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## ANNUAL REPORT

TO THE

CITY OF BIRMINGHAM EDUCATION COMMITTEE

OF THE

# SCHOOL MEDICAL OFFICER

GEORGE A. AUDEN, M.A., M.D. (Cantab.), Ph.D. (Birm.) F.R.C.P. (Lond.), D.P.H. (Camb.).

> INCLUDING THE REPORT ON THE SPECIAL SCHOOLS

CHARLES L. C. BURNS, M.R.C.S., L.R.C.P., D.P.M.

FOR THE

YEAR ENDED 31st DECEMBER, 1932

In accordance with Circulars 576 and 596

of the Board of Education.

## BIRMINGHAM.

Templar Printing Works, 168, Edmund Street.



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## ANNUAL REPORT

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## For the Year ended 31st December, 1932.

## ELEMENTARY, SECONDARY & NURSERY SCHOOLS.

## INTRODUCTION.

The Medical Inspection of children attending Public Elementary Schools has now been a statutory duty of the Local Education Authority for a quarter of a century, and the presentation of the 25th Annual Report of the work accomplished offers a fitting opportunity for placing on record the early history of the School Medical Department, and of tracing its progress and development from year to year, illustrated, as far as possible, by quotations from successive reports.

Moreover, the coincidence of this closure of the first twenty-five years of existence with a period of national financial stringency may possibly mark a turning point towards a new orientation of the work in the coming years.

Prior to this statutory imposition of medical inspection, Birmingham, in company with certain other cities, notably Bradford, Leicester and London, had established special schools for the feeble-minded and physically-handicapped children, and had retained the services of a Medical Officer. The late Sir Robert Simon, M.D., Physican to the General Hospital, acted in this capacity until the School Medical Department came into existence. It is not without interest that Birmingham has some claims to be regarded as a pioneer in Medical Inspection on a voluntary basis, for it is on record in the Minutes of the Birmingham Infant School Society,\* now in the Public Library, that from 1826 to 1835 Dr. Sands Cox, later one of the founders of the Queen's Hospital, examined the children regularly at the school in Ann Street (now represented by a portion of Colmore Row).

The School Medical Department began its work on the 1st September, 1908, with a staff consisting of a Medical Superintendent (the title was changed to that of "School Medical Officer" in 1913), three Medical Officers with three women attendants, and one clerk. Of this original staff three still remain in the service of the Education Committee, viz., Mr. Lackey, Nurse Gaskarth and myself.

<sup>\*</sup>September 29th, 1826, Minutes. "An offer from Dr. Sands Cox to act as Surgeon to the Institute was gratefully accepted;" on 27th November, 1826 Dr. Cox wrote "a letter suggesting the propriety of a periodical inspection of the state of the children's health, and kindly offering his attendance at the School for that purpose, as often as the Committee may think proper."

Until the completion of the Greater Birmingham Scheme, when the Hygiene Sub-Committee was established, the medical work was the responsibility of the Elementary Education Sub-Committee. No administrative accommodation was available in the Education Office, Edmund Street. After some difficulty a single room was taken in the adjoining offices of the Poor Law Guardians where the work continued until the opening of the present Council House in 1912.

No treatment of defects found was contemplated, and the Medical Officers at once found themselves faced with a great mass of defects which they were powerless to alleviate. The Hospitals quickly felt the pressure. By the end of the year 700 children needing glasses had been discovered. The following extract from the first Report illustrates the difficulty of the new situation :---

"The great majority of children who require glasses find a hospital to be the only means of obtaining them ... A great number have found their way to the Eye Hospital, and taxed the resources of that Institution to such an extent that it has been found necessary to add an additional House Surgeon to the Staff. The Secretary reports that the work of the 24 days ending November 12th included 259 children from the Birmingham Schools alone."

"The Secretary of the Children's Hospital reports that the increase in children from the day schools attending the Out-patient Department is from 20 to 25 a week, and that most of them are operation cases for tonsils and adenoids."

"Of all the defects revealed by Medical Inspection there are none which yield in importance or frequency to those of the teeth. It is impossible to over-estimate the urgency of the question from the point of view of School Hygiene."

"If indifference is seen in the matter of cleanliness of the mouth, still more marked and more incomprehensible is the indifference to the cleanliness of the head. It is impossible to give accurate figures of the numbers of children whose heads are warrens of lice. In some schools it may be said that, in despite all the efforts of the teaching staff, 50 per cent of the children are infected and infectious. Many families take their parasites so much as a matter of course that they firmly believe them to be a natural brood spontaneously generated from their own persons."

"The value of the inspection has been strikingly demonstrated in the discovery of numbers of children who present suspicious signs of early tuberculous disease of the lungs. . . It will be universally admitted that the tuberculous children are best away from crowded school rooms and in the open fields. . . The child who is not attending school is readily lost sight of, while at the same time he misses the regulated order of daily life which school attendance entails, together with all the social influences which are exercised by the school. It is plain that if these debilitated children are to be educated at all (and both the interests of the State and the individual demand it) then the duty is imposed upon Education Authorities of supplying such a form of curriculum as will at once improve both their bodily and their mental condition. One form of Educational Institution alone satisfies these two demands—the Open Air School." It should be remembered that there was no compulsory notification of cases of Tuberculosis until 1912. The Uffculme Open Air School was given to the City in September, 1911.

The year 1909 saw the first steps towards meeting these difficulties. New regulations concerning the closure of schools during epidemics of Measles were brought into being, weekly examinations for cleanliness of head and body by the nurse assistants were instituted, a dark room for the examination of eye defects was fitted up, and a scheme to enable parents to buy spectacles at uniform rates was instituted. A beginning was also made of an attack upon the heavy incidence of ringworm which at this time formed one of the chief causes of prolonged absence from school. In addition to the examination of entrants and leavers demanded by the Code of the Board of Education, the children between seven and eight years of age were examined, thus anticipating the subsequent requirements of the Board. The advantages of this are obvious, for by the time this age is reached, the children have learnt to read and are old enough to take an intelligent part in the examination.

"It is in this group that the greater number of eye, ear, and other defects are found, and, as far as is possible, attempts at securing removal or amelioration are urged with even greater vehemency than is the case with the other groups."

"With the establishment of Labour Exchanges a wide field of usefulness might be opened for the leaving examination. . . It is to some extent the need for guidance in the choice of a trade that leads so many lads to undertake the first job that offers the advantage of a weekly wage, and sooner or later leads them to swell the ranks of casual labour. A carefully co-ordinated scheme, even if only begun in a humble way would be a boon the value of which would become increasingly manifest." (Report, 1909).

"There is one eye affection in particular which calls with special urgency for a modified school curriculum, in which fresh air, generous diet, and hygienic surroundings play the most prominent part. This is recurrent ulceration of the cornea. There are other children who from one cause or another are so partially blind that they cannot profit by instruction given in an ordinary Elementary School. Many cases of progressive Myopia, corneal opacities and albinism come within this category."

In a special investigation I discovered fifty such cases, and in the following year a Partially Blind Day Class was established at the Blind Institution, Carpenter Road. In the same year similar classes were established in London.

The provision of meals and the adequacy of the food given occupy a considerable section of the three earliest reports. At this time the meal consisted of a thick slice of bread and margarine, with another slice of bread and blackberry and apple jam, and a cup of cocoa made with half milk and half water. The food was prepared at eight centres and distributed to fourteen sub-centres. It was given at 8 a.m. and was distributed under the covered playgrounds without tables or seats.

"The great disadvantage of the breakfast system is that time is pressing and speed is essential, for the children often arrive late and have in many cases a considerable distance to go before they reach their own school. This element of speed, too, combined with the lack of suitable accommodation, prevents any attempt at the quiet and orderliness of a 'meal' as opposed to a 'distribution of food' and a most valuable educational opportunity is thereby lost." (1909).

As an addition to the breakfast, porridge was recommended, and was first tried at Garrison Lane and afterwards at the other centres. As an experiment a varied meal was given at Summer Lane immediately after the afternoon session, which proved very popular as many of the children who received it were employed for long periods out of school hours. A detailed enquiry in 1911 into the length of hours worked by boys in three schools revealed out-of-school work of more than 35 hours and even 40 hours per week in many cases.

As regards the general hygiene of the schools, there has been an extraordinary change in the period under review, and in the earlier Annual Reports much space was devoted to the consideration of such problems as ventilation, dust, lighting, sanitary conveniences, and the unsatisfactory character of the desks and seating in very many schools. Similarly, problems in connection with the physically handicapped, feeble-minded, and maladjusted children were discussed in great detail.

"The complicated question of ventilation, or the interelationship of school atmospheric conditions, together with the endless psychological problems presented by the development of the child's mind, offer opportunities for much investigation and research. It is, perhaps, here that one of the most valuable effects of a Medical Department may be found, i.e., in the closer correlation of applied psychology and scientific investigation to the problems which present themselves in adapting the education to the individual needs and capabilities of children. . . At no English University does there exist at present any facility for the direct application of psychological methods to the problems of school life, and the establishment of a practical Psychology Department in a University in close connection with the schools of the town in which it is placed would be of the greatest possible value towards the elucidation of the many problems which beset educational effort." (1908).

The first step towards the realisation of this hope was rendered possible by the opening of the Remand Home\* in 1911, since which date it has been possible to examine the children admitted thereto, and to attempt to determine the psychological factors of which this delinquent conduct is the overt expression. Since that time there has been a growing co-operation with the Children's Court<sup>†</sup> which has culminated in the opening of the Child Guidance Clinic in April, 1932.

Ringworm was one of the chief causes of prolonged absence from school.

"It is probable that at any given time there are at least 600 children excluded for Ringworm. The frequency and wide distribution of this parasitic disease in the schools shews that the means of dealing with it at present in vogue are entirely inadequate. The

<sup>\*</sup>It is worthy of note in this connection that the Shustoke Industrial School—now known as the Shawbury School—has been the first and only certified industrial school established by a Municipal Corporation. It was certified as such by the Home Office on 18th February, 1868. All other similar institutions have been founded by private philanthropy or by the late School Boards.

<sup>&</sup>lt;sup>†</sup>Established in 1906, being the first Children's Court in the country. A Probation Officer, also the first officer of the kind in Great Britain, had been appointed in 1905.

long continued absence from school which is necessary under the present circumstances, and the consequent loss of education and of controlling supervision which it entails make it one of the most serious of school infections." (1909).

One of the chief difficulties in obtaining treatment arose from the absence of any co-ordinating scheme in connection with the voluntary hospitals, and the persistence of the note system. It was frequently necessary for parents to spend days in an attempt to secure the requisite number of hospital notes before treatment could be undertaken. To meet this difficulty the Birmingham Settlement in Summer Lane undertook the work of a Voluntary Care Committee for certain schools in the area. The homes of those children who were found to have defects were visited, and help was given towards obtaining notes, taking the children to the hospital, collection of any payments to be made, etc.

Large numbers of children were absent from school on alleged medical grounds, many of them being found useful at home, and early in 1909 an important move was made in co-operation with the School Attendance Department to secure a more adequate supervision of such children. After consultations with the British Medical Association and the staffs of the Hospitals and Dispensaries, a form of medical certificate was agreed upon which is still in use, and also a register of all children who are absent from school for prolonged periods which was begun at the same time.

"The formation of this register is a step towards the consolidation and unification of method in dealing with disease incidence in school. It is manifest that in order to deal with the diseases which affect children of school age in any satisfactory manner, knowledge of the causes of absence and the frequency of individual disease is necessary. These children are for the most part under medical treatment, generally more or less spasmodic, and it is of importance that there should be some direct means of communication between the School Medical Officer and the Medical Practitioner who is treating the case." (1909).

A new move was also made in dealing with infectious disease in the schools. Hitherto, it had been customary to close Infants' Departments, and more rarely Upper Departments, on the outbreak of infectious disease. The general loss of attendance from zymotic disease was very large; thus in 1910 82,369 school days were lost from Scarlet Feyer. New regulations were introduced, and no school department has been closed since that date for infectious disease.

The difficulties in securing treatment were rendered more manifest in the following years, when the round of Medical Inspection reached the schools for the second time.

"In spite of the advice and attention devoted in explaining the necessity to the parents, only 12 per cent. have remedied the eye defects by obtaining spectacles, which in many cases causes educational loss and will result in a diminution of industrial efficiency." (Report, 1910).

"It is not possible to discover how many children have been operated upon for Tonsils and Adenoids, but the proportion is quite insignificant in comparison with the large number in need of operation. . . The number of children found to suffer from Otorrhoea is surprisingly large (451) and the importance of the removal of the affection cannot be exaggerated." (1909). "In the previous report reference has been made to the present hardship suffered by children suffering from speech defects, whose disabilities render them unable to take proper advantage of the school curriculum, yet the condition is eminently one which in a large proportion of cases admits a cure with proper care and attention. The need for some provision for these children in Birmingham is evidenced by the number reported as suffering from speech defects." (1909).

These extracts from the three earliest reports give a more vivid picture of the conditions which existed than any actual figures which would be to some extent misleading in view of the fact that the Greater Birmingham extension did not come into being until November, 1911. The inclusion of Aston, Greet and Handsworth within the City set free buildings previously used as Education Offices, which were admirably suitable as clinics, and accordingly in 1912 the first movement towards the provision of treatment was made by the appointment in April of Mr. Beatson Hird, F.R.C.S., as Ophthalmic Surgeon.

The Medical Department, had, by this time, been transferred to the present Education Office (April, 1912), and the attendance of some 300 children each week proved a growing inconvenience.

A voluntary scheme of Dental treatment at the Dental Hospital of the children of two schools, Bristol Street and Summer Lane (to which Great Russell Street was subsequently added) made possible by a generous donor, had come into existence in 1906, the results of which are set out in the Report for 1908. At the first named school 98 per cent. of the children were found to be in need of treatment, at the others 96 per cent. At the age of six 74 per cent. of the children were found to have sound dentition, at seven years the proportion had dropped to 41.1 per cent., and by the time the thirteenth year was reached less than 12 per cent had sound teeth, and 71 per cent. had one or more unsaveable teeth. This valuable preliminary work made it appropriate that the Dental Hospital should be associated with the initiation of School Clinics, and accordingly an arrangement was made (Jan., 1913) whereby the Education Committee became the tenants of the operating rooms of the Dental Hospital each afternoon, with their own staff of Dental Surgeons and Attendants. Dental Clinics were also opened at Aston, Greet, Handsworth, and in a temporary school building in Fashoda Road. These were also used as Medical Treatment Clinics. Meanwhile the number of children who attended at the Education Office increased so rapidly that it became necessary to find further accommodation. To meet this need a clinic, orginally intended to be a temporary means of relieving the pressure at the Education Office was opened in the basement of Gem Street Special School. This continued until it was replaced by the opening of Sheep Street Clinic in September, 1926. Another clinic was established in the buildings of the Medical Mission, Floodgate Street, where already for many years medical treatment to the sick and ailing children of the neighbourhood had been given.

In October, 1913, the Board Room of the Education Office at Handsworth was opened as a Ward with 10 beds (subsequently increased to 14), and a neighbouring room as a theatre for operation on Tonsils and Adenoids, Mr. W. Glegg, M.R.C.P., Surgeon to the Ear and Throat Hospital, being appointed as Aural Surgeon. Owing to ill-health he tesigned in 1929 and was succeeded by Mr. D. J. Evans, F.R.C.S. In January, 1914, arrangements were made for the X-ray treatment of Ringworm with the Guardians of the Poor, who had installed at Dudley Road Hospital an apparatus in the early part of 1911, 2,131 cases having been discovered in the previous year.

"If six months average absence is allowed for each infected child, it is found that the loss of education amounts to the enormous figure of 12,000 months." (Report, 1913).

Dr. Russell Green was appointed as Radiologist and has continued to be in charge of this work to the present day. He has thus been responsible for one of the most spectacular and beneficial changes in the incidence of one of the most potent causes of lost attendance.

The growth of the treatment of children as a necessary and integral part of medical inspection made it clear that the equipment of a building in the neighbourhood to serve as a central clinic, could not be deferred, where, in addition to minor ailment treatment the growing specialist services could be carried out. A strip of land was found adjoining the Dental Hospital, which was already being used as a central Dental Clinic, and building was begun in June, 1914.

The War came to interrupt the progress of development, and twelve of the staff of the Medical Department saw military service. One School Medical Officer and one of the clerical staff were killed in action, one nurse died on active service, two members were wounded, and two were prisoners of war. With the return to peace conditions new developments were possible of which the following may be taken as the most important, but as these belong to the period of recent history detailed consideration is hardly necessary.

- 1919 Extension of Medical Inspection to Secondary Schools. Summer Lane Nursery School established.
- 1920 Alcester Street Clinic opened.
  - ,, Mr. Naughton Dunn appointed Consulting Orthopaedic Surgeon for the Remedial Exercises Clinic, established 1918.
- 1922 Aural Clinic established, Mr. F. B. Gilhespy appointed Aural Surgeon.
- 1924 Arrangements made with Selly Oak Hospital for allocation of four beds for Mastoid and other operations.
- 1926 Sheep Street Clinic opened.
- 1931 Transference of Cottage Homes to the Education Committee.
  - ,, Bordesley Green Clinic opened, to replace that at Floodgate Street. Medical Mission. Classes for "stammerers" established.
- 1932 Child Guidance Clinic established.

But side by side with the improvement in the conditions within the schools, and the increasing opportunities for the discovery and treatment of those defects of which there may be such a harvest of physical inefficiency in after years to which these extracts from early reports and historical resume offers testimony, the general conditions of child life have been amazingly improved. The Health Department has kept an an ever-increasing watch upon the general health of the City which is reflected in the remarkable reduction in the death rate for infants, and for children of the age period, 5 to 15, *i.e.*, of those children whose welfare is the special interest of the Education Committee. Taking the years in which the Census returns are available for accurate figures of the population of the City, we find the death rate for the 5 to 15 age period to have been—

1912	 	2.8	Infant I	Mortality	Rate	126
1921	 	2.1				83
1931	 	1.6		.,	,,	76

The death rate for the same age-group of children from certain infectious diseases reflects this decline.\* As Measles and Whooping Cough are not notifiable it is not possible to give the case mortality of these infections.

	Deathrate per 1,000 population 1906—10	Case Mortality per cent.	Death rate per 1,000 population. 1931	Case Mortality per cent.
Measles	 .36	-	.18	
Whooping Cough	 .36		.09	
Scarlet Fever	 .14	2.93	.01	.36
Diphtheria	 .18	12.3	.06	5.3

In this connection should be recorded the great extension of the work of the Children's Hospital, made possible by its removal from Broad Street to the new building in Ladywood Road. This splendidly equipped Hospital is recognised as one of the foremost institutions in the country devoted to the study and treatment of the diseases of children. Furthermore, an ever increasing use has been made of the Dudley Road and Selly Oak Hospitals for the medical and surgical treatment of the children in the City.

During the year 1932 there have been no developments worthy of special record, nor have there been changes in the medical or surgical staff. The total number of inspections of children (including re-inspections) has been 126, 276. Of the three Code groups—(39,376 children)—24.5% were found to shew some form of defect, requiring treatment in one form or another. This apparently large proportion which is one quarter of the whole number of children examined, is not so alarming as might appear at first sight. Very large numbers of the departures from normality which were noted are trival and transient, and if we exclude the three great groups, viz., eye defects (2,020), Tonsils and Adenoids (2,032), and Dental defects (5,648), the remainder do not appear so formidable.

The medical department works in close association with the numerous voluntary organisations which exist for the furtherance of child welfare in the City, and although this work does not admit of any detailed description in this report, the help given by these institutions in dealing with the sick and ailing children is immense. Three of these may be mentioned :—

The House Governor of the Children's Hospital, has supplied the following figures :--

Children admitted as In-patients 3,309	Day Wards	2,310
Out-patients 16,645	Major operations	1,814
Ear and Throat Department 2,308	Ophthalmic'Department	619
Dental Department 1,513	Ultra Violet Ray Treatment	6,985

\*Reports of Medical Officer of Health.

The Birmingham Society for the care of invalid children, Secretary, Mr. Frank Mathews, reports that since Haseley Hall was opened as a Residential School for children suffering from rheumatic conditions and chorea two and a half years ago, 92 children have been admitted, and 51 discharged. Of these 20 are at work and doing well, 10 are still at school, 17 have been removed by their parents, many of whom cannot realise the length of time necessary to secure complete recovery. This difficulty is diminishing, and now occurs but rarely. In addition 15 children have been boarded out in selected homes in the country.

The Children's Country Holiday Society sent away a larger number of children than in any year since 1919, viz., 1,702 to the country, and 377 to the Hadley Home, Conway, for convalescence.

In order to meet the needs of the new housing area in the Kingstanding district, and the difficulties and expenses entailed on parents by the distance from a school clinic, a temporary clinic was opened in July in a building attached to Dulwich Road School. The Medical Officer attends one afternoon in each week and a nurse on three additional sessions. The numbers making use of this provision have shewn a progressive increase and indicate that it is proving a boon to the children of the neighbourhood. This clinic will be transferred to the new clinic in Slade Road, Erdington, which it is hoped will be opened during the present year.

The main features of the treatment accomplished by the School Medical Service may be gauged from the following summary :---

Tonsil and Adenoid Operations		1,397
Minor Ailments Treated		17,580
Children treated for Dental Defects		39,695
Mastoid Operations at Selly Oak Hospital		14
" Short Stay " Operations at Selly Oak Hospital		37
Children treated by Ionization (for Otorrhoea)		307
Refractions for Eye Defects		3,694
X-Ray Treatment for Ringworm		85
Ultra Violet Ray Treatment		1414
Examinations under Bye-Laws for Employment of	Childre	n 1,794
Examinatious for Theatrical Licenses		20
Examinations for Intending Teachers		184
Examinations of Boarded-out Children		645

The number of children on the register of Public Elementary Schools on December 21st was 143,848, being 25 less than at the corresponding date in 1931.

During June and July an invitation to lecture in three American Universities gave me the opportunity of obtaining an insight into the scope and methods of Medical Inspection and treatment in the United States, and to visit schools and institutions in Ann Arbor, Baltimore, Detroit, New York, Newhaven, Lansing, and Philadelphia.

## ABSENCES FROM SCHOOL.

The analysis of the number of children absent from school for periods over three months on medical grounds shews a further reduction of such cases. This is probably due to the increasingly close co-operation between the Attendance Officers and the Medical Department which allows a systematic following up of such cases. It also bears testimony to the happy relations which exist with the members of the medical profession in the City who have shewn themselves very ready to give any information which may help to serve the interests of the children concerned.

Disease or Defect.			1930.	1931.	1932.
Pulmonary Tuberculosis			4	2	3
Other Chest Conditions			24	23	20
Asthma			-	8	6
Eye Conditions			4	6	6 7
Ears, including Otitis			8	10	9
Skin Affections			8	18	8
Ringworm			4	2	
Rheumatism and Heart			80	54	46
Chorea			47	34	33
Infectious Diseases			25	23	13
Mental and Epilepsy			10	9	6
Orthopaedic Defects			26	14	20
Nephritis			11	7	8
Tuberculous Disease					
Bones and Joints			14	10	8
Glands				6	2
Other Defects and Disease	es		67	35	35
		Totals	332	261	224

The number of children who are not on the register of any school is shewn in the following table. The reduction in the number whose non-attendance at any school is due to their mental state, which is shewn by a comparison with the previous years, may be accounted for by the more complete ascertainment of such cases on their reaching the age for school attendance. The Infant Welfare Department forwards the names of all physically and mentally handicapped children, and after examination the names of all ineducable children are reported to the Special Schools Department. Furthermore, many of the children who present presumptive evidence of mental defect are not only quite capable of profiting by the order and discipline of an Infant Department under the modern curriculum of the "Baby Room" but are in real need of the inculcation of such lessons in social order. It cannot, therefore, be stated that they are "unable to profit by instruction in an ordinary Elementary School." Accordingly, a certain number are now admitted on probation for observation in an Infant School, very often with very encouraging results.

Disease or De	fect.				1930.	1931.	1932.
Tuberculosis, Lun	gs				12	10	16
Other Chest Cond	itions				18	17	24
Eye Conditions					3	10	3
Ear Conditions					3	3	6
Rheumatism and	Heart				24	17	6 15
Chorea					6	3	5
Mental States					63	42	32
Epilepsy					8	4	1
Skin Affections					_	4	3
Orthopaedic Cases	s				44	25	34
Tuberculous Disea		nes a	nd Join	nts	12	10	10
Other Defects and	Disea	ses			86	49	69
	Total				279	194	218

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## ORTHOPAEDIC SCHEME.

The work of the Remedial Exercise Department continues to expand, and the opening of a third clinic at Sparkhill will offer facilities for further expansion. In order to meet the difficulties of parents in the Handsworth area, owing to the distance from Sheep Street, classes for Flat Foot exercises are now held at Handsworth Clinic, which are proving very successful. The actual work of the clinics may be summarised as follows:—

Defect.		A	dmitted.	Discharged.
pinal Curvature and Post	ural Defe	ormity	114	101
eneral Muscular Debility			76	38
arious forms of Paralysis			24	22
Deformities of Feet			178	107
hest Conditions, Asthma,	etc		10	7
njuries to Limbs			16	11
Vry Neck, etc			3	5
Total			421	291
			Contract Classification of Contract	Constant Malanta and

SGVDCHW

In addition, 785 children attended the remedial exercises clinic for breathing exercises following the removal of Tonsils and Adenoids.

The number of children suffering from some form of physical handicap, exclusive of such conditions as Heart Disease, etc., who are in attendance at the Elementary Schools was found to be 337. These are classified as to causation :--

Tuberculosis of Bone	s or Jo	oints	 	 24
Osteomyelitis			 	 5
Anterior Polio-myeli			 	 122
Other Forms of Para	lysis		 	 37
Accidents			 	 36
Congenital Defects			 	 68
Rickets			 	 14
Other Conditions			 	 31
Total			 	 337
				-

In connection with the congenital dislocation of the hips the usual preponderating sex-linkage with femaleness is noticable, there being 14 cases amongst girls as against 7 amongst boys.

A Remedial Exercise Clinic should perform two functions. Firstly, it should serve as an adjunct to a scheme for securing the adequate supervision during their school life and the continued treatment of those children who have some definite physical handicap. This function is secured by the close association of the Clinics with the Royal Cripples' Hospital and the Warwickshire Orthopaedic Hospital. Thus the number of children treated as In-patients at the former was 180, while 26 are (January, 1933) awaiting admission. During the year, 43 children were admitted to the latter Hospital.

		Out-Pat	ient Clinic.	Massage	Department.
Classification.		No. of Cases.	Attendances.		Attendances.
Talipes, Club Feet, etc.	c	280	1,459	24	546
Congenital Deformitie		35	145	5	111
Dislocated Hips		21	69	3	99
Spastic Paralysis		44	277	31	1,165
Infantile Paralysis		217	1,718	56	1,860
Birth Palsy		13	72	6	403
Rickets]1		133	506	18	245
Flat Feet		43	197	92	2,353
Scoliosis, Kyphosis, et		69	273	46	1,636
Fractures		15	52	4	118
Injuries		20	66	8	195
Amputations		5	18	1	31
Osteomyelitis		11	72		
Arthritis		16	80	4	249
Perthe's, Kholer's, Sy	novitis	17	63		
Unclassified		101	270	12	397
Totals		1,040	5,337	310	9,408

The Out-patient Department of the Royal Cripples' Hospital reports the following figures for the year ending 31st December.

The second function of a Remedial Exercise Clinic is that it should be ancillary to the general organisation of the physical training of the children in the schools, with which it should be in the closest touch. Both work with a common object which is to secure the full and equal physical development of which each child is capable, and to prevent the occurrence of such minor defects as postural deformities and flat foot, which may be incidental to the period of rapid growth in the pre-adolescent and early adolescent child.

At the present time, the children are selected by the Assistant School Medical Officers from amongst those children who are presented at routine or special examinations. Hence to a large extent the choice is limited to the three age groups which are examined annually. The remaining age groups, however, probably contain an equal proportion of children for whom special remedial exercises would be of value, and it may be confidently expected that recent developments of the physical training in the schools will render their discovery more easy and thus increase the scope of usefulness of the Remedial Exercise Clinics.

## PHYSICAL EDUCATION.

The following report has been supplied by Mr. MacCuaig and Miss Thorpe, Organising Inspectors of Physical Training :--

"Some important and far-reaching developments in the physical training of Senior Boys and Girls have occurred during the period under review.

"The re-organisation of schools on the Hadow lines has made it possible to arrange for a more suitable grading of scholars for physical training and for a new and more advanced scheme of gymnastics to be put into operation.

"The Committee have equipped about 90 Senior Departments with the following portable gymnastic apparatus:---

1 Vaulting Box; 6 Benches; 4 Mats; 1 set of Jumping Stands and Weighted Rope. "About 240 men and women teachers have been trained intensively to conduct the advanced form of physical education now in use. There are, therefore, two or three trained teachers in most Senior Departments and many of the teachers are responsible for the Gymnastic Lessons of three or more classes.

"Formerly, physical training was taken by practically every class teacher, but this arrangement was less satisfactory than the present system, by which teachers are in charge of the subject in which they have special training qualifications. The physical training of some 30,000 children in this City is now undertaken by men and women teachers who have volunteered to semi-specialise in this subject. These teachers are young, keen on their work and many of them are excellent gymnasts.

"Although the scheme has only been in operation for about a year, and it is, therefore, too early to gauge with accuracy its full effects on the children's physique, there is no doubt about its beneficial influence. The introduction of a more rhythmical type of exercise has developed a far greater suppleness of body, the localisation of effects of individual exercises is assured and the corrective value enhanced. The apparatus activities have been a means of developing courage, initiative and confidence to a surprising degree, as shewn in the spirited attack of all the children in their normal lessons. Further, the joy and interest in the work has resulted in the springing up of numerous gymnastic clubs after school hours. The latter were unknown when the 1919 syllabus was in use.

"A large number of new schools have been opened during the past two years and it has been possible to set apart a turfed area in the playgrounds specially for open air gymnastic lessons. The planning of the new schools has provided a detached hall with cross ventilation, and direct access to the grass area is gained through French windows. In the older buildings every effort has been made to clear the halls of furniture so that a full physical training programme is possible throughout the year and regular lessons are taken.

"The introduction of gymnastic apparatus with its greater scope for vigorous general activity such as agility exercises, jumping and vaulting has emphasised the necessity for suitable costume. One of the greatest advances has been the adoption of shorts and shoes for boys, all other dress being discarded, and white blouse, dark knickers and shoes for girls, no stockings being worn. Further, it is the practice also for both men and women teachers to change into gymnastic dress for this lesson. The revolutionary change in dress has resulted in a considerable increase in the zest with which both teacher and class undertake their work."

## DENTAL TREATMENT.

During the year 113,148 children were inspected in the schools by the Dental Surgeons, a figure which represents 80 per cent. of the children in average attendance. Of these, 85,352 were found to be in need of some form of dental treatment, a percentage of 75.5. A larger number of children than in any previous year received treatment at the clinics, i.e., 39,695, though this represents a smaller percentage (46.5) of the whole number referred for treatment than in 1931 (52.5). The causes

for this decline are complex, and defy strict analysis. Various measures are being tried to secure a larger number of acceptances in different districts, notably the sending out of the notices by post by the Head Teachers of one area, a scheme which has proved very successful at a comparatively small cost for postage. In another area the School Attendance Officers have visited the homes of 68 children whose parents have refused to accept treatment. As a result 35 additional children were treated. In both these schemes the extra work involved on the part of the Teaching and School Attendance Staff has been generously undertaken, and has afforded still another proof of the cordial co-operation of the officers of the Education Committee in promoting the welfare of the children in the City. It may be remarked that the proportion of children inspected is considerably higher than that of the country as a whole, and that furthermore, the larger the number of inspections, the larger the number of children which will be found to require treatment.

Turning to details of treatment, there are three items which call for comment. The first of these is the reduction in the number of children who reach the clinic casually, i.e., without previous appointment. Reference has frequently been made in previous reports to the dislocation of the routine work of the clinics by the attendance of an unpredictable and varying number of casuals, a very large proportion of whom attend on account of toothache, which is the result of unsaveable teeth, and require a general anaesthetic for which a re-appointment is necessary. Most of these children have failed to accept treatment when it has been offered. Unless there are exceptional circumstances, appointments are now made for these cases in the ordinary way at as early a date as can be arranged. The result has been a diminution of 3,733 (the number of fortuitous casuals in 1930 was 5,786; in 1931 5,543; and in the past year 1,810). Much consideration has been given to the question of the number of general anaesthetics, which has shewn a progressive increase in succeeding years. It is clear that in a truly conservative scheme, the number of extractions of permanent teeth (concerning the extraction of temporary teeth see later) should be small, for, given adequate supervision and early treatment, few teeth should become carious through dental decay. It will be long, however, before such an ideal system can be realised. There is a very general feeling in the dental profession that there are very great advantages in the use of general, as distinct from local, anaesthetics for children, and that it conduces largely to the popularity of dental treatment, especially amongst the younger children. A child is more likely to attend willingly for a subsequent appointment if he has no retrospect and no anticipation of pain. Under the circumstances, therefore, as more children are examined, more are found requiring treatment, and hence a larger number of them will be in need of general anaesthetics. In considering the question of extractions, a differentiation must be made between that of permanent and of temporary teeth respectively. The stopping of a cavity in a temporary tooth is a lengthy process, and the time spent on this type of work can probably be more advantageously used in the treatment of permanent teeth. Hence it is the usual practice, unless there are special indications, to extract temporary teeth if these are dead, and to dress them periodically if the pulp is living. This policy is reflected in the increase of 13,856 extractions of temporary teeth. The proportion of extractions and of fillings per 100 children treated has been suggested as an index of the trend towards more conservative standards (see Report of Chief Medical Officer, Board of Education, 1931, page 82) on the

supposition that these figures should vary inversely. This method is however, somewhat misleading, especially in an expanding service, unless the treatment of temporary teeth is excluded from consideration, as will be seen in the following figures for the past few years :--

Year ended 31st December.	No. of children treated.	No. of Fillings (Perm. and Temp. teeth).	No. of Fillings per 100 children treated.	No. of Extractions (Perm. and Temp. teeth).	No. of Extractions per 100 children treated.
1925	32,257	30,904	96	75,734	234
1926	34,190	27,792	81	71,559	210
1927	37,790	28,631	76	72,811	222
1928	29,855	29,891	75	74,355	187
1929	36,922	27,260	74	72,821	198
1930	35,104	25,807	73.5	74,333	212
1931	36,322	21,392	59	88,573	244
1932	39,695	19,746	50	106,609	269
1931	England a	and Wales	70	_	207

## FILLINGS AND EXTRACTIONS PER 100 CHILDREN TREATED.

## EYE DEFECTS.

The number of children whose eye defects (other than minor ailments of the eye, such as conjunctivitis, blepharitis, etc.) were dealt with during the year was 3,870. Spectacles were prescribed for 3,500 children at the Clinics, and 452 were found to have obtained their glasses from other sources.

It will be noted from Table II of the Appendix that routine and special inspections are reported to have produced 5,149 cases of defective vision requiring treatment, and 1,074 other cases of squint. At first sight it would appear, therefore, that only about one-half of those reported as "requiring treatment" for defective vision actually received Such a deduction is, however, quite erroneous. Apart from the it. fact that under the circumstances of repeated re-examinations and rerecording which are necessary, some duplication of records is almost inevitable, the term "requiring treatment" does not necessarily connote "requiring spectacles." Large numbers of children are found under the circumstances of the examination in school to shew prima facie evidence of defective vision, but when examined under a midriatic in the Clinic are found not to be in need of glasses-such children, there-fore, pass from the class "requiring treatment" into that "requiring observation." In other words, the phrase "requiring treatment" in the Board of Education Tables must be translated to mean "requiring further and detailed examination." Often also broken glasses, or frames needing repair, offer a favourable opportunity for a re-examination, which may thus be added to the class "requiring treatment," or a child may be suffering from transient debility which may be improved by general health measures without the provision of spectacles. Speaking generally, the following up does not reveal a large number of children who require glasses yet do not obtain them, and steps are taken through the School Nurses by visits to the home, and through the School Attendance Officers, to secure treatment in these cases,

At Great Charles Street Clinic 1,065 children were examined by Mr. Archer Hall and Dr. Aldridge. These shewed the following types of refractive error:—

Hypermetropia		 	 	403
Hypermetropic Astigm	atism	 	 	349
Myopia		 	 	121
Myopic Astigmatism		 	 	170
Mixed Astigmatism		 	 	22
the second standard s			-	1.0.02
Total		 	 	1,065

Mr. Archer Hall, D.O., Ophthalmic Surgeon to the Education Committee, Honorary Surgeon, Birmingham and Midland Eye Hospital, reports :--

"Ninety children of those examined by me suffered from convergent squint, and three cases shewed divergent squint. In a large number of cases it was found that the glasses worn were correct and in some cases glasses were not required.

"In twenty children, the vision was so defective or so myopic, that education at part-sighted schools was recommended, and the appropriate forms were completed. This number (20) was considerably smaller than that of previous years.

"Five children were certified blind for admission to the Edgbaston Royal Institution for the Blind or for the Harborne Institution.

"In ninety-eight cases, reports were written on eye conditions to the School Medical Officer or his Assistants.

"During 1932 I added a large number of names of children attending the Great Charles Street Clinic to my operation waiting list at the Birmingham and Midland Eye Hospital, where I performed sixty-one operations for squint on these referred children.

"Advantage was taken for these patients of the fusion-training department of the Hospital, and good results were obtained.

"Six cases of more serious eye disease were treated by me at the Hospital, being of a type unsuitable for treatment at the School Clinic."

### TONSILS AND ADENOIDS.

There were 1,397 children operated upon at the Handsworth Clinic for removal of Tonsils and Adenoids, i.e., 30 more than in the previous year.

Since the opening of the Clinic in October, 1913, 25,655 operations have been performed. There were no cases which caused any special anxiety, though for various reasons four children were sent into Hospital to be kept under observation.

The Secretary of the Ear and Throat Hospital reports that 468 Tonsil and Adenoid operations were performed on Birmingham school children, while many others were operated upon at the Children's Hospital.

The increasing number of operations of this kind throughout the country has raised the question whether such a holocaust of tonsils is really necessary, or whether these figures represent the high watermark of the ebb and flow of medical and lay opinion as to its desirability. A similar question is at present much discussed in America where the operation is as popular as in England. So far as our own cases are concerned, there has been no marked increase, and our general rule has been that mere enlargement of the tonsils in the absence of other signs, such as deafness, chronic rhinitis, otorrhoea, repeated attacks of tonsilitis, is not taken as an indication for operation.

The main question which requires an answer is "Are the results of operation, given careful selection of cases, so definitely satisfactory as to warrant the risk and expense of operative treatment?" In order to be in a position to give an answer to this question, Dr. Wilkins has been following up his own cases for the past three years. (See Report, 1930, pp. 32-33).

He reports :---

Following on two previous reports on the effects of the operation for the removal of tonsils and adenoids as performed at the Handsworth Clinic, I now submit a further statement based on the following up of 430 cases.

All these have been treated on my own recommendation, and the previous condition of the child, the reasons for advising operation, and the subsequent progress, have been recorded by myself. With a very few minor exceptions, the following up and interviewing of the parents has been done by myself, thus ensuring a continuity of aim and understanding throughout the investigation. In practically all cases the parent's personal statement as to improvement or otherwise has been the basis of the classification, checked by cross-examination and by medical examination of the child. Every care has been taken to exclude the possibility of misleading or unreliable verdicts being given from misunderstanding of the motive of the enquiry or from other causes. For instance, the opinion of the less intelligent type of parent has been found to vary from time to time according as the child happens to be well or not on the occasion of enquiry. It has been the rule to enquire as to general improvement, as well as concerning abatement or otherwise of the particular symptoms for which the operation was advised.

In the selection of the cases in this series the operation has never been recommended as a routine procedure nor for mere enlargement of the tonsil in the absence of definite ailments attributable to their presence. It has sometimes been necessary to dissuade from the thought of operation parents who are anxious that nothing in the interests of the child's well-being should be neglected. The series, therefore, includes only those who have suffered for a considerable time or with sufficient frequency from complaints directly attributable to the presence of diseased or enlarged tonsils or adenoids, and in whom the seriousness of the complaints was considered on a conservative basis to justify. A settled policy in this respect has been followed throughout.

The 430 cases have been collected continuously during the years 1929, 1930 and 1931, and the following up has continued to the end of January, 1933. The maximum period of observation has been 4 years, namely for those operated on early in 1929, and the minimum period one year for those operated on at end of 1931. Owing to the magnitude of the task of following up such a large number at intervals during the whole period some have been written off after shorter periods of observation : that is, all were not followed up till the end of 1932. No cases,

however, have been finally recorded as having given good results, about whom there was any reason to doubt the permanence of the benefit; doubtful cases have always been followed up for as long a period as possible. The *average* period of observation has been one year and 8 months, the shortest being 11 months after the operation. No child has been included who had not passed through a complete winter subsequent to the operation.

Total Cases operated on.	Very much improved or cured.	Definitely improved.	Slight or no improvement.
430	276	100	54
Approximate percentages	64.2%	23.2%	12.6%
Period of obser	vation : maximum 4 yrs minimum 11 m	s. } Average	1 year 8 months.

Age at time of operation from 6 to 12 years ; great majority under 10 years.

"The results of treatment have been classified into three groups. Group I includes all who have been greatly improved, or cured of the complaints for which the operation was advised. The continuance, for instance of otorrhoea or bad nasal discharge, either chronic or recurrent, or of frequent colds, although greatly improved in other respects, disqualifies from Group I. The continuance of a definitely unsatisfactory state of general health, though not necessarily due to the state of the nose or throat, nor reflecting on the success of the operation as such, has similarly been deemed to disqualify from this group. Again, the continuance of chronic or recurrent bronchial catarrh excludes from this Group. It will be seen, therefore, that the standard of classification is a high one. This group as a rule includes all those about whom the mother makes such unqualified statements as that "it has been the making of him," "it has done him the world of good," "he has been a different child," etc. It has been necessary, however, to check such statements by further questioning, and examination, as some mothers, taking a light view of an otorrhoea, for instance, may ignore the continuance of symptoms which should be noted.

Group II includes those who have shown definite and unmistakable improvement since the operation, but have continued to suffer from one or other of the more trivial complaints which it was hoped would have cleared up, or who have continued to suffer from some form of general debility.

The continuance, for instance, of recurrent colds or sore throats, though reduced in frequency or severity, would generally place a child in Group II, *provided* there was evidence as to sufficient improvement in other respects. This group, therefore, includes all in whom the operation has been regarded as well worth while, though disqualified for some reason from the completely satisfactory Group I.

Group II includes no child who, however improved in other respects, continues to suffer from a chronic otorrhoea or purulent nasal catarrh, or a noticeable degree of deafness; nor any case in which the improvement was slight or seemed in any way doubtful. If frequent colds in the nose or feverish attacks were a prominent argument for operation, their continuance would exclude from Group II in spite of some improvement in other respects. Without going into detail it may be said that, while a certain degree of flexibility must be allowed in any classification, the aim has been to mark down cases and place them in less satisfactory Groups whenever there appeared any reason that might justify it.

Group III includes all those who have not been improved by the operation, or whose improvement is doubtful or so slight as to class the result as unsatisfactory. It also includes a considerable group of children who, though improved in some respects, continue to suffer from one or other of the major ailments, such as otorrhoea, purulent nasal catarrh, or troublesome nasal obstruction, for the remedy or alleviation of which the operation was advised. Similarly, the continuance of frequent bad colds, feverish attacks or sore throats, in the absence of striking improvement in other respects, would class a case in Group III.

Although a number of the Group III children were later referred to Mr. Gilhespy and have had further nasal or aural treatment, and although many of these have been ultimately cured or greatly improved, they have all been classed here in the unsatisfactory group. The reason for this method is because the investigation is into the after-results of the tonsil-and-adenoid operation alone, and also because it has not been practicable to refer all the unsatisfactory cases to the Special Aural Clinic and would be still more difficult to ensure their complete further treatment. Consequently a differentiation of these cases into those who would have given good results after further treatment and those continuing unsatisfactory has been impossible. It should be borne in mind, therefore, that Group III, by including some cases which have not been entirely unsatisfactory, numerically over-estimates the proportion of really unsatisfactory results.

The main fact that emerges from this investigation is that in the great majority the operation has been successful in remedying, or greatly alleviating, the ailments for which it had been performed. 64.2 per cent. of the results may be regarded as thoroughly satisfactory; and if the 23.2 per cent. in Group II be added we have 87.4 per cent. of cases in which the results have unquestionably justified the treatment. The fact that Group III is unduly weighted by cases which gave good results after further treatment and some which might have done so if such treatment had been carried out, throws the percentage of satisfactory results into stronger relief. From these figures it can be inferred that approximately 9 cases may be expected to give good results out of every 10 recommended for operation on conservative lines.

It is necessary to consider possible fallacies in these conclusions. First, much of the benefit attributed to the operation may be due to the mere passage of time and the fact that the child is growing older. Some of the complaints which we associate with diseased tonsils and adenoids undoubtedly tend to lessen with increasing age, but the mode of selection, by which no cases of slight or indefinite ailment have been included, and the method of classification, by which slight or doubtful improvement has not been counted in the "improved" groups, lessens the possibility of attributing to the operation improvement which may have been due to changes associated with growth and development. The comparatively striking character of the improvement in most cases from the date of operation, seems conclusive.

Secondly, investigations in other quarters appear to indicate that the benefit attributed to the operation tends to disappear in the course of a number of years when compared with the progress of a similar group of children who have not undergone operation. I suggest, however, that the striking improvement in health and alleviation of symptoms which occurs soon after the operation and continues at least for some years unquestionably justifies the operation in the type of case which forms the material of this investigation. I may emphasise again that all these cases have been operated on for some very definite complaint and never for comparatively intangible defects in health, the amelioration of which might be difficult to assess. I suggest that much of the evidence which has been brought forward to show that benefit from the operation is slight or negligible, or even that it does harm, has been deduced from the observation of children operated on for insufficient cause. Enquiry into the grounds for operation in cases found already to have had their tonsils removed convinces me that, especially in the higher social grades, the operation is frequently performed for reasons much less serious than those obtaining in this series.

It may be objected that the period of observation in this series has been too short to be of value. To guard against faulty classification due to too brief observation I have endeavoured not to include in Groups I or II any cases about whom there seemed any reason to doubt the permanence or decisive nature of the improved state of health : all doubtful cases were followed up for the maximum period. It seems to me from the study of these 430 cases that, unless it can be conclusively shown that those operated on are definitely worse off in later years than a similar group not operated on, we must give full credit to the operation for unmistakable, and in may cases, striking relief from ill-health in the years immediately following it."

### AURAL CLINIC.

At the Aural Clinic, Great Charles Street, 1,089 children have been examined and re-examined by the Consulting Aural Surgeon, Mr. F. B. Gilhespy. In addition, 3,822 attendances have been made by children for various conditions, exclusive of 1,212 attendances for post-operative mastoid dressings and observation. In addition 307 children were treated by ionisation for Chronic Otorrhoea.

The arrangements with the Public Health Committee for the use of four beds at the Selly Oak Hospital has enabled a radical cure of middle ear and mastoid disease to be performed on 14 children, and 37 cases have been admitted for short stay operations such as the removal of nasal or aural polypi, the draining of the antrum and similar conditions.

Mr. Gilhespy reports :---

"During the last year, at Selly Oak I have performed ten radical mastoid operations, and have dealt with forty "short" cases. From past experience it has become increasingly evident that if any form of mastoid operation has been required to dry up a chronic discharging ear, then the radical mastoid operation is the one of choice. In the past full trial has been given to conservative radical operations in which the drum is left, but although the cosmetic result of such operations in many cases has been better than that found in the radical operation, yet the results as regards certainty of curing the discharge have not been so good as in the radical operation. As regards hearing, the radical operation in many cases is at no disadvantage compared with the conservative operation. Whenever possible the mastoid cavity has been covered with a skin graft, and this has undoubtedly saved time and pain in the after-treatment of cases. Of the six cases done within the last six months, all are discharged as dry and cured.

The "short" cases have comprised, as in past years, an investigation of the maxillary antra in children, many of whom have had their tonsils and adenoids removed. The beds at Selly Oak have also been utilised for removal of aural polypi, and a certain number of children have been admitted for dissection of tonsils where a previous guillotine operation has not been entirely successful.

At Great Charles Street the bulk of the work, as in the past, has been devoted to the treatment of the chronic running ear. In this connection one still continues to be impressed by the role played by the exanthemata in infancy in being the initial cause of the condition. Ionisation has been employed for suitable cases, with results which have been extremely valuable, saving a great loss of school time to the child, this treatment being carried out once weekly thus preventing the loss of time involved by daily attendance at the clinic.

A great number of children in this city appear to suffer from nasal catarrh, and this is not all accounted for by the presence of sinus disease, as we were able to eliminate such cases owing to the help of our beds at Selly Oak where such cases, as previously mentioned, are investigated. There must be many causes for this condition which have not been thoroughly investigated, such as home conditions, nutrition, and the effect of infectious illnesses. A prolonged trial has been given to diastolisation in some of these cases, but I cannot speak with any certainty of the results at the present moment."

## ULTRA VIOLET LIGHT TREATMENT.

The transference of Greet Clinic to the new premises at Sparkhill allows the installation of a quartz Mercury Vapour Lamp for the area served. Every Clinic will now be equipped for ultra violet radiation. The number of cases treated is necessarily limited by the time which the nurses at each clinic can devote to this particular kind of treatment, and although a larger number of children have been treated, with an addition to the Nursing Staff, added value could be obtained from the cost of the installations, which remain unused for a considerable part of each day. The actual running costs are exceedingly small, and the value of this form of treatment in trained hands is now generally recognised.

The total number of children who received treatment during the year was 1,414, a figure which includes those who were already undergoing treatment in January, and those whose treatment has been carried forward into the present year. It is not possible to give a concise summary of the results in each individual Clinic. Dr. Wilkins has, however, carefully analysed the results in the case of those children under his own care, and reports as follows:

"Of the total number (see below) of children from schools in my area treated at Sheep Street Clinic, I am able to report definitely on 113 cases. The remainder have attended for too short a time, or have not yet been competely followed up. Special care has been taken to obtain reliable evidence of the effects of treatment, and

		Cured or	Ţ	Inimproved
	Number treated.		Definitely improved.	
Debility, Anaemia, etc	29	10	13	6
Bronchial Catarrh	. 9	7	2	
Asthma	0	6	1	1
Nasal Catarrh, Frequent Colds, etc.		7	11	3
	=	3	2	
Otorrhoea	05	11	10	4
Rheumatism and Chorea		3	2	
Septic Sores, Impetigo, etc	. 5 . 3 . 3	3	-	
Chilblains	. 3	0	-	
Conjunctivitis and Blepharitis		2	1	
Vomiting Attacks		1	1	1
Descipate sta	2	1	1	
Total number " followed up "	. 113	54	44	15
Approximate %	. —	48	39	13
11 10 10		L		
		8	7%	

wherever there has been any doubt, cases have been classed in the 'unimproved' group.

"The experience of five years of ultra violet ray treatment at this clinic shows that in the majority of debilitated children there is improvement in appetite, activity, sleep, general spirits, and in stability and tone of the whole system. This improvement is sometimes very striking, and unparalleled by anything obtainable from other methods of treatment so long as the child remains in the same home environment. It is sometimes found that a child who has not benefited from a country holiday—which may be assumed to include better nourishment and housing as well as change of air—afterwards improves considerably under a course of radiation. These very gratifying results are not, however, obtained in all cases; some children show striking improvement in certain symptoms and not in others, while other children fail to improve at all.

"The results of the treatment of respiratory infections, impetigo, eye inflammation and rheumatism (which according to the modern view is due to infection) show clearly that ultra violet radiation raises the power to resist the invasion of micro-organisms. Cases of recurrent or persistent bronchial catarrh have very consistently given good results, the benefit in some being phenomenal. Recurrent feverish colds are generally reduced in frequency and severity, sometimes dispelled altogether. Improvement in cases of frequent colds in the nose is not quite so good-less so than in those with bronchial attacks-possibly owing to the presence in some of the former of definite focal infection in the tonsils or adenoids. It should be understood that no cases deemed to require operative treatment of tonsils or adenoids have been included here. There has been fairly definite improvement in most of the cases of chronic nasal catarrh referred to this clinic for ultra violet rays by Mr. Gilhespy, though the total number has not been large. Three out of five selected cases of discharging ears have been cured, while in the other two, the discharge recurred in one, and in the other it was merely reduced in amount. No cases of otorrhoea suspected of mastoid involvement or other surgical complications were included. Benefit in asthma is generally striking-this,

judging from concomitant improvement in other symptoms, being probably due to improvement in nervous and vasomotor tone and in the reactions of the blood, as much as to increased resistance to infection.

"Experience continues to accumulate to the effect that ultra violet radiation is one of the most potent forms of treatment for juvenile rheumatism. The pains are often greatly relieved or dispelled altogether and there is generally similar improvement in the accompanying debility, the benefit in some cases continuing for many months after radiation has ended. Some of the cases of rheumatism included choreic symptoms, but, apart from one case of early chorea which was definitely cured, I am at present not able to give definite reports of any of the small number of frank choreas treated during the year.

"As evidenced in the table of figures, good results continue to be obtained in obstinate impetigo and chronic or recurrent pustular skin infections, in chilblains, in cases of phlyctenular conjunctivitis which are refractory to local treatment; and in chronic blepharitis. The cure or improvement of cases of recurrent vomiting attacks is specially interesting, as mentioned in previous reports, as probably being due to an improved alkaline balance of the blood or some similar improvement in general metabolism.

"The 'sun-ray' department is highly appreciated by parents and popular with the children. Mothers often ask for 'sun-ray' treatment for their children, having heard of others who have benefited, and many parents ask for the course to be repeated. A certain number also are recommended to the Clinic by their private medical attendants. In view of wide-spread poverty, and other unsatisfactory conditions of home environment, the alleviation of which is beyond the power of the School Medical Service, the 87 per cent. of satisfactory results this year (total of the two improved groups) is highly gratifying."

### RINGWORM.

The reduction in the incidence of ringworm has been one of the most marked successes of Medical Inspection. Two factors have been instrumental in the actual abolition of this parasitic disease as a cause of prolonged absence from school, viz., the introduction of the inspections by the School Nurse and the discovery of X-ray treatment as a quick means of removing the infected hair, which has practically entirely superseded the old slow methods. In 1912 there were 2,281, and in 1913 there were 2,131 cases known to the Medical Department. At the Fever Hospital it was the routine practice to cut short the hair of all children admitted in order to reduce the risk of the spread of infection. This procedure gradually fell into abeyance as the number of cases treated increased, and finally could be discontinued.

Another discovery of great value in the prevention of these infections, especially in Residential Schools such as the Cottage Homes, was that of the fluorescence of the spores of the fungus under ultraviolet light. Use was made of this discovery in 1928 by the attachment of a Woods Screen (which cuts off all luminous rays but allows the passage of the ultra violet rays) to the Quartz lamp at Great Charles Street. Every child is now examined under the screen before it is admitted to the Cottage Homes, and the infection has been stamped out. During 1932, 125 cases were discovered in the schools and clinics, of which, with two exceptions, every one received treatment.

## SCABIES.

There has been a further slight increase in the number of children found to be suffering from Scabies—the figures for the last four years having been 382, 315, 493, 514. This increase is not confined to any particular quarter of the City. It should be borne in mind that the infection is very usually familial, involving every member of the household. The discovery of a small number of new infected families is sufficient to account for the increased numbers.

The difficulty really lies in the absence of facilities for cleansing the adult members of the family and sterilising the clothing and linen, with the resulting danger of home re-infections. The matter is under the consideration of the Health Department, and there appears to be every likelihood of arrangements being made shortly to meet this difficulty.

## VERMINOUS INFESTATION.

The campaign against verminous infestation has been continued with success. Each school has been visited on an average nine and a half times, but whereas some schools require only an occasional visit, others must be visited almost weekly. The School Nurses made 380,324 examinations which revealed 13,320 lice-infested children. Though this figure is regrettably large, it is a definite improvement on previous years, in that, though nearly 66,300 more examinations were made, 1,500 less infested children were discovered. 298 children availed themselves of the facilities for cleansing provided at the Clinics. Legal proceedings were taken in 61 cases.

It has already been mentioned that when inspections were first instituted 50 per cent. of the children were found verminous (page 6), and the diminution of this infestation has been continuous. Speaking generally, there is a much improved sense of their duty in this matter on the part of parents, and the cases of gross infestation are far fewer. This is reflected in the reduction in the number of cases in which it has been necessary to invoke the aid of the Law. The figures for the past seven years for prosecutions have been—

1926	138	1929	64
1927	86	1930	70
1928	83	1931	61
		1932	61

## SPEECH TRAINING CLASSES.

The speech training classes held at the Children's Hospital have been continued for the most part for those children who are, or have, been under treatment for cleft palate and hare lip. The following figures relate to the classes held at the hospital during the year ended 31st March, 1932. For the purposes of comparison the corresponding figures for the previous year have been added.

	or	Children with delayed speech and lisping . (not stammer- ing).	Total 1931- 1932.	Corresponding Total 1930- 1931.
No. of children on register on 1st Apr	il 15	19	34	29
No. of children admitted to classes sin that date	nce . 9	36	45	25
No. of children who have left the class	ses :—			
(a) As provisionally cured	. 4	10	14]	
<ul> <li>(b) As improved</li> <li>(c) As temporarily unsuitable for</li> </ul>		4	4	00
further treatment		10	12	20
(d) Withdrawn by parents (e) Lost sight of	0	$\frac{12}{2}$	4	
(e) Lost sight of (f) Left School		5	5	
No. of children on register on 31st	i ni tendi			
March	10	22	40	34
Average attendance per session	. 12	11	23	22

The classes for stammering children which were begun in September, 1931, have now been in existence for a sufficient time to allow an evaluation of their results. The causes of stammering are so complex and vary so much with each individual case, that it is abundantly clear that a psychological approach to the problem alone can give satisfactory results in a very large number of the cases. To secure this approach a close association with the Child Guidance Clinic should be maintained as an essential part of the scheme of dealing with this serious handicap.

Attention may be drawn to the important results of the special investigation detailed below.

Miss Rosser and Dr. Kemp submit the following joint report and tables which show the number of admission and discharges during 1932.

## TABLE I.

	No. on Register 1st January, 1932.			No. Admitted during 1932.			No. Discharged During 1932.		
	В.	G.	Total.	В.	<i>G</i> .	Total.	В.	G.	Total.
Stammerers	 69	15	84	37	9	46	44	9	53
Other Defects	 12	5	17	7	8	15	8	3	11
	81	20	101	44	17	61	52	12	64

## TABLE II.

These children were discharged under the following classifications :

Provisionally Cured Much Improved Slightly Improved	   abla	  	  rthor	Stammerers. 19* 20† 11‡	Other Defects. 2 2 2	Total. 21 22 13
Not improved or treatment Information not avai	 able 	for fu	rtner 	$\frac{3}{2}$	2 1	5 3
				55	9	64

\* 1 of these has left school.

† 8 of these have left school and three were withdrawn by their parents.

4 of these have left school and two were withdrawn by their parents.

"The work of the classes has progressed considerably during the past year, not only in the actual lessons, but also on the important side of linking up the treatment at the centre with the child's home and school life. The arrangement of the time-table has remained much as it was at the opening of the centres in September, 1931, except that the numbers in the groups for stammerers have been reduced slightly in order to give more opportunity for individual treatment. It is possible that a further decrease would be advisable, not only from this point of view, but also because it is still very difficult to keep up with the home and school visits that should be made. Since September, 1932 a "finishing class" has been held in each centre which is attended once a week only (instead of the usual bi-weekly attendance) by stammerers who have reached the stage of "very much improved." This arrangement has allowed the instructor more time for the non-tutorial work and, at the same time, has provided an added impetus to the children's efforts to achieve "a cure" by putting before them the idea of promotion to be gained. Most of them have made satisfactory progress in it, but no opinion can be formed yet as to the comparative value of this class. In Severn Street, in order to complete the time-table, there has also been one group of new pupils attending once per week, and these too have made most satisfactory progress.

"In judging the results as shown by the above figures, it should be borne in mind that a permanent cure cannot be reported until the pupil has proved his or her capability to maintain the standard achieved on leaving the classes. Some time must elapse before one can decide what the normal standard of speech is likely to be in any case. Frequently a slight relapse can be observed soon after discharge, but later a better standard is regained. The number discharged as 'Provisionally Cured' and 'Much Improved' is very satisfactory and the reports made in December by the teachers of children who have left the classes and are in school, show that in the majority of cases a good standard is being main-In four instances, considerable improvement has been tained. made after discharge, two children having progressed from 'Much Improved' to 'Provisionally Cured,' another from 'Slightly Improved' to 'Provisionally Cured,' and the fourth from 'Slightly Improved' to 'Much Improved.' A few have relapsed slightly, and two boys have asked to be allowed to return to the classes for a short period in order to recover lost ground.

"Most of those who have left school, left without having achieved the grade of 'Provisionally Cured' and as yet it has not been possible to make systematic after-care inquiries about them. However, reports of them come to the instructor through former school-fellows or by chance meetings, and it is known that some of them are progressing moderately well, a few very well. Some form of evening class would help the children and others, some of whom have come under the notice of the instructor, who have not had the opportunity of attending a class while in school. If it were possible to ensure that all cases of speech defect received treatment by the age of 10 or 11, this form of organisation would be no longer necessary.

"It may be noticed that improvement in the defects, other than stammering is rather slow. This is accounted for partly by the fact that a number of children under treatment for lalling and delayed speech are often retarded generally in every way, and partly by the fact that each of these children attends for one halfhour only in the week. It is now clear that more frequent lessons are necessary if treatment is to be quickly effective, and it is possible that in future it will be arranged that fewer children shall attend, but several times a week. Unfortunately the waiting lists are still lengthy and, if kept waiting too long for admission, both parents and children often lose hope and interest.

"The teachers of the children attending the classes have been invited to visit the centres to observe the methods used. Owing to the various adjustments in the school routine (as, for example, the re-organisation of many of the schools in July) it has not yet been possible for many to do so. It is gratifying to note that, in addition to the recommendations of the Assistant School Medical Officers, a number of teachers have applied for the admission of children, and also a few parents have, on their own initiative, requested that their children should be admitted. This is, perhaps, one of the best signs that the classes are proving of value.

"Since the establishment of the Child Guidance Clinic in April, six children have been recommended thither who did not respond well to treatment. One of these has now begun to show signs of improvement for the first time, and in all cases the advice of the members of the staff of the Clinic has been most helpful.

"There still remain 30 children awaiting interview. This figure by no means represents all who would be notified were it possible to include all those in the schools suffering from speech defects.

"The number of children certified and awaiting a place in a class is as follows :----

Stammerers Other Defects	 	 Boys. 30 12	Girls. 2 6	<i>Total.</i> 32 18
Total .	 	 42	8	50

At least 25 of these are rather urgent cases.

"Special Investigation. An investigation into the action of the diaphragm of stammering children during speech has been carried out. For some time the theory has been accepted that a spasm of the diaphragm during ascent accompanies the occurrence of certain

types of stammering, and exercises are practised with the object of gaining control over the ascending diaphragm. Recently this theory has been challenged as unlikely, and as literature on the subject relative to this point is not available, it was decided to make X-ray observations of some cases. This was carried out with the help of Dr. Russell Green, and by permission of the authorities of the Dudley Road Hospital. Nine children between 12 and 13 (6 boys and 3 girls) were chosen as representing the three main types of stammering, and different degrees of the defect. In order to prevent the influence of unconscious suggestion, they were assured that they would not feel any discomfort, and that the object of it was to gain information about the action of the lungs, no further details being given. Each child was observed for about three minutes, during which time deep breathing, the recital of a familiar poem, and, in most cases, unprepared conversation took place. All investigators present could observe the movements of the diaphragm, and compare their findings.

"The results were unexpected in detail. Abnormal behaviour of the diaphragm occurred where not expected (in two instances there was no noticable coincident stammer, and in three instances it took place in breathing without phonation) nor did it always occur where considered most likely, e.g., during stammering of the inspiratory type.

"The results may be summarised thus :--

1.	Action of the	Diaphr	agm i	in brea	thing	withou	t phona	ation :-	- 111	and i
	Normal								6	
	Irregular								2	
	*Otherwise	Abnorn	nal						1	
									-	
	The ascent was	s not lat	erally	unifo	rm.				9	
-										
2.	Action of the	Diaphra	ıgm d	uring s	speech	in whic	h no st	ammer	ing occ	curred :
	Normal								6	
	Irregular								3	
									9	
									-	
3.	Action of the	Diaphr	agm o	luring	stamm	nering s	speech			
	Normal								2 5	
	Spasmodic	or Irreg	gular						5	
	-								-	
									*7	
									-	

\* One child did not stammer at all during the experiment and one showed only very slight abnormality.

"Although definite conclusions cannot be formed from these results, the investigation gives evidence that in certain known cases the theory holds good and that the consequent method of training used is of true practical value."

## SECONDARY SCHOOLS.

A larger number of pupils was inspected than in the previous year, viz., 6,800 against 6,155. Of these 21.5 per cent. shewed defects which were in need of treatment. Defective vision (648) and dental disease (802) form by far the larger proportion of these defects, together with 279 cases of an orthopaedic character. The greater part of these are comparatively trivial postural deformities, incidental to the period of rapid growth of early adolescence, and flat foot, of a moderate type, which are amenable to suitable remedial exercises and participation in the school games.

The pupils of the Secondary Schools are placed at some disadvantage as compared with their fellows in the Elementary Schools in the attempt to secure treatment for errors of refraction and dental disease. A certain number of the former, where special circumstances are found on investigation, are dealt with at the clinics, and many of them have already received glasses while still in attendance at the Elementary Schools. As has already been pointed out (page 19) the term "treatment" does not necessarily mean that they need spectacles-many are already wearing glasses, but require a re-examination. Others are Still other cases in which a latent defect has begun to shew itself. cases are young adolescents who shew some temporary deterioration of general health. Those who are suffering from dental caries must seek treatment from private dental surgeons, or at the Dental Hospital. Speaking generally, however, there is evidence of greater personal care of the teeth especially amongst the older pupils than was evident a few years ago.

## NURSERY SCHOOLS.

Tiverton Road. This, the first Nursery School in the City, was established in the summer of 1904, at the Friends' Institute, Greet, by a group of persons interested in the kindergarten movement. Some ten years ago it was transferred to Tiverton Road, Selly Oak, where it is housed in premises specially designed for the purpose of a Nursery School on open-air school lines. Dental and Medical inspection and treatment are provided through the School Medical Service (accommodation 60).

#### Dr. Alexander reports :---

"I have made three visits for routine examinations, and eight visits for special examinations and 'following up,' making a total of 140 individual examinations.

"The defects found requiring treatment were	
---	--

Skin Diseases	 	 9	Tonsils and Adenoids	 	4
Eye Diseases	 	 4	Lung Disorders	 	2
Other Diseases	 	 2	and the second sec		

"All children received treatment under the Education Authority except four who were treated at a Hospital. Two cases of enlarged tonsils and adenoids were untreated. One child was examined at the Tuberculosis Centre, but no definite signs of tubercle were found. This child should improve while attending the Nursery School."

Twenty-nine children have received dental treatment at Harborne Lane Clinic.

The Head Mistress (Miss Marriott) reports :---

"Since dinner was provided in October, 1931, there has been a marked and steady increase in the weight of the children. In the second month after the dinners started, out of 56 children weighed, 24 gained one pound or over, only one case of loss of weight, and this was due to influenza. Those shewing signs of malnutrition have showed marked improvement during the year."

Summer Lane (accommodation 74. No. on Register, 86).

This Nursery School was established in 1907 at the Birmingham Settlement, and after the Education Act, 1918, was taken over by the Education Committee.
Dr. Payton reports that she made six visits for routine examinations during the year, and the nurse paid 1,319 visits to the homes of the children. The chief defect found was an unhealthy condition of the tonsils in 14 cases, of which eight have undergone operation at Handsworth or at a Hospital, and the remaining six are being kept under observation.

An epidemic of measles during December infected 42 cases, of whom ten developed pneumonia, which in one case was fatal. In order to secure adequate attendance arrangements were made with the Health Department for the names of children infected to be telephoned each morning, when the case was immediately visited by a Health Visitor.

Dartmouth Street Nursery Class. (Accommodation 32, average attendance 27, established 1925). The general health of the children has been good, and there has been very little infectious disease. The daily visit of the nurse has produced 928 treatments for minor ailments. One child received ultra violet light treatment with very marked improvement of general health.

## CAMP SCHOOLS.

Although the weather during parts of the year was not altogether favourable for the open-air curriculum of Camp life, the success of the three Camp Schools, from the point of view of the health of the children was marked. The figures relating to the schools are :---

			Headington,		
			Oxford	Bell Heath.	Blackwell
			(Boys).	(Boys).	(Girls).
Accommodation			 40	100	60
No. of weeks open			 37	41	42
No. of children sent			 527	1,164	1,070
No. of Schools sending	child	ren	 14	36	38

#### COTTAGE HOMES.

The system designed for the care of children whom poverty and destitution had thrown upon the Poor Law, which is now represented by the three Cottage Homes, has in Birmingham a long history. From 1797 to 1852 an "Asylum of the Infant Poor" with accommodation for 400 children existed in Summer Lane. In the latter year a Children's Department was provided in the new Poor Law Institution now represented by Western House, Dudley Road. In the course of time the system of Workhouse Schools fell into disfavour, and a system of boarding out was subsequently tried, under which 150 children were placed in selected homes. The experience of this scheme was not found to be sufficiently satisfactory to warrant its extension or continuance, and accordingly the Cottage Homes, Marston Green, were built in 1879. This institution, one of the first of its kind has served as a model for many other authorities.\* The example was followed by the King's Norton Board of Guardians which established in 1887 The Cottage Homes at Shenley Fields.

The comparable institution at Erdington was opened by the Aston Board of Guardians in 1900. At the amalgamation of the King's Norton and Aston Boards of Guardians with the Parish of Birmingham, three institutions came under the single authority.

The health of the children in the Cottage Homes has continued to be satisfactory, and though there have been cases of the usual infectious diseases, these have been localised. The policy of boarding out of children has been actively pursued, and some 480 children are now

\*Cp. Chance, Children under the Poor Law, pp 136-143.

boarded out. All those within reach have been examined twice during the year by me, making a total of 654 examinations, together with a considerable number who have been referred on account of some special condition. In pursuance of this policy there has been a progressive diminution in the number of children remaining in the Cottage Homes. Careful attention is given to the teeth, and the special research into the influence of vitamins on the calcification of the teeth under the Medical Research Council<sup>†</sup> has been continued so far as the diminishing numbers of the children concerned has allowed. The data obtained are now being summarised.

Erdington Cottage Homes. Mr. Norman Haines, L.D.S., reports :

"The condition of the teeth is excellent with the exception of the new entrants into the Homes, when quite a number of permanent teeth have had to be extracted. Only one denture has been fitted (five teeth), the teeth in question being in such a septic condition that nothing could be done to save them."

No. of examinations	282	X-rays	3
Permanent Teeth extracted	50	Dentures	1
Temporary Teeth extracted	168	Nitrous Oxide Cases	18
Scalings	13	General Anaesthetic Cases	1

Marston Green Cottage Homes. Mr. Reginald Knight, L.D.S., reports :--

"There has been no dental or oral disease of a serious nature found during the year under review. Several new arrivals to the Homes came under my notice with their teeth and mouth in a very dirty and neglected condition. In three cases this had given rise to severe gingivitis. Treatment for these children was commenced at once, and everything done to restore the mouth to a healthy condition. Instruction was given to each of these children in the correct method of brushing the teeth and care of the mouth.

	Fillings.		Extra	actions.	Dres	sings.		Gum.		
Deres		Perm.	Temp.	Perm.	Temp.	Perm.	Scalings.	Treatment		
Boys 172 GIRLS	21	22	13	16	9	14	14	2		
213	18	26	17	14	11	19	11	1		

Shenley Fields. Mr. J. C. Baker, L.D.S., reports :--

"During the twelve months ending 31st December, 1932, I inspected all the children in the Homes, and subsequently treated at Harborne Lane Clinic 54 children of ages varying from 3 to 16 years.

"The same high standard of oral cleanliness upon which I commented in my report for 1931 was again apparent in 1932, hence treatment, to a large extent, was of a conservative nature.

"Two children were given gas for the extraction of carious permanent teeth, whilst three others received the same anaesthetic for the removal of permanent teeth which were causing irregularities in the dental arch. Extraction of temporary teeth was carried out by means of a local anaesthetic, also I inserted copper amalgam fillings into 42 permanent teeth. All extracted teeth were forwarded to the Medical Research Council for microscopic investigation." It will be noted from the above reports that the teeth of the children on admission from the Receiving Homes are often extensively diseased. It would be a very real advantage if these children could be treated at Great Charles Street Clinic during their stay at Summer Hill. Moreover, it would be of the greatest protective value to the children in the Cottage Homes if those children who are likely to become the wards of the Local Authority could be immunised against Diphtheria while still in the Receiving Homes.

Furthermore, the Children's Court at present refers boys under ten years of age on remand to the Summerhill Homes.

Under the provisions of the Children and Young Persons Act, 1932, Section 38, the duty of providing Remand Homes is transferred to the local authority. Under Section 9 any child needing care and protection may be brought before the Children's Court. It is anticipated, therefore, that the number of children being brought before the Court on account of neglect by their parents will increase, and as by Section 33 of the Act no child under ten is to be committed to an approved school unless the Court is satisfied that he cannot be dealt with otherwise, it is probable that a number of these children will be committed to the care of the local authority with a view to boarding out.

It is probable, therefore, that there will be an increase in the number of children for whom accommodation must be found pending the settlement of the question of disposal, and they will probably remain in the Remand Homes for a longer period than hitherto pending the selection of a suitable home.

#### CHILD GUIDANCE CLINIC.

The establishment of a special clinic for the help and study of those children whose adjustment to their surroundings is imperfect, or whose misdemeanour and faulty behaviour are a source of anxiety to their parents or teachers, marks a most notable advance in the organisation of Child Welfare.

For a number of years past, an increasing number of children have been reported for a psychological examination into the cause of their aberrant and difficult behaviour, and there has grown up an ever closer co-operation with the School Medical Department on the part of the Teaching Staff, the School Attendance Officers, Juvenile Welfare Workers, Probation Officers, and the Children's Court, in an attempt to fathom the underlying psychological causes of these difficulties. Much has been accomplished by this co-operation, but until the foundation of the Child Guidance Clinic supplied the necessary staff, its full value could scarcely be obtained.

During the year 41 children were examined by me at the Remand Home, and a number at the request of the Magistrates or the Probation Officers.

Dr. C. L. C. Burns, Director of the Child Guidance Clinic, has supplied the following report :--

"The Child-Guidance Clinic has been working since the beginning of April. It is housed in two rooms in the premises of the School-Clinic, Sheep Street, the staff consisting of :---

A part-time Medical Director.

A part-time Educational Psychologist.

A full-time Psychiatric Social Worker.

"A large number of applications for treatment have been received, amounting to close on 200, of which over three-quarters have been investigated and the majority taken on for treatment. "Full treatment involves twice-weekly attendance of the child for two hours at a time at the Clinic, occasional interviews with the parents by the psychiatrist, visits of the social-worker to the home, testing by the psychologist, and exchange of information with the school.

"It is not possible, therefore, to carry this out for every case referred, and some of the cases are rejected as unsuitable after a preliminary interview and mental testing, while others, after this first investigation, are placed on the waiting list after some advice or information has been handed on to the parents and school.

"The cases which are unsuitable are those where the main factors in the problem are not psychological, e.g., where there is or has been some organic condition such as encephalitis, where there is a degree of mental retardation which renders it difficult to effect any change in the child other than can be accomplished by attendance at special schools, or lastly where the home is so destitute and disorderly that no co-operation with the parents is possible and where the main if not the only cause of the problem is a social or material one. Not that such cases are left unaided, for they are referred to other social agencies or arrangements made to remove the child if the environment is definitely harmful.

"Cases have been referred mainly by head-teachers of schools within the area of the City allocated to the Clinic, also by Assistant School Medical Officers, Hospitals, the Speech Classes, the Children's Court and Probation Office, and other sources. The complaints include such varied conditions as stealing, enuresis, fear of school, fits, stammering, backwardness, truancy, sextroubles.

"It is almost impossible to give an average of the time taken in the treatment of each individual case as this may range from two hours to two hundred or so, and the type of treatment also necessarily varies. In some, the main stress is laid on explanation and advice to the parents, others are mainly scholastic; in those cases where it is sought mainly to enable the child to cope with the environment, rather than adjust the environment to suit the child, this may be done mainly by talks of explanation and encouragement with the director or by play in the sense of artistic and creative activity, dancing, acting, etc. In most cases, a combination of all methods is aimed at.

"The Play-room is an essential part of the Child Guidance Clinic and what is known as the 'play-technique' method of observation and treatment of problem children is coming to be increasingly used. There may not be general agreement among psychologists as to how free play abreacts or disperses the conflicts, desires and anxieties in a child's mind, but it seems to fulfil the role which psychological analysis subserves in the adult.

"The result of our work so far may be considered to be gratifying. Although not many cases can be considered to be absolutely 'cured'—only time will shew the results—hardly any have not been helped in some way, and most show definite improvement. The large number of cases which have to be dealt with make it impossible to devote as much intensive work to each case as they mostly require, but what the Clinic has already achieved makes it possible to hope that it will soon be past the 'experimental' stage and remain an integral part of the educational system. Nor is its work restricted to actual treatment of cases, for as the knowledge of mental health principles has increased, so has the need for the application of these principles increased in our civilisation; parents and all who have to do with the young need education in mental hygiene no less than in physical, and the knowledge gained in Child Guidance work must be increasingly spread by lectures, study-circles, and other means, so that it may be applied in its preventive aspect both in the home and in the school. This educative side of the Clinic is also being utilised, and the need for this type of unit which acts as a co-ordinating centre between the home, the school, and the hospital or other medical unit, is being brought home to an increasing number of persons."

#### PROVISION OF MEALS.

No change has been made in the dietary. The mid-day meal is distributed at 23 Centres under the Education Committee, and at a varying number of centres under contract, of which there are at present (January) 22. Progress is being made in the provision of dining accommodation; whenever new centres are built, this accommodation is provided.

The figures shew a very large increase in the number of meals provided, and the children who have received meals.

	1928.	1929.	1930.	1931.	1932
Total No. of Meals provided Daily Average, 1st January	412,701 1,058	345,772 1,088	406,196 1,045	679,744 1,577	1,471,320. 2,442
Daily Average, 1st July	1,068	841	861	1,782	4,384
Daily Average, 31st Dec Total number of Children	1,050	1,051	1,565	2,439	4,090
who have received meals	3,702	3,308	3,819	7,231	9,249

#### TUBERCULOSIS.

Dr. Dixon, Chief Tuberculosis Officer, has forwarded the following report :--

"During the year 1932, the number of children dealt with at Yardley Green Road Sanatorium was 210. Of these 127 were males and 83 were females.

"Out of the 210 there were 123 who were admitted primarily for observation, 73 of which were discharged with no definite signs of Tuberculosis, and 50 remained for treatment.

"Of the 137 who received treatment 68 were in Group I, 35 in Group II, 9 were in Group III, and 25 were in Group IV, i.e., 25 were surgical cases. The surgical cases consisted of diseases of the bones and joints, abdominal tuberculosis, peripheral glands, etc., and the majority of these children were treated in the artificial light clinic with excellent results.

#### **Classification of Groups.**

Group

I.—Cases with slight constitutional disturbance, if any; e.g., there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration; gastro-intestinal disturbance or emanciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows: Either present in one lobe only, and, in the case of an apical lesion of one upper lobe, not extending below the second rib in front or not exceeding an equivalent area in any one lobe; or where these physical signs are present in more than one lobe, they should be limited to the apices of the upper lobes, and should not extend below the clavicle and the spine of the scapula. No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy should not exclude a case from this group.

Group III.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function, either local or general, and with little or no prospect of recovery. All cases with grave complications (e.g., diabetes, tuberculosis of intestine, etc.), whether those complications are tuberculous or not, should be classified in this group.

Group II .- All cases which cannot be placed in Groups I and III.

- Group IV.—Patients suffering from non-pulmonary tuberculosis include :---
  - (1) Tuberculosis of bones and joints.
  - (2) Abdominal tuberculosis (i.e., tuberculosis of peritoneum, intestines or mesenteric glands).
  - (3) Tuberculosis of other organs.
  - (4) Tuberculosis of peripheral glands.

#### TUBERCULOSIS. (NOTIFICATIONS). (ALL FORMS). 1932.

Ages.	Ages. Respiratory System.		NER		Intestines and Peritoneum.		OTHER FORMS,		
	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths	Cases Notified	Deaths	
0+	2	3	4	3	-	-	5	2	
1+	10	6	4	7	2	1	2	5	
2+	13	7	6	8	3	1	26	5	
5-15	100	17	7	12	8	-	55	10	
Totals	125	33	21	30	13	2	88	22	

### INFECTIOUS DISEASES.

The Health Department has supplied the following figures for the chief forms of notified infectious disease :--

Scarlet Fever Diphtheria	1924. 2,219 1,887	1925. 1,852 1,896	1926. 1,709 1,804	1927. 1,510 1,543	1928. 1,521 1,552	1929. 2,413 1,611	1930. 2,397 1,701	1931. 2,761 1,171	1932 2,550 722
Cerebro-spinal Meningitis	11	7	10	12	12	15	14	25	1
Anterior Poliomyelitis Encephalitis	39	11	38	15	6	6	9	3	137
Lethargica Ophthalmia	282	92	89	53	41	27	10	18	23
Neonatorum Polio-	413	335	395	409	530	522	596	617	321
Encephalitis	6	1	4	2	1	3	0	1	1

These figures refer to cases of all ages, but as the greatest amount of infectious disease occurs before adolescence is completed, they afford a reliable index as to the general incidence in the school population.

# IMMUNISATION AGAINST DIPHTHERIA.

The results of the campaign against Diphtheria by means of active immunisation have been indeed striking. Although immunisation had been to some extent carried out in the Infant Welfare Centres, it was not until October, 1927, that any attempt to reach the children of school age was made through the medium of the schools. This was carried out at first at the end of the morning sessions with the co-operation of the teaching staff. In the Spring of 1930 the Board of Education gave permission for this preventive work to be carried out as part of the general scheme to safeguard the health of the children which could be carried out during school hours. By the end of that year 6,965 school children had been immunised in the three years 1928-30. During 1931 an additional 6,000 school children were rendered immune, excluding those children who had been already immunised as toddlers, and in my Annual Report for that year it was estimated that some 25,000 children in the City had been protected against that disease, which hitherto has been one of the chief causes of death. During 1932 the campaign has been carried out on a more intensive scale, and 12,000 children were fully immunised with the three successive inoculations. By the end of April it is hoped that every elementary school will have been visited by the Medical Officer of the Health Department who is responsible for the actual work. This has been rendered possible by confining the inoculation to the age of the greatest incidence and danger, i.e., to the children in Infant and Junior Departments (except where a parent requests inoculation for an elder child). Birmingham probably has to-day a higher percentage of protected children than any City in the British Isles.

What then are the results which can be claimed from this campaign?

For the ten years 1918-1927 the average number of deaths from Diphtheria in children of age period 5-15 was 61. Since that date the actual number of deaths have been 38, 41, 34, 36.

In 1932 this number has been reduced to 17. Thus in five years the actual number of deaths of school children has been reduced by more than two-thirds, the equivalent of a reduction of 66 per cent.

A similar improvement is seen in the number of cases of Diphtheria in which the diagnosis was proved, the figures for the last four years (all ages) being 1,611; 1,701; 1,171; 722; respectively. Apart from other considerations, this reduction has meant the saving of a large sum of money for hospital treatment and maintenance which is much greater than the total cost of immunisation. These striking figures are a true index of the value of preventive inoculation against Diphtheria. Only those who were in contact with the disease before the introduction of the antitoxin in 1894 can fully realise how greatly bacteriological research has robbed Diphtheria of its terrors and the number of lives which have been saved thereby.

Encouraging as these results are, it cannot be impressed too strongly upon the community that there are still very large numbers of children at risk. Cases of diphtheria to the number of some 60,000 every year occur in England and Wales, and death in the form of this preventable disease takes a yearly toll of approximately 3,000 victims a holocaust which we cannot regard with complacency.

# DEATHS IN CHILDREN OF SCHOOL AGE.

No attempt to investigate the condition of child life in a community can be complete without the consideration of the causes of death in the child population at risk. The number of the population in the age groups 5-15 in the City is calculated as 167,000, and the approximate death rate for the same group is 1.6.

1932	ω <b>4</b> Γ	3	17	12	0	10	9	18	39	96	267
1931	27 4 4	36	13	15	3	6 18	- =	240	9 40	99	274
1930	969	35.0	13	11	¢1	5 26	13 2	0 16	9	17	282
1929	38	41	18	7	9	4 18	52 53	326	10	104	359
1928	с <del>г</del> 4	38	10	13	1	8 17	222	1 23	13	78	284
1927	80 60 61	37	17	18	6	11 21	14	34	10	96	324
1926	C1 4 00	64	16	13	9	5 24	27	33 3	11	89	352
1925	614	39	23	20	ŝ	22	25	31 4	13	79	340
1924	10 17 0	51 8	17	12	3	417	21	25	14	88	299
1923	13 18 0	60	24	13	9	12 13	24	31	13	66	369
1922	11	49 6	22	15	1	714	31	36	15	80	336
1921	11 16	64.0	25	15	9	8 2	28 0	46	20	88	374
1920	19 40 8	92 52	26	6	ŝ	17	30	5 49	50	110	521
1919	24 24	63	31	19	16	17 9	41	11	22	66	526
1918	8 1 0	87 223	52	20	6	21 10	4 27	01	16	86	738
CAUSES OF DEATH CHILDREN 5-15	Measles Scarlet Fever	Diphtheria	Tuberculosis	Meningitis	& Intestines	Other Lubercu- lous Diseases Rheumatic Fever	Fever	Bronchitis	Appendicitis	All Other Causes	TOTAL

## CONCLUSION.

In bringing to a close this Report on the main activities of the School Medical Service, the generous help of many persons should be recorded. School Attendance Officers, Juvenile Welfare Workers, Visitors of Boarded-out Children, Teachers, and Voluntary Workers, have all given unstinted help in the pursuit of one common aim—the welfare of the children of the City.



# SPECIAL SCHOOLS SUB-COMMITTEE, 1931-32.

Councillor Miss C. MARTINEAU, J.P. (Chairman), (Died January, 1932). Councillor Miss SANT (Appointed Chairman, March 1932). Mr. Alderman W. B. KENRICK (Ex-officio). Mr. Alderman A. R. JEPHCOTT, J.P. (Died March, 1932). Mr. Alderman T. QUINNEY, J.P. Alderman Dr. W. B. FEATHERSTONE, J.P. Councillor Mrs. FYSHE (Appointed April, 1932). Mr. Councillor D. HEATH. Mr. Councillor W. J. Loxley, J.P. Mr. Councillor W. MARTINEAU (Appointed June, 1932). Councillor Mrs. SALT. Mr. Councillor J. N. SPALTON. Councillor Mrs. WILLS. Miss E. M. BARLING, M.B.E. Miss J. DAVID. Mr. E. F. FREELAND. Mrs. BARROW CADBURY, J.P.

#### **CHIEF EDUCATION OFFICER:**

P. D. INNES, M.A., D.Sc.

#### CLERK TO SUB-COMMITTEE :

H. B. NEWSOME,

INSPECTOR OF RESIDENTIAL AND SPECIAL SCHOOLS: Elizabeth L. S. Ross, M.A., B.Ed.

#### SPECIAL SCHOOLS MEDICAL OFFICER :

CHARLES L. C. BURNS, M.R.C.S., L.R.C.P., D.P.M.

#### **OPHTHALMIC SURGEON:**

H. W. ARCHER HALL, D.O.

## **ORTHOPAEDIC SURGEON:**

F. WILSON STUART, M.D., Ch.M.

#### **VISITING MEDICAL OFFICERS:**

Baskerville School: FREDK. B. WINFIELD, O.B.E., M.R.C.S., M.R.C.F Cropwood School: MITCHELL I. DICK, M.B., Ch.B.

# SPECIAL SCHOOLS.

# ANNUAL REPORT OF THE SPECIAL SCHOOLS MEDICAL OFFICER, CHARLES L. C. BURNS, M.R.C.S., L.R.C.P., D.P.M., FOR THE YEAR ENDED 31st DECEMBER, 1932.

Dr. Smellie, who had held the office of Special Schools Medical Officer since April, 1929, and who had been associated with Special Schools work in Birmingham for a period of between eight and nine years, resigned in March, 1932. Dr. Ernest Bulmer, who had served as Assistant Special Schools Medical Officer from April, 1929, also terminated his engagement at the same time. Both these officers held part-time appointments, and their resignations coincided with the decision of the Education Committee to appoint a full-time officer who should act as Special Schools Medical Officer and also as Director of the Child Guidance Clinic. After appointment to these offices I took up duty in April, 1932. The full-time post thus created enables eight sessions per week to be devoted to Special School work.

## MEDICAL INSPECTION AND TREATMENT.

Routine Medical Inspections of children in attendance at the Special Schools have been held during the past year under similar conditions to those in force during previous years. The total number of children examined during the year was 963. This number is larger than the corresponding figures for the two preceding years, due to the increased number of sessions now available for the work.

As in former years, the number relates to general medical examinations of the Blind and Partially Blind, Deaf, Mentally Defective and those Physical Defective children who are in attendance at Day Schools. It does not include the children seen at the more frequent visits to the Baskerville School, and the Day and Residential Open-Air Schools.

Full use continues to be made of the School Clinics for the treatment of minor ailments, for defects of vision, and for tonsil and adenoid operations, whilst exceptional cases have been referred as in previous years for treatment at the Out-patient departments of the Children's or General Hospitals.

### SCHOOLS FOR THE MENTALLY DEFECTIVE.

#### ADMISSION EXAMINATIONS.

The following return shows the number of children who were examined with a view to admission to the Special Schools for the Mentally Defective, and the decisions arrived at :---

Number of children examined			 536
Number certified as mentally defective			 350*
Number to remain at Ordinary Schools			 137†
Number certified to attend Open-Air Sch	ools		 3
Number temporarily excluded from school	ol atten	dance	 14
Number certified as ineducable			 29
Number to remain at Deaf School			 1
Number to remain at Private School			 1
No action-Over 14 years			 1

\*Includes 12 for "Ascertainment" purposes only. Of these 106 were to be seen again later.

#### PERIODICAL EXAMINATIONS.

Periodical Examinations were held as usual once each term at all the Schools for the Mentally-defective:

A summary of the results is given below :---

Children allowed to leave between 14 and 16 years	of age	for	
approved employment			99*
Children leaving Special Schools at the age of 16			56†
Children discharged and notified to M.D. Act Committee	e as un	able	
to derive further benefit from Special School Instruct			48
Children transferred to Elementary Schools			2
Children transferred to Monyhull Residential School			2
Child transferred to Day P.D. School			1
Child transferred to Baskerville P.D. Residential School			1
Children temporarily excluded from school attendance			5

\* 94 of these children were to be reported to the Local M.D. Act Committee for statutory supervision, and 5 were de-certified.

<sup>†</sup> All of these children were to be reported to the Local M.D. Act Committee for statutory supervision.

The economic situation and its effects are more clearly reflected in these schools than in any other department. One aspect of this is the physical condition of the children themselves, which leaves very much to be desired. This has been the subject of a Memorandum presented by me to the Special Schools Sub-Committee in which it is urged that more provision should be made for these children to have at least one full meal per day and that the question of rest-periods, as also that of remedial exercises, should receive attention. In the best of times the mental retardation of these children is mirrored in the physical-in such conditions as a poor stance, toneless muscles, poor chest expansion and consequently poor circulation. In order that they may get the utmost benefit from their work it is essential that they should be provided as far as possible with nutritious and stimulating food, fresh air, and a reasonable proportion of exercise and rest. This could only be achieved by transforming these schools into those of the Day Open-air type, and it is my hope that this object may some day be achieved.

#### ACCOMMODATION FOR MENTALLY-DEFECTIVE CHILDREN.

Owing to the prevailing financial conditions the contemplated extensions at the Gem Street Special School have had to be postponed. It is hoped, however, that it may be possible early in 1933 to effect such slight alterations to the premises as will enable the Committee to proceed with the scheme of re-organisation which they had in mind, i.e., that Gem Street should become a school for senior boys and Burlington Street a school for senior girls, both schools taking junior mixed children. Proposals are also under consideration for accommodating the senior boys from the Little Green Lane and Ralph Road (M.D.) Schools at the former school and the senior girls from both schools at the latter.

Waiting Lists at December 31st, 1932, of children reported for examination with a view to their admission to M.D. Schools.

Bristol Street School	 	 	 16
Burlington Street School	 	 	 102
Fashoda Road School	 	 	 6
Gem Street School	 	 	 88
George Street West School	 	 	 32
Hamilton Road School	 	 	 11
Little Green Lane School	 	 	 100
Ralph Road School	 	 	 12
Sherbourne Road School	 	 	 40
			407

This list contains about 100 fewer names than at the end of the year 1931. The opening of the new School at Hamilton Road has absorbed a considerable number of the children in that district and the waiting list in connection with the Gem Street School has also been substantially reduced.

# SCHOOLS FOR THE PHYSICALLY-DEFECTIVE. DAY SCHOOLS—ADMISSION EXAMINATIONS.

The following table shows the examinations of children held during the year with a view to admission to the Day Schools for the Physically-Defective :--

Number of children examined			 	70
Number certified for admission			 	54
Number able to remain at ordinary			 	6
Number temporarily unfit for school	ol atte	ndance	 	7
Number deferred for further consid			 	3

### PERIODICAL EXAMINATIONS.

A summary is given below of the decisions made at the Periodical Examinations held once each term at these schools :---

Children to leave for work between 14 and 16 years of age	9*
Children transferred to ordinary schools	5
Child transferred to Day (M.D.) Schools	1
Children excluded as temporarily unfit to attend school	3
Children excluded as ineducable	9

\* 2 certified as M.D. for "ascertainment" purposes.

#### ORTHOPAEDIC INSPECTION.

Mr. F. Wilson Stuart, M.D., Ch.M., has furnished the following report on his work as Orthopaedic Surgeon in connection with the two Day Schools for P.D. Children :--

"During last year six clinics were held at George Street West, and seven at Little Green Lane School for Physically Defective children.

"The number of examinations made at George Street West was 74 and at Little Green Lane 88; treatments given by masseuses-

George Street	West	 1,539
Little Green	Lane	 1,456

"Much good is being accomplished by giving treatment at school. At the beginning of the autumn term a new (part-time) masseuse was appointed at Little Green Lane in room of the former masseuse who resigned in order to study for the Teachers' Certificate of the C.S.M.M.G.

"The advantages which have accrued as a result of the change have been considerable.

"As the new masseuse is on the staff of the Royal Cripples Hospital and in addition to holding three certificates of the C.S.M.M.G. is also a certificated orthopaedic nurse, a liason between the school and the hospital has been established which enables all splints, surgical boots, and broken plaster casts to be repaired at once when necessity arises.

"The masseuse at George Street West where there is not the advantage of an equipped gymnasium, is doing invaluable work.

## BASKERVILLE RESIDENTIAL SCHOOL

(Accommodation 90; Boys 42, Girls 48).

During the year 87 children were admitted, and 84 left. The causes of leaving were as shown below :---

Children fit to leave between th	a ages of 14	and 16	years	6
Children transferred to Ordinar	y Schools		-	30
Children withdrawn by parents				4
Children removed to Hospital				9
Child transferred to Woodlands	Hospital Se	chool		1
Children transferred to Day (P.	D.) Schools			26
Children transferred to M.D. So				3
Child transferred to Erdington	Cottage Hor	mes		1
Left City				2
Died				2

The average length of stay at the school of the children referred to above was 14 months.

The usual Admission Examinations were held in connection with this school, when 80 children were seen, 69 being certified as suitable for admission; 5 were to remain at ordinary Elementary schools; one was temporarily exempted from attendance at any school; one was to go to Hospital; in two cases no action was taken as the children were over 14 years; one was to remain at an M.D. School; and one to remain at a Day P.D. School.

At this School the year has been marked by the incidence of infectious illness. The sporadic cases of scarlet fever which had been cropping up since November, 1930, continued until May, 1932, when the step was taken of excluding those children who showed haemolytic streptococci and were considered to be carriers. The question was considered of immunising all those children who should prove to be nonimmune by the Dick test, but after consultation with the Public Health authorities and hospital consultants it was decided not to take this course, which in fact proved unnecessary. As mentioned by Dr. J. M. Smellie in a previous report, one of the interesting features of this epidemic has been the marked absence of cardiac involvement following scarlet fever. Some of the cases which were considered possible carriers have been followed up at the day (P.D.) schools where they were sent, and have shown the same absence of cardiac injury. An epidemic which occurred just before the Christmas Holidays was of more serious consequence; this was an outbreak of tonsillitis, or, in some cases, fever without throat signs, followed from two to three weeks later by a further rise of temperature accompanied by malaise and rheumatic pains in most cases and, in a certain proportion further involvement of the heart. The condition of a few of these

further involvement of the heart. The condition of a few of these children was so serious as to necessitate their removal to hospital. This feverish attack followed by a recrudescence after a "silent interval" is now recognised as a typical "epidemic" of rheumatism and is naturally fraught with serious danger to these cases. There is unfortunately no certain way of guarding against the spread of such an infection short of strict isolation of every child and all his belongings, though something might be achieved if the knowledge as to the mode of infection, the type of organism responsible, and a possible method of immunisation were more advanced.

Baskerville School offers an ideal ground for research of this kind which is so badly needed into rheumatic infection in children, and it is hoped that arrangements will be made in the near future whereby this object may be achieved.

#### OPEN-AIR SCHOOLS.

#### UFFCULME DAY SCHOOL. (Accommodation 120).

The number of admissions to this School during the year was 84, and the number of children who left was 73.

The following were the causes for leaving :--

Children who improved sufficiently to be transferred to Ordinary Schools Children who left at 14 years of age, whose physical con- dition was satisfactory	36 21
Children transferred to Cropwood Residential Open-Air	
School	4
Children transferred to Marsh Hill Day Open-Air School	2
Child who left owing to distance of home from School	1
Child who left owing to parents leaving district	1
Children transferred to a School for the M.D	2
Child gone to Switzerland	1
Children withdrawn by parents	4
Child who died (Hodgkins Disease)	1

The average length of stay at the School of the children referred to above was 20 months.

The customary Admission Examinations were held, when 44 children were seen. Of these 40 were certified for admission to Uffculme, and 4 were considered suitable to remain at Elementary Schools.

#### REPORT ON SLEEPING-IN DURING SUMMER 1932.

From May 4th to September 28th forty boys slept at Uffculme from Monday to Friday each week. The same boys stayed throughout this period and their weight gain averaged 4 lbs each boy. In every case the gain was greater than when they were sleeping at home.

After the "day-children" leave Uffculme at 5-30 p.m. the nightboys play games organised by a teacher. Bathing commences at 7 p.m. and usually by 7-45 all the boys are in bed, under a shed open on three sides. To eliminate all risk of fear on the part of the boys, a teacher sleeps at one end of the group and a nurse-attendant at the other, and the boys soon establish the habit of going to sleep early.

### UFFCULME GROUNDS AND SCHOOL SPORTS.

The second Annual Special Schools Athletic Sports Meeting was held in the Uffculme grounds on 1st July. Scholars from all the M.D. Schools, Open-Air Schools and Schools for the Partially Blind took part and competed for various trophies.

The grounds have also been used during the year for a number of friendly matches in Football and Cricket between Elementary and Special Schools.

### MARSH HILL DAY O.A. SCHOOL. (Accommodation 200).

The number of admissions to this School during the year was 79, and the number of children who left was 72.

#### The following were the causes for leaving :--

Children who improved sufficiently to be transferred	to	
Ordinary Schools		25
Children who left at 14 years of age or over		24
Children transferred to Cropwood O.A. School		3
Child transferred to Uffculme O.A. School		1
Child transferred to a Secondary School		1
Children transferred to Schools for the M.D		2
Children transferred to Baskerville School		2
Child transferred to Day P.D. School		1
Child transferred to Warwickshire Orthopaedic Hospital		1
Child transferred to Summerhill Receiving Homes		1
Child transferred to Blue Coat School		1
Child transferred to Shawbury School		1
Child transferred to Private School		1
Child transferred to Lingfield School for Epileptics		1
Child transferred to Davos, Switzerland		1
Children who left owing to parents leaving City		3
Children who left owing to distance of home from Schoo		2
Child excluded from school attendance-too ill		1
		-

The average length of stay at the School of the above mentioned children was  $11\frac{1}{2}$  months.

Admission Examinations were held at which 53 children were examined. Of these 50 were certified as suitable for admission and 3 were considered fit to remain at ordinary Elementary Schools.

#### CROPWOOD RESIDENTIAL O.A. SCHOOL. (Accommodation 80).

This School has been used exclusively for girls since Easter, 1930. It had been customary for the School to be occupied by boys and girls alternately at two yearly intervals, but in view of the pending completion of the new Boys' School the biennial change from girls to boys which was due to take place at Easter, 1932, was not made.

During the year 68 children were admitted to, and 69 left, the Cropwood Girl's School. The causes of leaving were as shown below :---

Children who improved sufficiently to be tra		to	
Ordinary Schools			37
Children who left at 14 years of age, or over, wh	ose phys	ical	
condition was satisfactory			11
Children withdrawn by parents			10
Child whose parents left Birmingham			1
Child transferred to Baskerville P.D. School			1
Child transferred to Warwickshire Orthopaedic	Hospital		1
Children transferred to Day O.A. Schools			7
Child transferred to a School for the Deaf			1

The average time spent by children at the Cropwood School was 131 months.

Admission Examinations were held at which 39 children were seen. Of these, 33 were certified for admission; four were considered suitable to remain at ordinary Elementary Schools; one was admitted to Hospital; and in one case no action was taken as the child was over 14 years.

The accommodation at Uffculme and Marsh Hill which totals 320 is barely sufficient to take in the number of applicants without a long wait, and this type of school has proved its value beyond any doubt. Re-examination of children who have been previous scholars, one, or perhaps two, years ago, shows these results to be lasting. At a re-union of old scholars at Uffculme it was found that of the children present all except two, were in regular work and there was hardly a complaint of ill-health among them.

The new Cropwood School will be ready to receive its quota of 120 at Easter and will prove of inestimable value for certain types of cases, such as those who do not do as well as they might at the day open-air schools, those with chest complaints, and some children suffering from "nerves." It will also relieve the congestion on the waiting list for the day schools.

To be able to save so many children from ill-health and chronic invalidism is highly satisfactory to all those who are concerned with their welfare, especially as it is apparent that this gain in health and strength is, in the great majority of cases, a permanent acquisition.

### SCHOOLS FOR THE PARTIALLY-SIGHTED.

Dr. H. W. Archer Hall, D.O. (Oxon), has supplied the following report on his work in connection with the three Day Schools for Partially-Sighted children at Edgbaston, Moseley Road and Whitehead Road :--

"During 1932, as in previous years, I have visited each of the three Part-Sighted Schools three times or more.

"On these inspections I found the school work proceeding most satisfactorily, and made arrangements for certain children to attend, at later dates, the Gt. Charles Street School Clinic, for refraction and other examinations of the eyes.

"In this manner, one hundred and ten examinations have been made by me at the Clinic. New glasses were prescribed where necessary, or arrangements were made for transference to other types of education, according to age and visual standard.

The following transferences were so made :---

Children transferred to Sighted Schools ... ... 13

"In addition, one girl from the Whitehead Road School was transferred to the Edgbaston Institution as a Day Scholar on attaining the age of 14 years.

"During my work at the Clinic, on Sighted School children, I found it necessary to recommend Part-Sighted Education for 20 children.

"I also certified 5 children for admission to the Harborne or Edgbaston Institutions for the Blind." The following table shows the number of children who were admitted to or who left from each of the three Schools for the Partially-Sighted during the calendar year :--

Number admitted during the year 2	Moseley Road, 13	Whitehead Road, 8
Number out a left during at	13	12
Number transformed to Ordina Columb		12
Number transferred to Ordinary Schools 1	5	7
Number who left for work at 14 years or over 3	5	3
Number transferred to Edgbaston Institution as resident pupil 1	_	_
Number transferred to Edgbaston Partially		1
		1
Number transferred for technical training at		
Edgbaston Institution at 16 1		
Number transferred to Private School	1	
Number transferred to Cropwood O.A	1	
Number transferred to School for the M.D	1	
Number admitted to a Sanatorium	-	1

#### SUMMER SCHOOL FOR DEFECTIVE CHILDREN.

It was hoped by this year, with the aid of the legacy left by the late Councillor Miss Martineau for the purpose, to have acquired permanent Summer School premises. Unfortunately this did not prove to be possible, and arrangements were accordingly again made to rent the premises known as Glan-y-don, Towyn. Seven groups of children (instead of the usual eight) numbering in all 169, went into residence, all of them going between Easter and the Summer Holidays.

Thus the School was in session from April 13th to July 20th. Each party spent a fortnight at the School in charge of two teachers except that in the case of the crippled children a teacher and a nurse formed the accompanying staff. The household arrangements were in all respects similar to those in operation during the previous year. On the whole the weather was good but two groups were unfortunate as they had only three days without rain. The provision of felt slippers for the use of all the groups was a great boon, especially during wet weather. The health of the children was excellent, no medical attention being necessary. The record of weights compared well with that of other years, 57 children having gained over 4 lbs. during the two weeks of their stay. The crippled children and the partially blind seemed to gain most, perhaps because they are the least active. It was very gratifying to find that nearly all the groups were visited at the week-ends by the Head Teachers from their Schools. This in itself is indicative of their keen interest. WEIGHT RECORDS OF CHILDREN WHO WENT TO TOWYN SUMMER SCHOOL, 1932.

					Number	Number		4
Date.	School.	Type.	Sex.	Age Range.	of days without rain.	who gained weight.	Average Gain.	gained 41b &over
				Years.			lbs. ozs.	
April 13th—27th	Moseley Road P.B. Whitehead Road P.B. Fashoda Road M.D.	P.B. & M.D.	Girls	7—14	10	24	3 11	Ξ
April 27th—May 11th	Moseley Road	Deaf	Boys & Girls	8—16	69	25	2 13	o
May 11th-25th	Hamilton Road	M.D.	Boys.	10-15	3	24	3 0	4
May 25th—Jure 8th	Littue Green Lane	P.D.	Girls	Not shown.	30	24	3 13	Ξ
June 8th-22nd	Bristol Street	M.D.	Girls	11-15	13	24	c1 00	ŝ
June 22nd—July 6th	George Street West	P.D.	Girls	7—16	6	24	4 10	15
July 6th-20th	George Street West	M.D.	Girls	9—16	9	23	3 7	9

Total who gained 4 lbs. and over=57.

# **CITY OF BIRMINGHAM**

# **Education** Committee

# Appendix to Annual Report

of

# School Medical Officer

for the year ended 31st December, 1932

# **OFFICIAL TABLES**

# Elementary Schools.

# TABLE I.—RETURN OF MEDICAL INSPECTIONS. A. ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections :

	Entrants							 	14,923
	Intermedi	ates						 	13,281
	Leavers							 	11,172
	Total							 	39,376
No	o. of other R	loutin	e Inspe	ctions				 	-
			В.	OTHE	R INS	PECTI	ONS.		
Nu	mber of Sp	ecial I	inspect	ions				 	40,170
Nu	umber of Re	-inspe	ections					 	46,730

				outine ections.		ecial ections.
				lo. of efects.		o. of fects.
	Defect or Disease.		Requiring treatment.	Requiring to be kept under observation, but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation, but not requiring
	(1)		(2)	(3)	(4)	(5)
	Malnutrition		236	438	490	158
	Ringworm : Scalp		6	1	119	2
-	Body		8	1	326	1
Skin	Scabies Impetigo		53 133	2 6	461 3,670	8 2 3
	Other Diseases (non-Tube	rculous)	317	21	4,390	3
	Blepharitis		175	4	528	
	Conjunctivitis	*****	37	2	685	-
Eye -	Keratitis Corneal Opacities		28	2 5	14 77	1
-ye	DefectiveVision (excludin	g Squint)		500	3,126	59
	Squint		500	176	574	11
	Other Conditions		31	8	461	1
Ear -	Defective Hearing		156	24	347	5
ear -	Otitis Media Other Ear Diseases		252 162	14 130	903 763	1
	Enlarged Tonsils only		251	397	406	26
Nose and -	Adenoids only		366	34	64	5
Throat	Enlarged Tonsils and Ad	enoids	2,032	742	1,676	34
	Other Conditions		270 56	88 185	2,217	30 11
Defective	Speech		102	42	527 104	2
Heart	(Heart Disease :		102		101	-
and -	Organic		102	43	141	21
Circula-	Functional		134	30	98	6
tion.	Anaemia		400 300	20 35	586 1,53	1
Lungs	Other Non-Tuberculous D		155	26	238	î
	Pulmonary :					
	Definite		11	7	29	2
	Suspected Non-pulmonary :		4	7	132	12
Tuber-	Glands		5	2	17	-
culosis.	{ Spine		2		-	-
	Hip		3	5	5	4
	Claim	nts	$\frac{1}{2}$	1	2 4	_
	Other Forms		ī	2	14	2
	Epilepsy		27	13	73	11
Nervous .	Chorea		37	8	256	5
System.	Other Conditions		67	28 26	52 13	15 5
Defor-	Rickets		90 185	26	54	14
mities	Other Forms		233	44	274	88
14110100				116	12,156	84

TABLE II. A. Return of Defects found by Medical Inspection in the Year ended 31st December, 1932.

B. NUMBER OF *individual Children* FOUND AT *Routine* MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group		- Number	Percentage of Children		
Group.		Inspected.	Found to re- quire treatment.	found to require	
(1)		(2)	(3)	(4)	
CODE GROUPS : Entrants Intermediates Leavers		14,923 13,281 11,172	3,706 3,401 2,542	24.8 25.7 22.8	
Total (code groups)		39,376	9,649	24.5	
Other routine inspections		-	-		

		AREA.			
			Boys.	Girls	Total.
Blind (in-	(i) Suitable for training in a School for the totally blind.	At Certified Schools for the Blind	17	24	41
cluding partially blind).	(ii) Suitable for training in a School for the partially blind.	At Certified Schools for the Blind or Partially Blind At Public Elementary Schools At no School	72	74 5 1	146 5 2
Deaf (in- cluding deaf and dumb and	(i) Suitable for training in a School for the totally deaf or deaf and dumb.	At Certified Schools for the Deaf	66	44	110
partially deaf).	(ii) Suitable for training in a School for the partially deaf.	At Certified Schools for the Deaf or Partially Deaf	7	7	14
Mentally Defective	Feeble-minded.	At Certified Schools for Mentally Defective Chil- dren At Public Elementary Schools At other Institutions At no School or Institution	758 14 13 3	568 7 12	1326 21* 25 3*
Epileptics.	Suffering from severe epilepsy.	At Certified Schools for Epileptics At Public Elementary Schools At no School or Institution	7 1 4	4	11 2 5
A MARK	Suffering from epilepsy which is not severe.	At Public Elementary Schools	81	49	130
	Active pulmonary tu- berculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	32	16	48
Physically Defective	Quiescent or arrested pulmonary tubercu- losis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board At Certified Residential Open Air Schools At Certified Day Open Air Schools At Public Elementary Schools At no School or Institution			
	Tuberculosis of the peripheral glands.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	4	6	10
	Abdominal tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board At Certified Day Open Air Schools	5	4	9

# TABLE III .- RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA

\* Certified as mentally-defective and awaiting admission to Special Schools. There are, in addition 247 boys and 160 girls who have been reported as probably mentally-defective, and who await examination.

# TABLE III. Contd.- RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

	our and all the	Trained 21. Indukry 10. 4	Boys.	Girls.	Total.
	Tuberculosis of bones and joints (not in- cluding deformities due to old tubercu- losis).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board At Public Elementary Schools At other Institutions At no School or Institution	33 1 12 2	35 	68 1 20 4
	Tuberculosis of other organs (skin, etc.).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board At other Institutions		11 × B	
	Delicate Children, <i>i.e.</i> , all children (except those included in	At Certified Residential Cripple Schools At Certified Day Cripple	24	20	44
	other groups) whose general health ren- ders it desirable that they should be speci- ally selected for ad- mission to an Open	Schools At Certified Residential Open Air Schools	11	9 72	20 72
		At Certified Day Open Air Schools At Public Elementary	210	103	313*
Physically	Air School.	Schools At other Institutions At no School or Institution	15 9 1	18 2 3	33 11 4
Defective	Crippled Children (other than those with active tubercu- lous disease) who are suffering from a de- gree of crippling sufficiently severe to interfere materially with a child's nor- mal mode of life.	At Certified Hospital Schools At Certified Residential	25	24	49
		Cripple Schools At Certified Day Cripple Schools At Certified Day Open Air	1 90	94	1 184
		Schools At Public Elementary Schools At other Institutions	1 204(18) 2	1 171(19) 2	2 375 (37)‡ 4
		At no School or Institution			22 (22)‡
	Children with heart disease, <i>i.e.</i> , children whose defect is so	At Certified Residential Cripple Schools At Certified Day Cripple	19	28	47
	severe as to necessi- tate the provision of educational facilities	Schools At Cer <sup>+</sup> ified Residential	21	23	44
	other than those of the public elemen-	Open Air Schools At Certified Day Open Air Schools	-	2	2
	tary school.	At Public Elementary Schools At no School or Institution	5 2	6 5	11 7

\* In addition there are 154 boys and 131 girls who have been reported for examination with a view to admission to Open-Air Schools.

t The figures in brackets indicate the number of these children who should be receiving Special School Education.

# TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1932.

## TREATMENT TABLE.

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

Disease or Defect	Number of Defects treated, or under treatment during the year.				
Disease of Delect	Under the Authority's Scheme.	Otherwise.	Total.		
(1)	(2)	(3)	(4)		
Skin—         Ringworm-Scalp         Ringworm-Body         Scabies         Scabies         Impetigo         Other skin disease         Minor Eye Defects         (External and other, but excluding cases falling in Group II.).	114 238 328 3,318 3,624 1,516	9 3 31 62 135 106	123 241 359 3,380 3,759 1,622		
Minor Ear Defects	1,912	152	2,064		
Miscellaneous (e.g., minor injuries, bruises, sores, chilblains, etc.).	6,530	413	6,943		
Total	17,580	911	18,491		

# TABLE IV. (Contd.)

	Number of defects dealt with					
Defect or Disease.	Under the Authority's Scheme. (2)	Submitted to refraction by private prac- titioner or at hospital, apart from the Authority's Scheme.	Otherwise.	Total.		
(1)	(2)	(3)	(4)	(5)		
Errors of Refraction (including Squint but excluding opera- tions for Squint).	3,694	516	64	4,274		
Other Defect or Disease of the eyes (excluding those re- corded in Group I.)	176	45	-	221		
Total	3,870	561	64	4,495		

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

Total number of children for whom spectacles were prescribed

(a)	Under the Authority's Scheme	3,500
(b)	Otherwise	452
Total	number of children who obtained or received spectacles	
(a)	Under the Authority's Scheme	3,360
(b)	Otherwise	443

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

Number of Defects. Received Operative Treatment.					
Under the Authority's Scheme, in Clinic or Hos- pital.	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)	
1,446	657	2,103	1,730	3,833	

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Group IV .- Dental Defects.

#### (1) Number of Children who were :--

(a) Inspected by the Dentist : Aged :

Grand Total 113,148

- (b) Found to require treatment 85,352
  (c) Actually treated 39,695
- (2) Half-days devoted  $\begin{cases} Inspection & .... & 483 \\ Treatment & .... & 3,146 \end{cases}$  Total 3,629

(3) Attendances made by children for treatment 45,886

- (4) Fillings  $\begin{cases} Permanent teeth 16,782 \\ Temporary teeth 2,964 \end{cases}$  Total 19,746 (5) Extractions  $\begin{cases} Permanent teeth 20,084 \\ Temporary teeth 86,525 \end{cases}$  Total 106,609
- (6) Administrations of general anaesthetics for extractions 19,224

(7) Other operations  $\begin{cases} Permanent teeth & 2,180 \\ Temporary teeth & 4,761 \end{cases}$  Total 6,941

Group V.-Uncleanliness and verminous conditions.

- (v) Number of cases in which legal proceedings were taken :
  - (a) Under the Education Act, 1921.....Nil.

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# SECONDARY SCHOOLS

# AND

# **OTHER INSTITUTIONS FOR HIGHER EDUCATION**

# TABLE I.-RETURN OF MEDICAL INSPECTIONS.

NUMBER OF CHILDREN INSPECTED 1ST JA	NUARY	, 1932,	то 31	ST DECE	MBER,	1932
Number of Routine Medical Inspections						6,800
Number of Special Medical Inspections						134
Number of Re-inspections						787
				Total		7,721
Number of Individual Children found to re-	quire T	reatmo	ent			1,567
Percentage of Children found to require Tro	eatmen	t				23.0

	RN OF DEFECTS FOUND BY MEDI- 31st December		2.			
-			Routine Inspections. No. of Defects.		Special Inspections. No. of Defects.	
	Defect or Disease.	(c) Requiring treatment.	Requiring to be kept under observation, © but not requiring treatment.	<ol> <li>Requiring treatment.</li> </ol>	Requiring to be kept (2) under observation, (3) but not requiring treatment.	
	Malnutrition	10	14	_	1	
	Ringworm :	1				
	Scalp Body	-	=	-	-	
Skin	Scabies	23	-	1	-	
	Impetigo Other Diseases (non-Tuberculous)	67	5	3	_	
	Blepharitis	25	1	-	-	
	Conjunctivitis	1 3	_	=	=	
Eye ·	Corneal Opacities		200			
	DefectiveVision (excluding Squin Squint	t) 648 8	399 10	15	12	
	Other Conditions	8	-	-	-	
Ear	Defective Hearing	9 14	37	_	_	
Lai	Other Ear Diseases	15	3	-	-	
N	Enlarged Tonsils only	29	35 2	-	-	
Nose and Throat	Adenoids only Enlarged Tonsils and Adenoids	6 90	114	6	1	
	Other Conditions	74	4	2	-	
Enlarged ( Defective	Cervical Glands (Non-Tuberculous) Speech	3 24	4 2	=	=	
	ental Diseases	802	-	-	-	
Heart	(See Table IV., Group IV.). (Heart Disease:					
and	{ Organic	10	23	-	1	
Circula- tion	Anaemia	26 27	19 2	1 2	3	
tion	Bronchitis	13	5	-	-	
Lungs	Other Non-Tuberculous Diseases	8	7	-	-	
	Pulmonary : Definite	_	2	-	-	
	Suspected	1	5	2	1	
Tuber-	Non-pulmonary : Glands	-	-	-	-	
culosis	Spine	1	-	-	-	
	Hip Other Bones and Joints	-	_	-	_	
	Skin	-	-	-	-	
	Epilepsy	1	=	1	=	
Nervous	{ Chorea	-	-	3	-	
System	Other Conditions	5 9	7	2	_	
Defor-	Spinal Curvature	144	11	2	-	
mities	Other Forms	135	15	7		

TABLE II. A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st December, 1932.





