic section of the clinic includes rooms equipped for all types of plaster work, electrical treatment and remedial exercises and by means of a folding partition can be cut off from the rest of the building when not in use.

Plans have been drawn up for the erection of a further Health Centre on similar lines at Hinckley. It is hoped that a commencement may be made with the building of this Clinic early in 1934 and that it will be possible to begin operations in the Clinic by January, 1935. When this building is erected and ready for use it will complete a chain of out-patient clinics which will serve most of the county, three being directly under the control of the County Authority and two, one at Loughborough conducted by the Loughborough Cripples Guild and one at Leicester controlled by the Leicester City Authority, in which co-operation is carried out on a pro rata basis with an independent authority.

Ascertainment of the number of Cripples.

Cases of crippling defect occurring in school children are referred from the schools at routine and special inspections by the Assistant School Medical Officers. In addition, cases are brought to the notice of the Department by Teachers, School Attendance Officers and School Nurses.

A special register of physically defective children is filed at the Central office in Leicester. This register includes many children undergoing treatment at clinics or hospitals, and each child's records

are kept up to date by periodic reports upon the number of attendances made at clinics, period of stay in hospital, etc., which are sent from each out-patient clinic.

The register is also kept up-to-date by the periodic re-examination of all the physically defective children entered upon it. This is carried out either at the school at the time of the routine medical inspection or by means of special visits by Medical Officers to the homes of children. A certain amount of time is allocated to each Medical Officer each year for the purpose of making these special visits and by this means cases are kept within the purview of the Medical Officers and an up-to-date record of the child's physical condition, fitness for school and any special recommendations necessary as to education and training are available to the administrative officers.

I have outlined in previous paragraphs the special arrangements in force for the early ascertainment of crippling defects and deformities amongst pre-school children and the good results which are already apparent. In the future it should be the exception to find gross crippling deformities amongst the school population and this is the ideal at which to aim.

If the School Medical Service is to be looked upon as a preventive agency it is essential that its component parts should have the prevention of disease as a basis and the orthopædic section of the work if conducted on sound lines is fundamentally preventive. If early treatment will prevent the onset of deformity, then the arrangements for the ascertainment of defect in its initial stages form one of the most important parts of the scheme and every effort should be made to ensure that no case is allowed to progress to a late stage of deformity before treatment is undertaken.

After-Care Supervision.

The after-care of cases discharged from hospital is carried on at the out-patient clinics. In order to maintain restored function and prevent relapse constant supervision must be exercised over instruments and apparatus, and whilst the clinic may undertake this work up to a point there is need for frequent supervision of patients in their own homes. There is a lack of voluntary aid in the County for work of this nature and for assistance to the cripple in improving his social condition and for the provision of suitable employment. The latter is essentially an activity that lends itself to successful operation

by voluntary workers and there is room in the County for a great deal of useful work in this direction.

I can imagine no other voluntary effort which will give a greater return than that of creating a new interest in life for the cripple whose affliction is so great a handicap in times like these when even the physically perfect find it a constant and wearying struggle to maintain an existence.

I had hoped that as a result of a visit during the year to this County of the organiser of the Central Council for the Care of Cripples there might be some increase in the interest displayed by voluntary workers in the care of cripples but so far as I am aware conditions remain in the same state as before and the need for greater voluntary effort in this direction is just as urgent.

Clinics and Hospitals.

The following are the out-patient clinics, with their parent hospitals, included in the Orthopædic Scheme.

The Coalville Clinic.

This clinic is directly under the control of the County Council and is open on two afternoons per week from 1.30 p.m.

Treatment is carried out under the direction of Mr. Allan, of Coleshill Hospital, who attends at one session per month when all new cases are seen and the treatment of those in attendance comes under review.

The staff consists of a fully trained Orthopædic Sister, a masseuse from Coleshill Hospital and a School Nurse who takes charge of the clerical work, arranges the appointments for the patients and keeps the records. This clinic with the parent hospital at Coleshill forms a complete clinical unit for the treatment of all patients from the Coalville area.

The Melton Mowbray Clinic.

This clinic is also directly under the control of the County Council and is open on one afternoon per week from 2.0 p.m.

The work is carried out under the direction of Mr. Morris, Orthopædic Surgeon to the Leicester Royal Infirmary and to the

City General Hospital, Leicester. Mr. Morris attends at one session per month when new cases are seen and old patients re-examined. The staff consists of a masseuse and a School Nurse who attends to the clerical side of the work, and assists generally in the running of the clinic.

The parent hospital in connection with this clinic is the City General Hospital, Leicester, where all in-patient treatment necessary for cases attending the clinic is undertaken. This clinic and its hospital again form a complete clinical unit for the treatment of all patients from the Melton Mowbray area.

Leicester City Clinic.

This clinic, which is administered by the Leicester City Authority, is available on a pro rata basis for County cases resident in the vicinity of Leicester. The clinic is under the direction of Mr. Morris and in addition to the facilities provided for all forms of out-patient treatment, there is a small ward which can be used for short periods of in-patient treatment.

The parent hospital in connection with this clinic is the City General Hospital, Leicester, County cases are, therefore, being admitted to this hospital from two orthopædic clinics staffed by the same orthopædic surgeon.

Loughborough Cripples' Guild.

The Loughborough Clinic is administered by a Voluntary Committee and contributions are made by the Leicestershire County Council and the Loughborough Borough Council according to the number and nature of treatments received by patients referred from their areas.

The staff consists of Mr. Malkin, Orthopædic Surgeon to Harlow Wood Orthopædic Hospital, Nottinghamshire, who visits the clinic once a month, the orthopædic sister who attends once a week from Nottingham, one masseuse who is employed whole time, and four voluntary workers.

The clinic is open all the week for massage and other forms of treatment.

The Loughborough Cripples' Guild is associated with the Nottingham Cripples' Guild and forms a complete clinical unit with the parent hospital at Harlow Wood.

Work of the Orthopædic Clinics.

(*a*) *Coalville Clinic.*

During the year 95 sessions were held and 2,160 attendances were made by children suffering from some form of crippling defect. Last year the corresponding figures were 99 and 1,735.

The types of treatment were ; Muscle re-education exercises 540 ; Massage 625 ; Electrical treatment 619 ; Application and supervision of splints 161 ; Plaster treatment 124 ; Dressings 107 and in addition 453 general supervision and after-care examinations were made.

The number of children who attended was 155.

The work of the clinic continued very successfully and it will be evident from the figures quoted that a variety of cases have been dealt with. It is hoped early next year to provide a Mercury Vapour Quartz Lamp for treatment of rickets and of anæmic and debilitated children. This will fill a long felt want at this clinic.

(*b*) *Melton Mowbray Clinic.*

Work commenced in the new clinic in January of this year, no orthopædic treatment having been carried out previously in this district under the County Council scheme. As was to be expected some difficulty was experienced at the outset in obtaining sufficient numbers to occupy a full clinic session. Notwithstanding special investigations by Medical Officers and Health Visitors in the district with a view to obtaining suitable cases for treatment at the clinic, the numbers in attendance have continued to be small.

During the year 45 sessions were held and 520 attendances were made by children suffering from some form of crippling defect.

The types of treatment given were ; muscle re-education exercises 363 ; electrical treatment 11 ; and 150 general supervision and after-care examinations were made.

The number of children who attended was 62.

(*c*) *Loughborough Cripples' Guild.*

The following treatments were given at this Clinic to County cases :—Massage 130 ; Electrical treatment 128 ; Exercises and re-

education 144 ; Artificial Sunlight 39 ; Plaster 13 ; Dressings 23 ; and 34 general supervision and after-care examinations were made. A total of 342 attendances was made at the clinic by County cases during the year.

The number of children who attended was 15.

I would like again to place on record my appreciation of the vast amount of work undertaken by the Voluntary Committee in the interests of the crippled children of their area and of the assistance afforded to this department in the treatment and after-care of cases referred to this Clinic.

(*d*) *Leicester City Clinic.*

During the year 17 children were referred from the County to this clinic. Of these 8 were recommended for treatment. The number of attendances made for out-patient treatment was 32.

The following is a summary of the cases which received in-patient treatment during the year :—

Hospital	Males.	Females.
Coleshill	12	7
Harlow Wood	1	2
Leicester	6	4

Of the total of 32 cases admitted during the year 6 still remained in hospital on December 31st, 1933.

XII.—OPEN-AIR EDUCATION.

Amongst the school population of the County there is a definite proportion of delicate children, the majority of whom are in attendance at ordinary schools. These children whether they are suffering from debility, rheumatism, anæmia, tubercular infection or some other abnormal condition are by reason of their subnormal physical capacity less capable of receiving full benefit from the education provided than are their more fortunate fellows.

Many of these children suffer from conditions which are directly traceable to poor environment and which will react beneficially to proper supervision under open-air conditions. Such supervision is only possible in a properly organised open-air school where their

education can be carried on concurrently with benefit to their physical condition. Reports from open air schools maintained by other authorities show remarkable results in the benefits received by the children in attendance, they gained in weight, their general health showed improvement and they lost that feeling of inferiority which becomes ingrained in many, due to unsuccessful competition with no.mal children.

There is need in this county for some provision for open-air education on an organised basis. Efforts have been made in various schools in the County to organise playground classes but unless these classes deal solely with delicate children and have as their main object the amelioration of the child's physical condition with education as a secondary aim they cannot hope to meet with much success.

There are many difficulties associated with the provision of day open-air schools in a County but in the more thickly populated industrial areas these are minimised to some extent by the close proximity of the children and the greater ease of access to the open-air school. The provision of open-air classrooms and playground shelters in centralised areas would help to solve the problem and enable many debilitated and delicate children to attend school who are at present precluded from doing so. With a specially arranged curriculm, special arrangements for travelling and for a mid-day meal such classes would be of the greatest benefit both to the physical and mental conditions of these children and would present no untoward difficulty in their organisation and conduct.

XIII.—CO-OPERATION OF PARENTS.

Parents are invited to attend with their children at the school at the time of routine medical inspection. The form of invitation also embodies a questionnaire as to the previous medical history of the child to be inspected. School medical inspection has progressed to the stage when the co-operation of the parents is no longer a matter of propaganda and persuasion. Parents are anxious that their children should be inspected and the advice of the school doctor is sought in all matters pertaining to the child's health.

During 1933 the records show that 46.3 per cent. of parents took advantage of the opportunity to be present at the medical examination of their children—Entrants 65.8 per cent. ; Intermediates 58.3 per cent. ; Leavers 22.9 per cent. The presence of the parents is

particularly valuable in the case of the inspection of the entrants and intermediates and it is in these groups that endeavour is made to secure the attendance of the parents.

The Head Teacher wields a considerable influence over the attitude adopted by the parent towards medical inspection and treatment and it is noticeable that in schools where the staff are enthusiastic and anxious to derive full benefit from the medical inspection there is a corresponding readiness on the part of the parents to exercise a willing co-operation.

An increasing number of parents seek the advice of Medical Officers at the School Clinics with regard to their children's health. The clinics are therefore in addition to their function as minor ailment treatment centres assisting towards the improvement of the general health of the children in the districts where they are situated.

XIV.—CO-OPERATION OF TEACHERS.

Teachers play a large part in the successful organisation of the medical inspection in the schools. They forward lists of children in the various age groups who are due for inspection together with the names of any children whom they consider should be seen by the Medical Officer for some special reason. In order to facilitate the maintenance of the records at the Central Office in a state of accuracy it is essential that weekly returns should be made by teachers of all transfers, admission and exemptions. The majority of teachers are aware of the importance of this matter and send regular returns but I regret to state that there is a definite laxity in certain quarters which adds considerably to the clerical work of the office.

There is always a certain amount of difficulty in carrying out medical inspection in small rural schools without causing dislocation of the teaching. It is the aim of the department to create as little disturbance of school routine as is possible but where accommodation is very limited the ordinary work of the school is bound to suffer.

I would like once again to express my gratitude for the willing way in which teachers in these schools bear with the dislocation of their work and for the trouble taken by them to facilitate the work of the Medical Officers in every way.

XV.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

The co-operation existing between the Medical and School Attendance Departments is beneficial to each in many different ways. The School Attendance Officers report cases of prolonged absence, through illness, from school and certificates of unfitness and exemption are issued to the School Attendance Department by the Medical Officers.

Cases of defect encountered by School Attendance Officers in the course of their visits to homes are reported to the School Medical Department for investigation by a Medical Officer.

The Attendance Officer also performs a very useful service in assisting with the following up of children in attendance at the School Clinics who have defaulted from treatment and where the school nurse finds difficulty in securing re-attendance.

XVI.—CO-OPERATION OF VOLUNTARY BODIES.

During the year a great deal of valuable assistance has been rendered to the Department by the N.S.P.C.C. A variety of cases has been referred to the Officers of the Society and in every case improvement has been secured or treatment sought after a visit has been made by one of the Inspectors. The Medical Officers of the Department work in close co-operation with the Society and in cases of neglect or cruelty a Medical Officer is always available to the Inspector for the purpose of furnishing a certificate or rendering any other assistance necessary. It has been found that incorrigible offenders who have been warned frequently by the School Nurse or the School Medical Officer react in a marked degree to a visit from the N.S.P.C.C., and use is made of the Society after all other measures have failed. The work of the Society in this County has proved to be a very valuable asset to the School and Maternity and Child Welfare Departments and I would like again to express my gratitude for their assistance in dealing with many difficult cases.

The Department also works in close co-operation with the Leicestershire Voluntary Mental Welfare Association whose secretary Miss Freshney is untiring in her work for the mentally afflicted of the County. Many difficulties arise in connection with the care and supervision of mental defectives and in all these cases Miss Freshney has been of the greatest assistance to the Officers of the Department. It is a matter of great regret to myself and my staff that she has been forced through ill-health to resign her appointment as Secretary to the Association.

Other voluntary agencies to whom my thanks are due include the Loughborough Cripples' Guild and the Leicester Saturday Hospital Society.

I am greatly indebted also to the staffs of the Leicester Royal Infirmary, the Loughborough General Hospital and the various Cottage Hospitals at Ashby, Lutterworth, Hinckley, Market Harborough and Melton Mowbray for their efficient work under the County Scheme for operative treatment of enlarged tonsils and adenoids.

XVII.—SUPPLY OF MILK TO ELEMENTARY SCHOOL CHILDREN

The detailed scheme for the supply of milk to children in attendance at the Elementary Schools of the County was outlined in my Annual Report for 1930. Briefly, the scheme comprises arrangements for the supply of liquid milk, where possible of Grade "A" standard, in bottles of one-third of a pint, provided with a disc and straw. The price charged must not exceed one penny per bottle. The milk is submitted to regular bacteriological tests by the Medical Department, and the Agricultural Department, in whose hands the arrangements lie for obtaining supplies, is notified of any case in which the milk is not up to Standard.

The following returns show the amount of milk supplied to the schools during the past five years :—

	Oct. 1929	Dec. 1929	Dec. 1930	Dec. 1931	Dec. 1932	Dec. 1933
No of schools receiving milk	1	33	111	163	174	179
No. of children receiving milk	102	3,067	8,681	7,943	6,870	6,600
No. of bottles supplied weekly	510	15,335	43,405	39,718	34,310	33,250
No. of gallons of milk weekly	21	639	1,808	1,655	1,430	1,385

(*These figures are approximate.*)

It will be seen from the figures that the scheme has been extended during the year to include a further five schools.

There has been some decrease in the number of children taking milk in schools which is doubtless due, largely, to economic conditions existing in the County.

No milk is supplied free by the Education Authority but in the schools at Bitteswell, Ullesthorpe and Claybrooke free milk is available to the children through the funds of the Marc Smith Charity.

In order to ensure the maintenance of a high standard of purity the milk from each supplier is examined periodically in the County Laboratory. The collection of these samples of milk for examination is undertaken by the School Medical Department. If a sample is found, which does not conform to the standard adopted by the Committee, action is undertaken through the Agricultural Department to secure an improvement. If after due warning there is no improvement the supply from the defaulting producer is discontinued.

During the year 366 samples of milk were collected and submitted to bacteriological examination in the County Laboratory. Of these 180 or 49 per cent. contained less than 30,000 organisms per c.c. ; 124 or 34 per cent. showed a count of less than 200,000 organisms per c.c. and only 62 or 17 per cent. had a count of over 200,000. Seventy-five per cent. of the milk examined was of "Grade A" standard bacteriologically. The frequent collection and examination of surprise samples plays a big part in the maintenance of a high standard of cleanliness and it is very satisfactory to find that the milk supplied shows such a marked degree of purity.

The scheme is now well established and successful and is reacting to the benefit of the children in the schools and to the milk producing industry. Experiments in the weighing and measuring of children who partake of the milk have been carried out by the Officers of this Authority and in other areas, and the results show that an increased gain in height and weight occurs in these children in comparison with those who do not receive the extra milk.

Particulars of these experiments were given in the School Annual Report of 1930.

XVIII.—HEALTH EDUCATION.

During the year in conjunction with the Leicestershire Insurance Committee the usual campaign of Health Education has been conducted in the Schools of the County.

Posters and leaflets dealing with Personal Health, Cleanliness and general health subjects such as Influenza, etc., have been issued to teachers and used for the purpose of giving Health lessons.

In June, 1933, a "Saturday School" for the benefit of teachers was arranged by the Leicestershire Insurance Committee at the Leicester University College. Addresses were given by Mr. C. J. Bond and Mrs. C. B. S. Hodson and a number of exhibits arranged by Dr. E. N. Miles Thomas were open for inspection.

Senior girls in attendance at certain schools are afforded the opportunity of being present at Infant Welfare Exhibitions in the County. These exhibitions are arranged by the Superintendent Health Visitor under the auspices of the Maternity & Child Welfare Committee. The School Nurse in attendance gives a short address on simple health matters such as cleanliness in the home, care and protection of food, etc., and practical demonstrations are also carried out.

XIX.—PHYSICAL TRAINING.

Report of the Organisers of Physical Education for the period 1st January, 1933 to 31st December, 1933.

General.

The last year is one of particular interest to those interested in Physical Education, since it saw the publication by the Board of Education of the new "Syllabus of Physical Training for Schools." This takes the place of the 1919 Syllabus, which for many years now has fallen short of the modern interpretation of a Physical Training lesson. The Organisers hoped to see the new Syllabus in use in the schools early in the year, but as it was not in the hands of the teachers until the end of October, it is impossible, in this report, to give any estimate of its effect upon the work of the schools. The Organisers must therefore limit themselves to a statement as to their plans for the introduction of the Syllabus to the teachers, in order that they, in their turn, may pass on the new work to the children.

That the teachers themselves are keenly interested in this new issue of the Board is shown by the fact that 646 women and 148 men teachers have expressed a desire to attend courses during the next twelve months. These courses are held almost invariably in the evenings, at the end of the normal day's work, and in many cases the teachers must travel many miles to the centre and back again to their homes. The fact that this entails for some of them a day which begins at 8 a.m. and ends at 10 p.m. demonstrates conclusively their keenness in the subject, and their readiness to make sacrifices.

To provide for the enormous number of keen women teachers, courses of six lessons of 1½ hours each are being held in all parts of the County. By carrying out such a programme, it will be possible to give assistance to the whole 646 teachers in nine months. Two courses were held before Christmas, and at each more than 50 teachers attended. The most noticeable finding from these courses was that the new Syllabus demands even more mental alertness than physical agility. It was, however, most encouraging to discover that the teachers were unanimous in their feeling that the physical and mental benefits to be derived from the 1933 Syllabus would more than compensate for the difficulty of its first interpretation.

Suitable Clothing.

Girls.

More than ever, since the 1933 Syllabus has come into the hands of the teachers, are they being asked to press for the wearing of suitable clothes for the Physical Training lesson. The new work, with its leap frog, vaults, and somersaults, and most of all its stress on posture, makes it essential that the skirt and tunic should be discarded. As has been mentioned before, the tunic is too heavy for the present day vigorous lesson ; the children become overheated and catch chills on their return to the classrooms, some of which are inadequately heated. Moreover, for vaults and leap frog the skirt is definitely dangerous ; while for posture training it presents a perfect camouflage and effectually prevents the teacher from knowing anything of the real attitude of the body ; nothing could more completely conceal a hollow back than a tunic which hangs in a straight line from the shoulders. Many teachers, who imagined that the standing position of the children in their classes was moderately good, have been amazed when the tunics or skirts were removed and the actual posture of the children was revealed.

Rubber soled shoes are more than ever a necessity in order that the many and varied rhythmic and apparatus jumps can be performed, not only with reasonable safety, but also with some grace. No one can compare the timid run and clumsy jump of a child in heavy boots with the free and vigorous movement of the child in rubber shoes, without realizing that more than half the benefit of any agility exercise is lost if the footgear is unsuitable.

The Organisers have come to the conclusion that the supply of gym shoes depends less upon the financial circumstances of the parents than upon the personal influence of the teacher, since in

some well-to-do districts no rubber shoes are forthcoming, whereas in other really necessitous areas the children will bring along some form of gym shoe. It cannot be too strongly stressed that most of the benefits accruing from the 1933 Syllabus will be lost if the children are not suitably clothed and shod.

Senior Schools.

Girls.

During the past year the Organisers have had the opportunity of inspecting the work of those senior schools where the teachers in charge have attended a course on the "Supplement for Older Girls." The standard of the physical training lesson has shown a most marked advance. The group work under leaders, a new feature in many schools, has added interest and afforded much opportunity for individual practice. It was not easy, using the old 1919 Syllabus, to sustain the keenness of adolescent girls, and the teachers have welcomed the new rhythmic work and group activities which have made the lessons much more acceptable to girls of this age.

Boys.

In those schools where facilities for the use of apparatus exist, good progress has been maintained. It is, however, apparent that if the pupils of the Senior Schools are to derive the greatest benefit from modern Physical Education, apparatus is a necessity.

Agility work, which has such a direct appeal to boys, is seriously hampered by the lack of suitable mats, benches, etc. However, in spite of these difficulties, the Senior Schools have in many cases, through the use of improvised apparatus and exercises carried out with the aid of "human support," raised the standard of the work.

It has yet to be fully realized that the benefits to be derived from a properly conducted physical training lesson do not end with the completion of the lesson. It is only when each teacher, whether or not he is directly interested in Physical Education, realizes that the members of his class possess bodies, arms and legs as well as heads and faces, and is concerned for their posture throughout the school day, that the school as a whole will gain those benefits which are invaluable to the child in after-school life.

Primary Schools.

Teachers of Junior and Infant pupils have awaited with especial eagerness the new Syllabus, for which they have attempted to pre-

pare by supplementing the lessons of the 1919 book by activity breaks and agility exercises taken from pamphlets supplied by the Organisers. It is due to the successful teaching in these schools that it has been possible to aim at more advanced work in the Senior Departments. The response of teachers in Infant and Junior Schools to the proposed teachers' classes has been almost 100 per cent. which augurs well for the future of physical training in the County.

Rural Schools.

There has been a steady improvement in the work of the Rural Schools ; in the majority of cases there has been a marked step forward both in the character of the lessons given and in the response of the children. The main factors responsible are :—

(*a*) Owing to re-organisation, the outlook of the teacher has broadened, and the "esprit de corps" which now exists between the central school and the contributory rural schools is largely responsible for this fresh outlook. This working together towards a common aim is gradually but surely raising the standard of work, and this is particularly noticeable in those schools where pupils automatically pass on to a central school. The increased interest and enthusiasm apparent amongst the majority of the teachers, together with the awakening to the fact that the rural child requires physical training as much as the town child, and for the same reason, is responsible for the step forward in this branch of education in the Rural Schools.

(*b*) The introduction of such apparatus as balls, ropes, and jumping standards, and the keeping of records, etc., have given a renewed zest to the physical training lesson. "Group Work" which affords opportunities for co-operating with others has been introduced. It is now possible for the senior section of the class to practise "activities" independently, thus enabling the teacher to concentrate upon the work of the junior section.

(*c*) It is a pleasure to report that many playgrounds which have hitherto been unfit for use, have been re-conditioned ; in some cases the space formerly used for school gardens and now no longer required for that purpose has been levelled and grassed, providing an excellent surface for activity work. There are, however, still many schools whose work is hampered by inadequate accommodation and unsuitable playgrounds.

Through the generosity of the Committee's grant towards the provision of apparatus, most schools now possess a small amount of apparatus for use in the physical training lesson. Unlike the larger schools, the rural school does not possess a "Sports Fund" and is entirely dependent upon the generosity of interested managers and parents for the means to provide the quota required from the school towards the cost of such apparatus. Enterprising teachers are to be congratulated upon the methods which have been adopted in order to secure the necessary amount. To take examples at random :—

(*a*) The Head Teacher of a small rural school invited the managers and parents of the children to see an organised games lesson in progress. After the lesson, the Head Teacher pointed out the educational value of organised games and appealed for co-operation. Funds were readily forthcoming and the school now possesses a fully equipped games-box.

(*b*) In a similar school the children were encouraged to grow vegetables in an unused plot of ground. These were sold to the parents and the proceeds used for the purchase of a school cricket bat.

(*c*) The children of another school decided to save their spending money and after two years the coveted apparatus was bought.

It is clearly evident that if the rural child is to receive the benefits of modern physical training, a certain amount of apparatus is necessary ; it is hoped that in the near future such apparatus will be looked upon as an essential part of school equipment.

Swimming.

Arrangements for swimming instruction were made on similar lines to those of last year. Ninety-seven classes of boys and girls attended the eight baths during the season. Three new classes were admitted, making up to 71 the total number of departments which include swimming instruction in their scheme of Physical Education.

As a result of the lessons for teachers conducted by the Organisers, interest in this branch of the work has considerably increased.

In order that swimming instruction should be placed on sound progressive lines, graded tests were introduced and issued to the schools together with a class swimming register. Four tests or grades were set and upon the completion of the tests each successful pupil

was awarded the Committee's Schools Swimming Certificate. By this means not only has every scholar who attends the baths for swimming instruction an immediate objective to strive for, *i.e.*, to possess his typed grade certificate which is issued to him when he has passed his test successfully, but interest in his personal progress is maintained throughout the swimming season, and individual progress can easily be checked by reference to the boy himself or to the swimming register.

The Organisers are indebted to the class teachers who have so willingly carried out the scheme which has raised the standard of swimming throughout the County.

Life-saving methods, which were introduced last year, are being taught in all classes. It is pleasing to report that four Bronze Medallions and eighteen Proficiency Certificates of the Royal Life Saving Society were gained during the year.

The Organisers wish to place on record their gratitude to the Baths Committees of Hinckley, Coalville, and Market Harborough, who have set apart definite days of the week for the instructions of scholars. The teacher working under such ideal conditions is able to plan his lesson in such a manner that the whole bath can be used, and has greater opportunities for the carrying out of "Group Work."

Such is the interest aroused in one particular area that the Baths Committee gave permission for parents to visit the baths so that they might see actual lessons in progress during one week in the latter part of the season.

School and Inter-School Galas were held at Hinckley, Coalville, Oadby and Market Harborough Baths. These events are thoroughly enjoyed by parents and children, and are particularly helpful in stimulating interest in schools swimming.

Total number of scholars who attended baths	3,528
Total number of attendances made	42,318

The attendances at the baths have been excellent throughout the season. The following is a summary of attendances for the past four years :—

1930 :	22,524
1931 :	24,243
1932 :	32,027
1933 :	42,318

Voluntary Associations.

The various Committees of teachers which conduct the voluntary out-of-school activities continue to do excellent work. Area and County sports have been organised and a representative team was entered for the National Championship Athletic Competition at Southend-on-Sea held in July.

Interest continues to be shown in the various inter-school, league, and County football competitions throughout the County.

Evening Institutes.

Classes in Physical Education have been organised in the evening institutes of the County. Much good work has been done, and in spite of the limited supply of apparatus the attendance of the students was maintained. A class for unemployed men and youths was incorporated at one centre ; their appreciation of the work was shown by their keenness and excellent attendance.

The organisers wish to take the opportunity afforded by the publishing of this report to thank the Director of Education, Members of the Committee, Medical Officers, and School Managers for their help and support. They are grateful too for the readiness with which Head Teachers and their staffs respond to suggestions proffered for the improvement of the teaching of Physical Education in the schools.

DOROTHY D. COWAN,
DONALD MILLER,
Organisers of Physical Education.

XX.—BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

(1) *Physically Defective Children.*

The register of physically defective children has been kept up to date by the addition of fresh cases ascertained during the year and by the re-examination of those children whose names were already on the register and who were due to be re-inspected. Each year a certain portion of the time of the medical officers is allotted for the examination and re-examination of exceptional children and is devoted mainly to the home visiting of children who are for one reason or another not in attendance at school.

Last year a complete survey was made of all known physically defective school children in the County and a complete and up-to-date record of the conditon of these children was obtained. This year the work has been of a supplementary nature but has been of value in keeping the records in a state of accuracy. In so far as known physically defectives are concerned the records may be said to be complete. There are, in all probability, a few cases in the County which have not come to the knowledge of the Department but the arrangements made for co-ordination with the Maternity and Child Welfare Department which are detailed in another section of this report, ensure that few or no physical defectives attain school age without coming within the purview of the School Medical Service.

The cases are classified as follows :—

	Males.	Females.
Blind	9	9
Deaf	12	5
Anterior Poliomyelitis	64	38
Spastic Paraplegia	15	10
Congenital Deformities	13	18
Torticollis	4	5
Rickets	8	3
Scoliosis	6	5
Osteomyelitis	4	2
Muscular Dystrophy	5	1
Heart Disease	10	23
Talipes	21	9
Birth Palsy	8	4
Injuries	6	3
Miscellaneous	13	5
	198	140

Tuberculosis.

All notifications of Tuberculosis amongst children by School Medical Officers, Tuberculosis Medical Officers and General Practitioners are recorded by means of a card index system at the Central Office.

Contacts of Tuberculosis cases are examined by the Assistant School Medical Officers in the course of their routine school work and during the year 53 such examinations were made.

The register of tuberculous children is kept up to date by the addition of new cases notified and from details entered from the reports received from the school nurses as a result of their periodic visits to the homes of the children.

(3) *Mentally Defective Children.*

(*a*) *Ascertainment.*

Considerable time has been devoted during the year to the examination of new cases and the re-examination where necessary of those already on the register. Last year a complete survey of all known cases of mental defect was carried out and an accurate classification made irrespective of the facilities available in the County for education or training. There is thus in being a record which gives a fairly accurate estimate of the needs of the area in relation to mental deficiency and the education of the mentally retarded. This record has been kept up to date by the addition of details obtained from the examination of fresh cases during the year and the deletion of the names of those who reached sixteen years of age and were passed on to the local Voluntary Association for Mental Welfare.

As in the case of the physically defective children a certain amount of time was allotted to each medical officer during the year to enable special visits and examinations to be made.

(*b*) *Provision for the Mentally Retarded.*

No further progress has been made towards providing special facilities for the education of mentally retarded children in the County.

In 1930 the Education Committee appointed an organiser to institute and supervise special classes in various areas. This appointment should have proved a preliminary step to an organised system of education for these children within the elementary schools.

Centralisation of schools is far advanced in this County and the organisation of special classes in these schools would appear to offer an ideal solution to the problem of the Education of the mentally retarded children and one which should present no undue difficulty in administration. A great proportion of these children are in attendance at school in the ordinary classes and not only do they themselves derive little or no benefit from the instruction imparted

but they act as a serious drag upon the class and add enormously to the difficulties of the teacher.

The records of the Department show that in all areas of the County and in the greater number of schools there are in attendance sufficient mentally defective children to hamper the work, and that in certain of the new Central Schools there are sufficient numbers of mentally retarded children to enable a class or classes to be organised without admitting others from outside.

In dealing with these children in special classes in ordinary schools it would not be necessary, at the commencement if a few classes were organised, to appoint specially qualified teachers. The organiser would be in a position to devote considerable time to the supervision of schemes of work and the methods employed. As the scheme developed and further classes were inaugurated it might be necessary to appoint teachers with special qualifications in this work to exercise supervision over the classes in the Central Schools and to deal with retarded children in the Junior Schools.

The formation of special classes in Senior Schools will deal only with the education of mentally retarded children of approximately eleven years or over. There still remains the problem of the mentally retarded child in the Junior School. There would arise a real danger that if provision is made for the senior children those in the Junior Schools might be allowed to drift without much effort being made towards special training until they attain the age for admission to the special class in the Senior School.

In order to overcome this difficulty it would be necessary that mentally retarded children in the Junior Schools should be carefully supervised and that the staffs of these schools should realise the importance of early steps in relation to their special education. It should be possible to institute and supervise schemes of instruction for use in Junior schools by making use of the services of a peripatetic teacher for this purpose and such work is already being carried into effect to some extent by the organiser. If the Junior Schools, in districts where special classes are organised in the senior schools, were dealt with in this manner it would ensure that the children from these schools would be in a position to benefit fully from the training in the special classes when they attained the age for admission.

Notwithstanding the opportunity offered by the formation of Central Schools in the County and the appointment of an organiser

it is regrettable to have to report that no progress has been made in the formation of special classes. An attempt was made to organise classes in two of the Central Schools, in one of these a class was actually established and teaching commenced under the supervision of the organiser. After continuing for some time the attempt was dropped and the children re-distributed in ordinary classes throughout the school.

At the present time the organiser is endeavouring by suggesting schemes of work to secure special attention for the individual mentally retarded child in an ordinary class of normal children. As stated in my report of last year I consider this to be a case of mid-directed energy and a course which will confer little or no benefit upon the child concerned. The class teacher in an elementary school has his or her time fully occupied in dealing with the normal children and it is too much to expect that any excessive time for instruction can be allocated to the retarded child particularly when little improvement can be expected as a result.

It would appear unfortunate that the opportunity afforded by the formation of Central Schools is not being used to the best advantage in connection with the education of mentally retarded children in the County. I can only reiterate the hope that developments on sound lines may take place in the early future and that an effort may be made to use the services of the organiser to better advantage by the institution of special classes under her supervision conducted on a systematised and properly organised basis.

(*c*) *Provision for the Mentally Defective.*

Children in this category with a low grade mental defect *i.e.*, serious feeblemindedness, imbecility or idiocy, are certified as mentally defective and notified to the Local Mental Deficiency Authority.

Last year a new institution for the care of Mental Defectives was opened at Stretton Hall. This Institution which is administered by the Mental Deficiency Act Committee of the County Council makes provision for high grade mental defective females and for a few low grade boys and girls. The available accommodation at present is 20 cot and chair cases and 30 of medium and high grade.

(*d*) *The Work of the Voluntary Association for Mental Welfare.*

During the year 1933, thirty-three new cases were admitted to Stretton Hall, (certified by the Board of Control for the reception of

20 cot and chair cases, 20 medium-grade cases under 16 and 10 working patients over 16.) This has relieved the situation to a great extent with regard to certain low-grade defective children in the County for whom, by reason of the degree of defect or on account of their home surroundings, Institutional care is necessary. The general improvement in the children since their admission to Stretton Hall is considerable.

In March 1933, the third Occupation Centre in the County was opened at Hinckley. It is hoped that a fourth Centre will be established in 1934 at Melton Mowbray to meet the needs of that area.

Hinckley Centre has made an excellent beginning, and Coalville and Loughborough Centres continue to make steady progress. The report of the Board of Control Inspector on these two Centres was very satisfactory. The Defectives enjoy attending the Centres and we have the warm support of the parents.

The majority of Defectives can be suitably cared for in their own homes if facilities such as Occupation Centres, Home Teachers and friendly supervision are provided for their training, but there will, however, always remain a percentage, which may be estimated as one third of the whole, for whom institutional accommodation and treatment is desirable.

The number of Defectives who remain in their own homes renders it important that schemes for their training in the community be provided, and the Association is anxious and willing to organise and supervise Occupation Centres on behalf of the Local Authority. The establishment of these Centres undoubtedly assists the boy and girl to use to a fuller extent their limited capabilities.

Our work of supervision of educable defective children for the County Education Committee has been continued, and vacancies in a Residental Special School have been obtained for two little brothers.

We are greatly indebted to the County Council and Local Education Authorities for their co-operation.

E. N. COLMAN,

Secretary.

XXI.—DESK CHAIRS FOR CRIPPLES.

In my report of last year mention was made of a special desk chair, designed by Dr. Cowan, for the use of certain crippled children in the schools of the County. This chair, of which there are now ten in use in County Schools, is specially adapted for children with crippling defects involving loss of function in one or both legs.

The chair has an adjustable seat and foot rest, self-propelling wheels, desk with ink-pot and a sorbo-rubber pad on the adjustable seat. The children for whom the chairs have been provided are unfit through their physical defect to attend an ordinary elementary school and would have required education in a special school for crippled children. The provision of these chairs has enabled the children to attend the ordinary elementary schools and has thus effected a considerable saving to the Authority as the cost of the chair is negligible (£6 . 10.) compared with the heavy cost of maintenance of the children at special schools.

Enquiries have been received from other Authorities for details of construction and design and these with photographs have been transmitted. I am pleased to know that at least one other County is going to make use of the chair and am sure that it will prove as valuable in that area as it has been in Leicestershire.

XXII.—SECONDARY SCHOOLS.

(1) *Medical Inspection.*

There are 14 Secondary Schools in the administrative County—seven of which are maintained by the Authority, the remaining seven being non-provided but aided.

The approximate number of children on the rolls of the provided schools is 1,400 and in the aided schools 1,880 ; a total of 3,280.

All these Secondary Schools are visited at least once a year by a Medical Officer for the purpose of carrying out routine and special examinations. In the case of girls' schools the work is undertaken by a Lady Medical Officer.

Children in attendance are subject to a full routine medical inspection on admission and to further routine examinations at the

ages of 12 and 15 years or over. Any pupils whom the teachers wish to be specially examined are also referred at the time of the Medical Officer's visit.

The only arrangement in force for the "following up" of children discovered with defects at routine inspection is the re-inspection of these children by the Medical Officer at his or her subsequent visit to the school.

The routine inspections numbered 1,527. As a result of these inspections it was found that 212 or 13.2 per cent. required treatment.

The most prevalent defect was found to be defective vision and 122 cases were referred for treatment and 118 for observation.

(2) *Medical Treatment.*

No treatment is provided under arrangements made by the Authority. All defective children requiring treatment are advised, through their parents, to consult their own private practitioner.

XXIII.—EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

The employment of children in the County is regulated by bye-laws. Employment is not permitted before school hours except for the delivery of milk and newspapers and a certain class of domestic work.

The engagement of young persons in street trading is also controlled by these bye-laws which have the general effect of ensuring that employment has no deleterious effect on the children's fitness to receive education.

Every child making application for an employment certificate is required to pass a medical examination by one of the School Medical Officers.

During the year 138 certificates were granted :—

Errands	30
Delivery of Newspapers	102
Delivery of Milk	4
Other permitted duties	2

XXIV.—HYGIENIC CONDITIONS OF ELEMENTARY SCHOOLS.

At each routine medical inspection the assistant medical officer has also, during 1932 and 1933, carried out an investigation of the hygienic conditions of the school. In this way each elementary school has been surveyed, the majority on two occasions, only five being inspected once only. The report was made on a special form so that the standard of the findings might be so far as possible uniform. Information was specifically required with reference to the following :

(1) The method of heating and its adequacy.

(2) Ventilation.

(3) Lighting of classrooms by both natural and artificial means.

(4) The water supply as to its source, potability and adequacy both for drinking and washing.

(5) The type of sanitary convenience, the number of closets provided for boys, girls, infants, and staff, and whether or not there is a urinal.

The cleanliness and condition of repair of these offices also require to be noted, with, in the case of closets other than water closets, the frequency of emptying.

(6) Cloakroom accommodation.

(7) Condition of playground.

(8) Finally the medical officer under "general remarks" is requested to give information as to any conditions which may be found that are likely to be prejudicial to the health of the scholars.

The average attendance of boys, girls and infants is entered on the form in order that the adequacy of closet accommodation may be estimated.

During 1934 the forms, in addition to the above, specifically ask for information regarding the surroundings of the school (*e.g.*, urban, rural, built up, open, etc.), and the equipment (*i.e.*, desks and blackboards) of the schools together with a definite statement as to the cleanliness and repair of the class rooms and cloakrooms, and the supply of washbasins and baths.

In order that improvements made may be noted the medical officer takes with him a statement as to the defects found at the

previous inspection and notes whether these have been remedied, improved or remain unaltered.

All these reports are considered by the Senior Assistant Medical Officer and any defects or inadequacies are referred to the Buildings and Sites Department who then take the appropriate steps to remedy them.

In a County of the varied nature of Leicestershire it will be realised that there must be a considerable variation in the type of school and the sanitary provisions that are made. In the rural districts where there has been little or no increase in the population, the schools are mainly of an old type to which from time to time modifications have been made, in order to modernise them in so far as possible. In the industrial urban districts there are both old and new schools, the latter being in a very satisfactory condition ; the older schools though are not so fortunately placed and considerable modification would be necessary to completely modernise them. The most modern schools are those in the new housing estates on the outskirts of Leicester and the new central schools. The inspection in these cases is likely to reveal faults rather in management than in construction.

To a great extent the conditions found in the school will correspond to the sanitary facilities available in the district in which they are found, thus where there is no sewerage system it is not possible to provide a water carriage system unless a small disposal works is also set up, similarly so long as many villages are without a public water supply it is not practicable to have a laid-on supply of potable water to the schools in these villages.

Heating.

Some type of central heating is the most common, followed in order by stoves, open fires, and a combination of stoves and open fires. Central heating gives the most satisfaction but with some of the older plants there is a temptation to maintain the temperature of the rooms at the expense of satisfactory ventilation. If, however, the plant is modern, properly looked after and designed for the premises with due regard to the need for ventilation this method is much the best, leading to an equalised temperature throughout the room.

Stoves are next in adequacy as regards actual heating but have the disadvantage that they dry the air, that there is a large expanse of very hot metal on which dust, etc. burns and a liability for leaks

to occur in the long flues. Trouble from fumes, however, was only noted in one case and this has since been dealt with.

Open fires which from the aspect of ventilation are probably the most satisfactory gave rise to more complaints of inadequacy ; they are however, mainly found in the older schools and the grates are of the older types which are not very efficient. Open fires are gradually being replaced by central heating or stoves.

In one infants' school electric heating by panels in the ceiling had been installed. This was not satisfactory and as the contractors are still liable, steps are being taken to improve matters.

In a few schools, electric radiators are in use to supplement the main source of heat.

Defective heating was noted in 23 schools ; this figure, however, includes those where the school is satisfactorily heated apart from one classroom. In 1933 it was found that 3 schools had had efficient heating installed since 1932 and in two cases extra heating facilities were in course of erection.

Ventilation.

No artificial methods are used in any of the schools and in only a few are there special inlets for air, but most classrooms have roof ventilators. That these methods are effective is shown by the fact that in only six schools was the ventilation inadequate, though, as mentioned above, in one or two of the schools where there is defective heating there is a tendency to maintain the temperature of the room at the expense of its proper ventilation. One great value of using windows as the method of ventilation is that in this way the children get accustomed to seeing open windows. While most of the artificial methods require that windows be kept shut, otherwise the air currents are disorganised and the carefully calculated replacement of foul by pure air is upset. Shut windows are a bad object lesson when one is teaching the value of fresh air and sunlight.

In 1932 one school had to keep the windows shut on account of the proximity of a stone-crushing plant, but as a result of representations to the owner of the plant the dust nuisance has been abated.

Lighting.

The natural lighting of the schools is, except in a few instances, satisfactory, there are only nine schools in which it is definitely poor though in some others certain rooms are inadequately lit.

The number of schools with electric lighting is increasing and there are no complaints of inadequacy with this illuminant, except that in one case it could be improved by some re-arrangement of the lamps.

About half the schools have either some other illuminant than electricity (*e.g.*, gas or oil lamps) or no illuminant. These latter, as also those with oil lamps, are small country schools and close early, *i.e.*, 3.30 p.m. and so artificial illuminants are not required. If daylight should fail early, work is done which does not require a good light. Gas lighting is being steadily replaced by electricity, which is beneficial, the gas in only a few instances giving good results.

Water Supply.

As was noted in the introductory remarks to this section it is not practicable to provide a supply of laid-on potable water to schools in villages which have no such supply themselves. There are however a few schools in which there is no water supply of any description, others in which water is obtained from the village pump which is not on the school premises and others in which a supply is fetched each morning by the caretaker.

In some cases there is no potable supply but the rain water is collected in tanks for washing purposes, or there may be a pump, but it yields water which analysis has shown to be polluted. These difficulties though are those of the village and in 1933 they were accentuated, to a marked degree, by the exceptional drought.

In all the urban schools and in those rural schools which come within the area supplied by the Leicester City Waterworks, together with certain others, there is a plentiful provision of good drinking water : in some of these schools, special drinking appliances and in all wash-basins with running water are installed. In a few of the rural schools the wash-basins are portable.

Sanitary Conveniences.

As in the case of the water supply the type used depends to a great extent on the facilities available in the village. In all the urban districts a public water supply and system of sewerage is available, and the water carriage system is used, though in one or two schools where these facilities are available the pail system is still in use. In several of the rural schools the water closet is in use, though in certain cases owing to the poor water supply the pans have to be hand-flushed daily by the caretaker.

Pail closets are the commonest in rural schools and these are emptied by the District or Parish Council where there is a scavenging scheme or where there is no scheme, by the caretaker or by private contract, and there were only three complaints of the emptying not being carried out sufficiently frequently.

There is still a considerable number of the pit or midden type in use ; these are difficult to empty and the process is only carried out at intervals varying from once a term to once a year or when necessary.

During the year, however, two of these have been converted to the pail system.

The cleanliness on the whole has been reported as satisfactory as also the state of repair. In some cases the number of closets is inadequate for the number of children attending the school, and these facts are under consideration by the managers of the schools concerned.

Where an unsatisfactory state of cleanliness was reported in 1932 there was a definite improvement in 1933.

One school where some of the boys were in a separate building at a considerable distance from the main school had extra closets installed during 1933, so that the boys now have sanitary conveniences available without a considerable walk.

The position of the sanitary conveniences in some schools calls for comment, such as closets other than water closets, being only a few feet from the classrooms and the closets for both sexes having a common entrance.

As noted above there is an improvement in all cases where the defect is one of want of proper management and some improvement in those defects which are structural in character. Especially in regard to these offices the proper supervision of the caretaker is of the utmost importance.

During 1933, the following defects discovered in 1932 were found to have been remedied. In addition similar defects detected in 1933 are noted.

Defects	Detected 1932 Improved 1933	Detected 1933	Repairs in Progress 1933
Infrequent emptying	2	2	—
Uncleanliness	7	5	—
Bad repair	5	8	2
Drains unsatisfactory	3	2	—

Cloakroom Accommodation.

In inspecting this portion of the school regard is paid to the adequacy in size of the rooms to the number of pegs provided relative to the number of scholars in attendance. Any conditions of disrepair are also noted. In 13 per cent. of the schools the accommodation was stated to be inadequate and in 5 cases there was some disrepair. In two of these latter, remedies have been considered by the school managers.

In the newer schools the cloakrooms are heated and there is greater facility for the drying of boots and clothing ; this is especially important in the central schools where the children come from considerable distances and it is satisfactory to note the provision that is being made.

Playgrounds.

In size these are usually adequate and, where they are small, it is in rural schools where there is ground adjoining the school to which access is available for games and physical training without danger from traffic.

The surface of the playgrounds attached to these small rural schools is usually not satisfactory, being rough and dusty in dry weather and muddy in wet. An increasing number are, however, being asphalted. The disadvantages of the gravel surface are threefold ; liability to more frequent falls and skin breakages during play, secondly, hampering of movements in physical training, and thirdly, the mud in wet weather splashes on to the children when running and performing drill and also is taken into the school, making floors much more dirty than where the playground is asphalted.

As a result of these inspections and the representations made to the Buildings Department improvements have been effected. Defects in management have been remedied but owing to the financial circumstances there has not been so great an improvement in those defects where structural alterations are required.

During 1934, an even more detailed examination is being carried out. The inspection will be rather more comprehensive in nature and this, in conjunction with the ready co-operation offered by the Buildings and Sites Department and the help of the teachers, will result in as near an approach to complete hygienic supervision as is possible with Public Elementary Schools in a County.

XXV.—SPECIAL ARTICLES.

(1) AMBLYOPIA EX ANOPSIA—WITHOUT SQUINT.

The general expression amblyopia is used to denote weak (or more literally "blunt") sight. The more special term amblyopia ex anopsia implies that the weak sight is due to some disuse of the eye commencing in early life, and caused by interference with the formation of sharply defined images on the retina.

The commonest cause of amblyopia ex anopsia is squint, in which the visual acuity in the defective eye deteriorates from absence of binocular vision. As a result of this the image formed by the squinting eye is suppressed and from lack of use the retina gradually loses its sensitiveness.

There are, however, some cases of amblyopia with clear refractive media in which there is no obvious squint and no history of it. The amblyopia here is associated with a difference in refractive error between the two eyes. Either the amblyopia is congenital in the strict sense of the term ; or the retinal image in the more ametropic eye being less clear than in the other, the retina of the former fails to develop or loses its power of recording well defined images.

Where the amblyopia is the result of a squint no appreciable improvement in sight can be obtained by the usual methods, once the child has attained the age of 8—9 years.

The object of this investigation is to determine whether this result also obtains in cases of amblyopia without squint. In such cases the possible cause of the amblyopia is removed by placing suitable lenses before the child's eyes, thus rendering them both emmetropic, and the constant wearing of such lenses for a period of two years is the line of treatment adopted.

The defective sight in the majority of such instances is first discovered at the routine School Medical Inspection and the children are, therefore, referred to me for the first examination when they are 8 to 9 years old. As a general rule the cases have one eye with low refractive error on which they rely for clear vision and they are unaware that the other eye is less efficient. Up to the time of examination the parents, too have usually noticed nothing wrong, and it is my experience that mothers frequently express a reluctance to provide glasses for a defect which has hitherto caused the child no inconvenience. It is obviously essential that the Medical Officers in charge of such cases should have some definite knowledge of the

results of treatment, before offering advice. If any improvement in vision is to be expected in the majority of such cases,—even after the age of 9 years, then treatment must be strongly recommended in every instance.

For the purposes of this investigation I have selected a series of cases who, at the time of their first examination, showed a marked difference in visual acuity between their two eyes. In all the cases congenital defects, pathological lesions, and history of previous squint were first excluded. If at the time of examination I failed to obtain the expected improvement in sight in the more ametropic eye from correction with the appropriate lenses, then the case was included in the series as being one of true amblyopia. The degree of amblyopia varied from 6/12 in milder cases to less than 6/60 in the most extreme instances.

A large proportion of the cases were found among children from hyper-metropia in both eyes. These accounted for 54 of the total of 66. Of the remaining 12, 2 were cases of *anisometropia, 1 of myopia, while 9 showed mixed astigmatism in the amblyopic eye, and hypermetropia in the other.

(In passing it is interesting to note with reference to these cases of anisometropia that whereas I examined 12 of them during the past year only 2 showed any degree of amblyopia. In adults who have never worn glasses the two conditions of anisometropia and amblyopia are more closely associated, and it is, therefore probable that the progress of the amblyopia in such cases continues through late childhood and adolescence.

Again, the predominance of amblyopia amongst children who are hypermetropic in both eyes may be related to the fact that the distance of the near point of the eye from the retina is in proportion to the hypermetropic error, and in inverse proportion to the degree of myopia. There is thus, in hypermetropic cases, no distance at which the eye showing the greater error can form a clearer image than the other. In myopia the reverse is the case and the near point in anisometropia is much closer to the retina in the myopic, than in the hypermetropic eye. The range of accommodation in the former is small, but such an eye can focus a very near object, which the

*Throughout this article, for the sake of convenience, and unless otherwise stated, I use the term anisometropia in the narrow sense to indicate that one eye was myopic and the other hypermetropic.

hypermetropic eye cannot see as clearly. In children—who are often in the habit of looking at objects at very close range, this intermittent use of a myopic eye may, therefore, serve to retard the onset and development of amblyopia ex anopsia).

Each of the 2 cases of anisometropia with amblyopia referred to above, had a difference in refractivity of 9 dioptres. In the first the myopic eye had vision 6/60 without and 6/24 with glasses and in the second 6/60 and 6/36 respectively. (In spite of this high difference of lenses both children wore their full myopic correction, though to avoid confusion of images, the spherical lens was omitted before the hypermetropic eye).

During the year I examined a large number of children with binocular myopia and amongst them I found only one who showed any appreciable degree of amblyopia. There were two instances in whom its absence was very striking. One had a difference of -5.D and the other -6.D between the two eyes. In both these children the unaided vision in the more myopic eye was less then 6/60, and yet the correction of the error by the addition of minus lenses caused an immediate improvement in the sight to 6/9 and 6/12 in the two cases. The one exception which showed a true amblyopia of less than 6/60, had refractive errors -7.D sphere and -4.D cylinder, in the right eye, and -0.5.D sphere in the left eye and was without any fundus changes.

In 7 of the 9 cases of amblyopia resulting from mixed astigmatism, I succeeded in obtaining some improvement in vision by the immediate correction of the refractive error, but even then the vision was never better than 6/12.

The difference in the cylinder required by the two eyes varied from 2 to 6 dioptres, and taking the cases as a whole, there was some evidence to show that the degree of amblyopia varied directly with this difference in cylindrical correction. This may be illustrated by the fact that the four most severe cases,—having vision 6/36 or less,—all had a cylindrical difference between the two eyes of 4 dioptres or more.

On the other hand, of the 54 hypermetropic and amblyopic eyes, 38 failed to show any improvement in visual acuity when the error was corrected in the first instance, while the remainder could not be brought beyond 6/12 even in the few most favourable cases.

I found no definite relation between the amount of difference of hypermetropia in the two eyes and the defect in sight ; in one child

aged 9 years a difference of 1.D caused as low a vision in the amblyopic eye as in a second child of the same age with the highest difference noted, namely 4.D.

Where there was a high degree of hypermetropia in both eyes, however, even a small difference in the refractive errors appeared to cause a very marked degree of amblyopia. In three such cases where the hypermetropia exceeded +6D. in the two eyes, as small a difference as +0.5D. to +1.0D. had reduced the visual acuity to less than 6/60 in the more hypermetropic eye.

The difference in the lenses required by the two eyes in these 54 children with binocular hypermetropia was one of both sphere and cylinder in 30 cases, of sphere alone in 14, and of cylinder only in the remaining 10.

In some of the children I examined, the amblyopia appeared to be progressive after the age of 9. One girl whom I first saw when she was 10 years old had right and left refractive errors of +1.5D. and +4.5D. respectively. Her vision was 6/6, 6/12, with and without correction. Her parents omitted to provide glasses for her, and when I examined her again at the end of two years her vision was 6/6, 6/24, without, and still 6/6, 6/12, with, corrective lenses. A second child aged 9 years had refractive errors +1.5D. sphere and +0.15D. cylinder in the right eye, and +2.0D. sphere and +0.75D. cylinder in the left. Her error was 6/6, 6/18, with and without lenses. This girl lost her glasses after about nine months, and her parents took no steps to replace them. When I examined her two years later I found that the sight in her left eye was reduced to 6/24, and that correction with lenses did not improve it.

Two other children had never worn glasses in the two years interval between examinations, and their visions respectively 6/60, 6/6, and 6/6, 6/36, were unchanged at the second inspection.

I have no means of assessing from the above data the age at which the amblyopia starts. The ages of the children in the whole group ranged up to 12 years but as I have previously stated, none of them was referred to me before the age of 8 years, and then the amblyopia was already well established. On the other hand in two of the untreated cases the amblyopia had increased after two years, and during the same interval,—as will be seen later, there was in the majority of cases, definite improvement from the continued correction of the refractive error. These facts are against the theory that the ambly-

opia is in itself congenital. Rather it would seem that the sensitiveness of the retina diminishes as a result of a congenital discrepancy between the refractive media in the two eyes.

Nevertheless the evidence does not show that as a whole, children of 12 suffer from a higher degree of amblyopia ex anopsia than those of 8 years. The only criterion of the progress of such cases is the study of the course in each individual.

Of the 66 cases under review I examined 18 for the first time in 1933 and in these I am, therefore, unable to report the results of treatment. As I have stated above 4 of the children seen at a second inspection either had not had or had not worn the glasses prescribed. The other 44 were all examined for a second time at the end of one and a half to two and a half years, and the results of wearing glasses are tabulated below to illustrate the vision in the amblyopic eye before and after treatment.

Read horizontally the figures apply to the vision with glasses at the first inspection, and the vertical columns indicate the vision resultant on approximately two years' treatment.

Vision after an approximate interval of two years.

Vision at first examination.	< 6/60	6/60	6/36	6/24	6/18	6/12	6/9	6/6	
< 6/60	3	–	–	–	1	–	–	–	4
6/60	–	–	–	–	–	2	–	–	2
6/36	–	–	1	1	3	2	–	2	9
6/24	–	–	–	–	3	6	1	2	12
6/18	–	–	–	–	1	3	5	2	11
6/12	–	–	–	–	–	1	1	4	6
	3	–	1	1	8	14	7	10	44

From this Table it may be seen that there were three cases with vision less than 6/60, one of 6/36, one of 6/18, and one of 6/12, in whom the vision remained unaltered. Eight children showed an improvement of one line only *e.g.*, from 6/24 to 6/18 or 6/18 to 6/12 ; whereas in the remaining 30 cases the improvement was more appreciable. In the last vertical column there are 10 cases in whom the vision had risen to normal during the two years.

These tabular results when described in relation to the type of refractive error are as follows :—

The case of myopia occurs in the first column and there was no improvement in the original vision of less than 6/60.

There was, however, improvement in the myopic eye in the 2 anisometropic cases, one from 6/24 to 6/12, the other from 6/12 to 6/9.

Two of the nine cases of mixed astigmatism—one 6/18 and the other 6/12, were unaltered and the other 7 had changed thus :— one 6/36 to 6/18, one 6/24 to 6/18, two 6/18 to 6/9, one 6/18 to 6/6, one 6/12 to 6/9, and one 6/12 to 6/6.

The cases of hypermetropia account for the remainder and, therefore, need no special description apart from the table.

Thus it will be seen that although approximately 15 per cent. of this short series received no benefit from wearing glasses, in 18 per cent. there was definite if slight improvement ; whereas in the majority or 67 per cent. there was an appreciable increase in vision.

As a general conclusion we may infer from the facts that in a certain small proportion of children with varying differences in the refractive errors of their two eyes, an amblyopia ex anopsia arises in the more ametropic eye, and if left untreated tends to progress unfavourably.

Although anisometropia in the broad sense, and implying any degree of difference in refractive error between the two eyes in one individual, is found in a high proportion of children, the incidence of amblyopia is fortunately very low. In all I examined the eyes of over 1,500 school children during the past year, and yet the total number of cases of amblyopia ex anopsia resulting from the stated cause was less than 70.

Nevertheless, such cases are important from the point of view of the School Medical Officer. The equalisation of the refractive errors in the two eyes by the addition of lenses, does not immediately cause more than a negligible improvement in vision. The constant wearing of glasses over a period of two years or more does, however, raise the visual acuity in a large proportion of the children, and the promise to parents that there is a reasonable hope of some benefit from such treatment even during the later years of school life is, therefore, justifiable.

CONSTANCE WALTERS,
School Oculist.

(2) TEACHING OF SEX HYGIENE IN SCHOOLS.

"Organised and controlled sex teaching is a definite requirement of our modern educational system and the time for its inception is already mature." These words were written in the Annual Report for 1930 by Dr. Davidson in the course of an article setting forth the principles of sex hygiene teaching and outlining a syllabus already drawn up for use in the Elementary Schools of this County.

It seems appropriate, after the lapse of three years to review the situation and consider how far our hopes have been fulfilled and what obstacles still remain in the path towards our objective.

As regards the need for this instruction my experience has very much deepened my conviction of its urgency and importance. It is therefore with real regret that I find myself unable to record even an approximate achievement of our very modest aims of three years ago. After the syllabus had been drawn up, the schools were circularised to ascertain the willingness of the Head Teachers to adopt sex teaching as an addition to the General Hygiene course. Here at the outset we were confronted with the discrepancy between the large number of schools desiring the instruction and the fewness of the persons able and willing to instruct. The Sub-Committee appointed to deal with the question therefore decided to begin by selecting from the total number, ten Central Schools and to invite them to apply for the services of a man and a woman Medical Officer to visit the school and give a specimen lecture to boy and girl leavers separately, the Head Master and Senior Mistress respectively being present. It was thought that by this means the teachers themselves would be able to carry on the work and thus year by year a fresh small batch of schools could be drawn into the scheme. It is important to state here that no other means were taken to arouse interest in the schools and no propaganda other than the circular letter was undertaken, nor was the letter followed up in any way. This I think sufficiently explains the fact that only two Central Schools (Anstey and Roundhill) wrote making the necessary application.

The lectures at these two places however, do not represent the whole of the work done. At Barwell, the Headmaster already undertook the boys' teaching and at his request a School Medical Officer had spoken to girl leavers for two successive years, and the Senior Mistress was now able to carry on the work, and at Melton Senior Girls, the Head Mistress herself undertakes the teaching and

has done so for some years. Indeed the experience and capable advice of these two Head Teachers, both of whom served on the Sub-Committee, has been of great value throughout. At Hinckley Senior Girls' School a talk to leavers was given at the request of the late Miss Fellowes and repeated under the present Head Mistress who has since given personal instruction herself and has also instituted a carefully graded course of simple biology throughout the entire school based on the admirable book by Reid-Heyman.

It is to be regretted that the Senior Mistress has left Anstey Senior School and that the teaching there has lapsed.

During the three years during which this much, or this little, has been accomplished, something approaching 10,000—12,000 boys and girls have left school and gone out into the Industrial world to make what they can of the complexities of adolescence and sex-life. Surely it is unthinkable that we can rest content to do nothing further. Nor can it be said that the subject has no actual bearing on Public Health and Preventive Medicine, when recent statistics give the number of new infections of venereal disease as 70,000 per annum. It is significant to note in this connection that the peak incidence of new infections falls between the ages of 19 and 22.

It cannot of course be too strongly emphasised that the basis of sex hygiene is something far broader than mere prevention of organic disease or even what are called "irregularities of conduct." The teaching should always be definitely constructive, aiming at the building up of a biological and eugenic ideal in the minds of citizens of all classes in the control and exercise of these functions. Nevertheless, the incidence of V.D., as well as the illegitimate birth rate both serve as concrete illustrations of the unsatisfactory state of things at present and so long as it is recognised that a fall in either figure, though desirable in itself, might yet be brought about without fundamental improvement in current modes of life, those records have a statistical value for our purpose.

What then were the chief obstacles to the carrying out of our original plan ?

Undoubtedly in the first place inability to allot sufficient time to those members of the Medical Staff who were willing and competent to deal with the matter. The introduction of a new piece of work into a full-time appointment is bound to present some difficulty but in the present instance where the work must be done in school hours and

these are necessarily inelastic, mere goodwill or actual enthusiasm on the part of the teaching or medical staff, is not in itself sufficient to solve the problem. If a Medical Officer is to act even temporarily as a peripatetic teacher, then the giving of two lectures must need comprise a half day's work and if routine inspection duties are to be combined with a lecture at one and the same session, then time must be allowed and the number of inspections at that session reduced accordingly.

To work out a Medical Officer's programme of work when due place is given to sex hygiene teaching will involve a considerable amount of organisation and co-operation with the schools concerned to make it a practical proposition. We count on the work of preparation of lectures and a certain amount of entailed correspondence being done in the doctor's own time but the adjustment of the work so as to include the giving of the lectures presents a real, though probably not insurmountable difficulty.

SECONDARY SCHOOLS.

Although the Sub-Committee was formed only for dealing with the Primary Schools, the needs of the boys and girls attending Secondary Schools are felt to be equally urgent—in the Girls' Schools a beginning has been made.

In 1931 I broached the subject of suitable provision being made for adolescent girls attending these schools and, authorised by the Director, I wrote to all Senior Mistresses in mixed Schools asking for details regarding this matter and suggesting a special talk to girls of 12 and over on the hygiene of Menstruation—subject to the individual consent of the parents. As the result of this, talks were given in six schools and the number of children withheld by parents was negligible. In one school 69 were present out of a possible 70. In another the only absentee was the daughter of one of the Masters.

In view of the widespread ignorance which I have found amongst girls and even amongst their parents I feel it is desirable that instruction on this subject should be given to all entrants of 11+ by the School Doctor at the time of the annual Medical Inspection, at least in all schools where the Senior Mistress is not able to interview personally all parents at the time of admission.

There is reason to believe that corresponding teaching on adolescence is equally needed amongst the boys.

In 1932 at the request of the Head Mistress a lecture was given to the girls of Forms V., Up. V. and VI. in Loughborough High School on the more general subject of the sex functions. In this school the ground had already been prepared by addresses to parents under the auspices of the Diocesan Moral Welfare Association. Here there were no refusals of parental consent and upwards of 100 girls attended. Miss Bristol and several members of the staff including the House Mistress were also present with the idea of securing the fullest possible harmony of outlook throughout the school. The interest of the girls and the lack of anything approaching embarrassment were obvious but it was felt that the subject matter had been unduly compressed and accordingly this year the teaching was spread over two lectures. This was undoubtedly an improvement, questions were asked and a number or girls came to me afterwards in small groups to have special points elaborated with a view to clarifying their minds of the results of muddled thinking and previous misinformation.

A further step had to be taken this year in the inauguration of a talk to younger girls. This came about as the result of the discovery of a book which was being read and lent amongst the girls of the lower school. The book was quite harmless in itself but the subject was mainly obstetrical and the language and presentation naturally unsuitable for girls of 10 to 12 years. It was accordingly removed and the facts they were anxious to know were told them simply instead ; a process which showed them so conclusively how far their own efforts had led them from the truth (this being apparent from their questions afterwards) that it was hardly needful to tell them why the surreptitious reading and lending of books on sex subjects is discountenanced.

In this instance again we had fresh proof of the co-operation of parents, for a letter was written to each one stating the nature of the talk and the reason for its being given and they were unanimous in their support and their gratitude to the school for providing the opportunity for instruction.

The question of time and organisation for this work in relation to other school duties, referred to earlier in this article threatens shortly to become acute.

A beginning has already been made at Ashby Girls' Grammar School with a parents' meeting. This was arranged by Miss Champion to take place in the evening so that I was able to go over and speak to them. It is interesting to note that out of 95 invitations sent out,

81 accepted; that of the 14 who were unable to come, 13 wrote saying that in the event of sex teaching being given in the school they wished their daughter to attend. The remaining one did not mention this point at all. There was an interesting discussion afterwards and unanimous appreciation of the idea of definite teaching being given. The next step is to endeavour to plan the Medical Officers' time so that work of real value may be done in response to the widespread demand for instruction on this vital question. A request from South Wigston Intermediate School for Girls for a similar address to mothers has had to be refused for want of time.

I would add in conclusion that the line that I adopted aims at the giving of such facts of elementary anatomy and physiology as completely to satisfy the child's natural curiosity on the two sides of the question of procreation, *viz.*: fertilization and childbirth and to explain the phenomenon of menstruation, giving it its normal setting in the complete picture of sex life.

It is my very definite aim to give a worthy attitude of mind towards these facts *while imparting them* and not in any sense as a separate line of thought.

After a good deal of varied experience not confined entirely to school work it is my strongly held opinion that there is no justification for withholding the simple facts of any part of the act of procreation nor do I think such withholding of one side of the question can fail to be productive of considerable potential harm. Even an implied promise of frankness must be honestly fulfilled if we are to be completely trusted by those who unfortunately have too often already had experience of half-truths and the shirking of real issues. Moreover, this knowledge of the physical side of parenthood is necessary to right conduct and I can find no answer to the question "What more suitable opportunity than the present is likely to occur whereby those girls may acquire sound knowledge of the reproductive powers in such a strictly unemotional atmosphere?"

MARY E. WESTON,
Assistant School Medical Officer.

ELEMENTARY SCHOOLS.

TABLE I.

A.—**Routine Medical Inspections.**

Year ended 31st December, 1933.

Number of Code Group Inspections.

Entrants	4,272
Second Age Group	3,799
Third Age Group	5,595
Total	13,666

Number of other Routine Inspections	536

B.—**Other Inspections.**

Number of Special Inspections	2,614
Number of Re-Inspections	5,381
Total	7,995

TABLE II.

A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1933.

DEFECT OR DISEASE. (1)		ROUTINE INSPECTIONS. No. of Defects.		SPECIAL INSPECTIONS. No. of Defects.	
		Requiring Treatment. (2)	Requiring to be kept under observation, but *not* requiring Treatment. (3)	Requiring Treatment. (4)	Requiring to be kept under observation, but *not* requiring Treatment. (5)
Malnutrition		30	92	33	2
Skin	Ringworm :				
	Scalp	—	3	28	—
	Body	1	2	24	—
	Scabies	2	1	16	—
	Impetigo	7	10	230	—
	Other Diseases (Non-Tuberculous)	17	16	183	6
Eye	Blepharitis	51	18	66	—
	Conjunctivitis	8	3	34	2
	Keratitis	1	—	—	—
	Corneal Opacities	1	2	—	—
	Defective Vision (excluding Squint)	775	434	285	15
	Squint	158	52	36	—
	Other Conditions	21	19	55	1
Ear	Defective Hearing	21	16	24	—
	Otitis Media	54	11	89	—
	Other Ear Diseases	1	1	41	3
Nose and Throat	Chronic Tonsillitis only	522	799	106	14
	Adenoids only	63	80	42	6
	Chronic Tonsillitis & Adenoids	178	74	135	10
	Other Conditions	8	7	93	4
Enlarged Cervical Glands (Non-Tuberculous)		30	185	46	1
Defective Speech		—	5	1	—
Heart and Circulation	Heart Disease :				
	Organic	25	14	12	4
	Functional	17	10	—	—
	Anæmia	45	23	13	2
Lungs	Bronchitis	24	102	25	—
	Other Non-Tuberculous Diseases	4	14	10	—
Tuberculosis	Pulmonary :				
	Definite	1	—	6	—
	Suspected	3	1	12	2
	Non-Pulmonary				
	Glands	1	1	2	—
	Bones & Joints	2	1	1	1
	Skin	—	—	1	—
	Other Forms	—	1	1	—
Nervous System	Epilepsy	—	2	10	—
	Chorea....	—	—	9	—
	Other Conditions	—	4	4	—
Deformities	Rickets	5	3	—	—
	Spinal Curvature	—	—	1	—
	Other Forms	13	15	30	2
Other Defects and Diseases		99	156	255	7

TABLE II.—*continued.*

B.—Number of individual Children found at Routine Medical Inspection to require Treatment (excluding Uncleanliness and Dental Diseases).

Group.	Number of Children.		Percentage of Children found to require Treatment.
	Inspected.	Found to require Treatment.	
(1)	(2)	(3)	(4)
GROUPS :			
Entrants	4,272	528	12.4%
Second Age Group	3,799	573	15.1%
Third Age Group	5,595	773	13.8%
Total	13,666	1,874	13.7%
Other Routine Inspections	536	71	13.2%

TABLE III.

Return of all Exceptional Children in the Area.

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Children suffering from the following types of Multiple Defect, *i.e.*, any combination of Total Blindness, Total Deafness, Mental Defect, Epilepsy, Active Tuberculosis, Crippling, or Heart Disease 10

BLIND CHILDREN.

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
3	1	—	1	5

PARTIALLY BLIND CHILDREN.

At Certified Schools for the Blind.	At Certified Schools for the Partially Blind.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
7	—	5	—	2	14

DEAF CHILDREN.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
10	3	—	1	14

TABLE III.—*continued.*

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.
2	—	—	—	1	3

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.
7	184	—	77	268

	Males	Females	Total
Notified to the Local Mental Deficiency Authority *during the year*	4	10	14

EPILEPTIC CHILDREN.

Children Suffering from Severe Epilepsy.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
—	5	—	6	11

TABLE III.—*continued.*

PHYSICALLY DEFECTIVE CHILDREN.

A.—Tuberculous Children.

I.—Children suffering from Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
10	16	—	32	58

I I.—Children suffering from Non-Pulmonary Tuberculosis.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
32	25	—	12	69

B.—Delicate Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
7	225	—	40	272

C.—Crippled Children.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At no School or Institution.	Total.
6	237	—	53	296

TABLE III.—*continued.*

D.—CHILDREN WITH HEART DISEASE.

At Certified Special Schools.	At Public Elementary Schools.	At other Institutions.	At No School or Institution.	Total.
—	21	—	12	33

TABLE IV.

Return of Defects treated during the year ended 31st December, 1933.

TREATMENT TABLE.

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

Disease or Defect.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
(1)	(2)	(3)	(4)
Skin—			
Ringworm-Scalp	27	28	55
Ringworm-Body	24	2	26
Scabies	16	11	27
Impetigo	228	76	304
Other skin disease	156	25	181
Minor Eye Defects— (External and other, but excluding cases falling in Group II.)	129	31	160
Minor Ear Defects	83	33	116
Miscellaneous— (*e.g.*, minor injuries, bruises, sores, chilblains, etc.)	1049	40	1089
TOTAL	1,712	246	1,958

TABLE IV.—*continued.*

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

Defect or Disease.	No. of Defects dealt with.				No. of children for whom spectacles were			
					Prescribed (1)		Obtained (2)	
	Under the Authority's Scheme.	By Private Practitioner or at Hospital, apart from the Authority's Scheme.	Otherwise.	Total.	(i) Under the Authority's Scheme.	(ii) Otherwise.	(i) Under the Authority's Scheme.	(ii) Otherwise.
(1)	(2)	(3)	(4)	(5)				
Errors of Refraction (including squint). (Operations for squint should be recorded separately in the body of the School Medical Officer's Report)	1,781	14	—	1,795	—	—	—	—
Other Defect or Disease of the Eyes (excluding those recorded in Group I.)	112	—	—	112	—	—	—	—
Total	1,893	14	—	1,907	1,665	14	1,538	27

Group III.—Treatment of Defects of Nose and Throat

Number of Defects				
Received Operative Treatment.				
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital, apart from the Authority's Scheme.	Total.	Received other forms of Treatment.	Total number treated.
(1)	(2)	(3)	(4)	(5)
338	68	406	—	406

TABLE IV.—*continued.*

Group IV.—Orthopaedic and Postural Defects.

	Under the Authority's Scheme. (1)			Otherwise. (2)			Total number treated.
	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	Residential treatment with education. (i)	Residential treatment without education. (ii)	Non-residential treatment at an orthopaedic clinic. (iii)	
Number of children treated	29	3	244	—	—	—	276

Group V.—Dental Defects.

(1) Number of Children who were :—

(*a*) Inspected by the Dentist :

	Age. No.	
Routine Age Groups	5....2354	Total 26,275
	6....2719	
	7....2865	
	8....3025	
	9....3105	
	10....3023	
	11....3330	
	12....3029	
	13....2351	
	14.... 455	
	15.... 19	

Specials 1,039

GRAND TOTAL 27,314

(*b*) Found to require treatment 14,136

(*c*) Actually treated 10,605

(2) Half-days devoted to { Inspection.... 280 / Treatment 1,280 } Total 1,560

(3) Attendances made by children for treatment 12,803

Group V. Dental Defects—continued.

(4) Fillings	Permanent teeth 10,628 Temporary teeth 26	Total	10,654
(5) Extractions	Permanent teeth 1,308 Temporary teeth 10,919	Total	12,227
(6) Administrations of general anæsthetics for extractions			117
(7) Other operations	Permanent teeth 123 Temporary teeth 172	Total	295

Group V I.—Uncleanliness and Verminous Conditions.

(i.) Average number of visits per school made during the year by the School Nurses	5.5
(ii.) Total number of examinations of children in the Schools by School Nurses	101,115
(iii.) Number of individual children found unclean	4,678
(iv.) Number of children cleansed under arrangements made by the Local Education Authority	—
(v.) Number of cases in which legal proceedings were taken :—	
(*a*) Under the Education Act, 1921	—
(*b*) Under School Attendance Byelaws	—

SECONDARY SCHOOLS.

TABLE I.

Number of Children Inspected from 1st January, 1933 to 31st December, 1933.

A.—**Routine Inspections.**

Age	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
Males	2	2	1	9	22	61	202	269	88	35	174	19	2	–	886
Females	2	2	6	12	20	33	146	201	50	23	140	5	1	–	641
Total	4	4	7	21	42	94	348	470	138	58	314	24	3	–	1,527

B.—**Special Inspections.**

	Specials.	Re-Inspections.
Males	16	81
Females	8	61
Total	24	142

C.—**Total Number of Individual Children Inspected by the Medical Officers whether as Routine or Special cases.**

Number of individual children inspected.... 1,693

TABLE II.

A.—**Return of Defects found in the course of Routine Medical Inspection in 1933.**

Defect or Disease.		Routine Inspection.	
		Number referred for Treatment.	Number required to be kept under observation but not referred for treatment.
Malnutrition		—	21
Uncleanliness, Head		5	—
Skin	Impetigo	1	—
	Scabies	—	—
	Other Diseases—non-Tuberculous	—	2
Eye	Defective Vision	122	118
	Squint	2	5
	External Diseases	7	2
Ear	Defective Hearing	—	—
	Ear Disease	3	1
Nose and Throat	Enlarged Tonsils and Adenoids	3	—
	Enlarged Tonsils	32	50
	Adenoids	6	4
	Other Conditions	1	—
Teeth		4	58
Cervical Glands		3	6
Defective Speech		—	2
Heart	Organic	—	1
	Functional	1	3
	Anæmia	1	5
Lungs—Non-Tubercular Diseases		7	3
Tuberculosis Pulmonary	Definite	—	—
	Suspected	—	—
Nervous System	Chorea	—	—
	Other Conditions	—	—
Deformities	Spinal Curvature	1	5
	Flat Foot	28	29
	Other Forms	2	12
Enlarged Thyroid Gland		—	1
Other Diseases or Defects		3	9

B.—**Number of Individual Children found at Routine Medical Inspection to require treatment (excluding Uncleanliness and Dental Diseases.)**

Number inspected	1,527
Requiring treatment	212
Percentage requiring treatment	13.2%