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ANNUAL REPORT

TO THE

EDUCATION AUTHORITY

ON

SCHOOL HYGIENE

FOR THE YEAR 1921,

 $\mathbf{B}\mathbf{Y}$

G. W. N. JOSEPH, M.D., D.P.H.

Medical Officer of Health and School Medical Officer.

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To the Education Authority of the County Borough of Warrington.

LADIES AND GENTLEMEN,

I beg to submit to you my Ninth Annual Report on School Hygiene, viz., that for the year 1921.

During the period under review there were examined at the Routine Medical Inspections in the Schools 4,414 children (see page 5). In addition, 4,653 children were examined by the Doctor at various special inspections either in the Schools or at the Clinic, making a total of 9,377 children medically examined (exclusive of re-examinations).

The number of defects found at Routine Inspection was 1,022, and out of these 840 or 82% received satisfactory treatment up to the end of the year.

At the Clinic behind the Health Department for the treatment of minor ailments no less than 22,203 attendances were made by 3,011 children (see page 18, etc.).

Considerable progress was made during the year in our endeavours to check the incidence of minor ailments among school children by the adoption of a system of bi-weekly visits by the Nurses to all the Schools in the Borough (see page 19). In this way a great many defects were dealt with at an earlier stage and obviated the necessity for excluding the child. Apart from the benefit accruing to the children, close on 20,000 school attendances were saved compared with the previous year (page 20), although the scheme was only working for eight months.

Special inquiries were conducted during the year into the incidence of goitre among the children (page 10), on the occupations of children leaving school (page 38), and the effect of the Daylight Saving Act on the health of children (page 35).

These inquiries may not be as complete as one might wish owing to pressure of other work, and our present necessarily limited Staff, but much of the value of the School Medical Service will be lost unless every opportunity is taken of research work in the various problems presenting themselves.

Dr. Paulusz ably carried on the duties of Assistant School Medical Officer during the year, and I have to thank him for summarising many of the statistics that follow.

The work of Mr. Hutchison, the School Dental Officer, and the four Nurses is referred to in the body of the Report (pages 24 and 16). Mr. Flood, Chief Sanitary Inspector, has given me much valuable assistance in investigating the sanitary condition of the Schools.

I wish to convey my thanks to Mr. J. Moore Murray, the Director of Education, for assistance in collecting certain information.

I have much pleasure in stating that there has been that hearty co-operation between the officials of the Education Department and the Health Department during the past year that is necessary for the due carrying out of the work detailed in this Report.

Lastly, I would like to place on record my appreciation of the cordial support always rendered to me by the Members of the School Medical Service Committee and the Local Education Authority.

I am, Gentlemen,

Your obedient servant,

G. W. N. JOSEPH.

February, 1922.

1.-STAFF.

No changes were made in the number of the Staff engaged in the School Medical Service in Warrington during 1921, and as particulars of the duties were given in my last Report (pages 4 and 5) they will not be repeated here.

2.-CO-ORDINATION WITH OTHER HEALTH SERVICES.

There has always been close co-operation between the work of the School Medical Service and that of the local Health Department.

Special reference was made in the 1920 Report to our work in connection with Infant and Child Welfare, Tuberculosis, crippled children, and the co-operation between the Sanitary Inspectors and School Attendance Officers.

3.-SCHOOL HYCIENE.

A Review of the hygienic conditions of the Schools in the area, with particular reference to their surroundings, ventilation, lighting, warming, equipment and sanitation, was given in the Annual Report for 1919 and previous years, No structural alterations or additions were undertaken, but the following is a list of the Schools that were decorated during the year 1921:—

Beamont Council	External
Bolton Council	External
Evelyn Street Council	External
Fairfield	Internal
Hamilton Street	Internal
St. James'	Internal
Oakwood Avenue Council	External
Silver Street Council	Internal and External
Thewlis Street Council	Internal
Wycliffe Council	External
Secondary	External
Art	External

4.-MEDICAL INSPECTION.

The Routine Medical Inspections are conducted by the Assistant Medical Officer during the mornings at the various schools in the Borough.

The arrangements made for carrying out this work have been detailed in earlier Reports.

In addition to these routine examinations, a large amount of inspection work is also carried out by the Doctor in the Clinic in the afternoons in examining special cases, or cases excluded from school for treatment at the Clinic or in re-examining children as to the results of treatment (see page 13).

Age Croups Inspected.—School children in Warrington are medically examined at least three times during their period of attendance at an elementary school, viz., during their 5th, 8th and 13th years. These are referred to as the "Entrant," "Intermediate" and "Leaver" groups of children.

Altogether, 4,414 children, excluding those at the Secondary School, were thus dealt with in 1921, and statistics are given in Table I. on page 53.

The number examined in 1920 was 3,813. All Routine Inspections were carried out on the school premises (Article 44b).

The Board's schedule of medical inspection was followed in every instance, and there was no disturbance of the ordinary school arrangements.

5.—FINDINGS OF MEDICAL INSPECTION.

The following is a brief review of the facts revealed by the routine medical inspection. For the statistics relating to the year's work reference must be made to Table II. appended to this Report (page 54).

(a) **Uncleanliness.**—During 1921 a very marked improvement was noted in the cleanliness of the children examined.

Out of the total children inspected only 3.8% were found to have verminous heads (*i.e.*, nits or pediculi, or both). Compared with recent years the proportion is shown as follows:—

1916	 	 10%
1917	 	 10.73%
1918	 	 15.8%
1919	 	 11.2%
1920		 6.3%
1921	 	 3.8%
1021	 	 0.0 /0

The proportion varies, but improvement is noticeable in all age periods, and this is all the more noteworthy as the standard adopted was, if anything, higher than usual.

In large measure this is due to the work of the Nurses in the Schools (see "Surprise Visits," page 26, and also page 19), but credit is also due to the efforts of the Teachers.

(b) Minor Ailments.—As a rule, few minor ailments are discovered at the Routine Inspections, as most of the obvious cases of contagious disease, such as impetigo, conjunctivitis, ringworm, &c., have either been excluded by the Teachers as soon as discovered or dealt with by the School Nurses during their regular visits (see also Inspection Clinic, page 18).

In 1921, the proportion of children found by the School Doctor compared with the previous year was as follows:—

	1921.	1920.
Impetigo	.52%	1.8%
Kingworm (scalp)	.34%	.15%
Conjunctivitis and Blepharitis	1.1%	1.9%
Scabies (itch)	.45%	.52%

(c) **Tonsils and Adenoids.**—In 94.3% of the children examined, there was no defect of the nose and throat.

The tonsils were much enlarged in 2.7%.

Altogether, 253 children were referred for treatment of defects of the nose and throat.

This does not necessarily mean operative treatment, for in many instances after palliative treatment the enlargement of the tonsils may have subsided. Operation is only advised in chronic cases where the child is showing definite signs of the deleterious effect of obstruction of the nasopharynx.

(d) **Tuberculosis.**—Two children (.04%) were found who were suspected to be suffering from early tuberculosis of the lungs.

This figure, of course, does not represent the percentage of tuberculous children in the Borough.

A better idea of the real amount of tuberculosis in Warrington among school children is to be gathered from the notifications received under the Public Health Tuberculosis Regulations, 1912.

The following table shows the number of school children suffering from different forms of the disease who were living in the Borough on the 31st December, 1921:—

					Atten scho		Not att sche		
					Males.	Females	Males.	Females	Total
Tuberculosis	of	Lungs			40	23	6	10	79
,,	,,	Glands			37	30	6	1	74
		Peritone	um		19	10	2	4	35
		Skin			2	3	-	-	5 7
,,		Spine			2	- 1	5		7
		Hip			7	1	2	1	11
,,		Ankle			2 2 7 2	2	-	-	4
23		Knee			3	1		_	4
,,	,,,	Foot			1	1			2
	,,	Clavicle			_	i		_	1
**	,,	Ribs			1	_			1
,,	,,	Elbow			i	1			2
	,,	Tibia			1	î		_	2
		Brain			2	_		_	2 2 2 3
,,	"	Finger a			2	1		_	3
"	,,	Abscesses		Leg;	-	1. 1. 1. 1. 1.		and the second	
,,	"	Neck,	Ar	m	4	2	-		6
,,	,,	Bladder			1	-	-	-	1
Tota	als			1	125	77	21	16	239

These cases are kept under observation by the Medical Officer of Health and his Staff (see also page 28).

(e) Skin Disease.—Reference is made under Minor Ailments to the cases of impetigo, ringworm and scabies discovered, (f) **External Eye Disease.**—Comparatively few cases of conjunctivitis and blepharitis were found compared with previous years, as shown on page 20.

(g) **Vision.**—The eyesight of boys and girls in the first age group is not tested excepted in exceptional circumstances.

The following is a summary of the results found during 1921, compared with 1920:—

	1921.	1920.
Total number of children whose vision was examined	3370	2776
Number of children with normal vision both eyes	1350 (40%)	980 (35.3%)
Number of children with good vision (not less than 6/9 both eyes)	1302 (38.6%)	1095 (39.4%)
Number of children with fair vision (not less than 6/12 and without eye-strain	181 (5.3%)	180 (6.4%)
Number of children whose vision was cor rected by glasses	198 (5.8%)	160 (5.7%)
Number of children requiring treatment	334 (9.9%)	361 (13%)
Number of children whose vision cannot be improved by glasses	5 (.1%)	-

(h) Ear Disease and Hearing.—25 cases of aural discharge were found at routine inspection. In addition, 8 cases of deafness owing to obstruction due to wax in the ears were discovered.

(i) **Dental Defect.**—The School Medical Officer refers to the Dental Officer for treatment all children with four or more decayed teeth or any children who are obviously suffering from lack of attention to the mouth. In this connection 48 children compared with 71 the previous year were dealt with. This does not by any means represent the number of children requiring dental treatment, but only the most urgent ones. For particulars of the routine inspections made by the Dental Officer reference must be made to page 24.

(*j*) **Crippling Defects.**—No cases of serious heart disease were discovered, but 28 children were kept under special observation on this account. Ten cases of anæmia and 1 of chorea (St. Vitus' Dance) were found during Routine Inspection.

(k) **Nutrition.**—At the Routine Inspections 40 children were found suffering from malnutrition in a more or less marked degree and were followed up as in previous years (see page 28). The average height and weight for each of the Groups (Entrants, Intermediates and Leavers) for the previous ten years was published in the 1919 Report. For 1920 and 1921 the high average of the past few years has been maintained, and there is a noteworthy increase both in average height and weight of the boys and girls of five years of age.

AVERAGE HEIGHTS AND WEIGHTS.

		H	eigh	it.		Weight.						
						100	Boys. st. lbs. ozs.					
Entrants :-												
5 years	3	4.6	3	4.1	2	11	1.3	2	9	5.6		
6 years	3	6	3	5.3	2	13	1.9	2	11	7.5		
7 years	3	7.1	3	3,3	3	1	$1.3 \\ 1.9 \\ 2.6$	2	10	6		
Intermediate :												
8 years	3	9.3	3	9.2	3	4	6.8	3	3	10		
9 years	3	11.2	3	9.7	3	9	4.7	3	4	10 14.2		
10 years	3	10.2	3	10.5	3	8	6.8 4.7 4	3	5	12		
Leavers :			-									
13 years	4	6.3	4	6.4	4	13	9.5	5	0	5.6		
14 years		6.9	4	6.4 8.1	5	2	12	5	5	5.6 10.6		

The figures for the 7-year-olds and 10-year-olds are hardly reliable owing to the small number of children examined in those groups (see Table I.).

As regards nutrition, the following table summarises the findings of medical inspection : ---

		Above Normal.	Normal.	Below Normal.	Markedly Defective.
Infants-Girls	/	 35	606	17	4
. Boys		 22	604	16	1
Intermediate-	Girls	 39	744	- 19	10
	Boys	 24	731	34	8
Leavers-Girls		 67	614	25	13
Boys		 46	684	42	9
			-	• •	
	Total		3983	153	45
		(5.2%)	(90.2%)	(3.4%)	(1%)

(1) **Other Defects.**—The other defects found, numbering 54 in all, mentioned at the foot of Table II., consisted of :—

Sore Throats		 14
Defective Clothing		 6
Defective Footgear		 28
Debility		 1
Ulceration of the Ton	igue	 1
Influenza		 2
Scarlet Fever		 2
		-
		54
		-

These were dealt with as explained on page 27.

Coitre (Enlargement of the Thyroid Gland).—Goitre is an enlargement of the thyroid gland, a bi-lobed organ lying across the wind-pipe in the lower part of the front of the neck.

Dr. Paulusz undertook an inquiry into the incidence of goitre among the school children of Warrington.

For this purpose he inspected all the children in the Public Elementary Schools and in the Secondary School, with the following result : —

ELEMENTARY SCHOOLS.

No. of children examined	Eularged thyroid found					
	Boys.	Girls.		Boys.	Girls.	
Entrants (5 & 6 years)	1572	1561		7 = .4	45%	
Intermediates (7-12 years)	4741	4759		10 = .9	21% 77 = 1.6%	
Leavers (13 & 14 years)	664	664	·	2 = .3	31% 54 = 8.1%	

SECONDARY SCHOOL.

No. of children examine	Er	nlarged thyre	oid found in	
	Boys.	Girls.	Boys.	Girls.
14 to 16 years	149	165	1 = .67%	3 = 1.8%

Age & Sex.	Slight.	Marked.	Cases with associated signs or symptoms.	Cases in which other members of family are affected.	Number examined.	Percentage affected.
 B. G. G. B. G. B. G. T. B. G. S. B. G. S. B. G. S. B. G. S. B. G. 10. B. 	4 3 4 8 1		1 1 1		717 693 855 868 792 809 809 830 762 728 757	$ \begin{array}{c} - \\ .59 \\ - \\ .34 \\ - \\ .49 \\ - \\ .26 \\ 1.6 \\ .13 \end{array} $
G. 11. B. G. 12. B. G. 13. B. G. 14. B. G.					807 810 779 811 806 571 582 93 82	$ \begin{array}{r} 1.2 \\ .49 \\ 2.5 \\ .38 \\ 3.1 \\ .35 \\ 8.4 \\ \hline 6.0^{\circ} \end{array} $
	91	59	18	52	13961	

The incidence in age periods is shown in the next table :---

No.	of	children	whose	mothe	rs ha	d goiti	re				 16	
No.	of	children	whose	aunts	had	goitre					 6	
No.	of	children	whose	sisters	had	goitre					 30	
No.	of	children	who st	iffered	from	nervo	usness	or	palpit	ation	 18	

The condition is much more common in girls than in boys and is often found in more than one member of the family. Most of the cases showed only slight enlargement and only a small proportion had any associated symptoms, such as palpitation or nervousness.

It would be interesting to compare these numbers affected with children in other towns.

Although one might suspect that the incidence of goitre among children in Warrington is unduly high, judging from the numbers one notices in the streets and cars, it may be that it is the present low-necked blouse that renders the defect more obvious than formerly.

Further examination of cases selected at the Inspections in the Schools.

The further examination of certain cases is made at the Inspection Clinic when necessary. These cases consist of children whom it is impossible to examine thoroughly during the Routine examination.

In 1921, there were 622 such examinations, compared with 588 in 1920. When a defect was discovered it was entered on the schedule card and has been included in the foregoing statistics as though found at the original Routine Inspection.

Special Cases.—In addition to the children notified for examination at the Routine inspection, various children were specially examined during the year.

The teachers submit any special case to the doctor at the time of the inspection in the schools, or special cases may at any time be sent to the School Clinic.

Apart from the children attending for treatment at the Clinic (see page 18), the A.S.M.O. examined a number of children specially in the schools, with the results shown in the Summary in Table II.

Exclusions.—All children suffering from contagious disease who may be a danger to the other children, and all cases in which the condition necessitates absence from school are at once excluded by the A.S.M.O .at the time of his inspections. Slight cases are not excluded, but referred for treatment after school hours. The following are the cases excluded during 1921, compared with 397 cases the previous year:—

E:	KCL	USI	ONS	
----	-----	-----	-----	--

			Excluded.	After School.
Uncleanliness-Head .		 	130	45
Body .		 		40
Ringworm-Head .			-	12
Ded		 	3	12
Scabies			10	4
Impetigo		 	29	26
Other Skin Dise	ases	 	7	26
Blepharitis	:	 	14	11
Coninnativitie		 	14	17
Vanatitia		 	1	- '
Corneal Ulcer .		 	5	-
Aural Discharge		 	24	22
Other Ear Dise		 	1	13
Scarlet Fever		 	2	_
Mumps		 	1.	-
Cone Wheed		 	18	-
Influenza		 	2	_
Defective Clothi	ng	 	1 '	5
Defective Footge		 	-	29
			282	262

The foregoing table refers to defects, and the actual number of children affected was :---

Exclusions 274 After School cases 260

Other Medical Inspection Work.

In addition to the Routine inspection work and the examinations of children in the schools in the mornings, a large amount of work is done by the School Medical Officer at the Clinic every afternoon.

The sources from which the cases are derived were detailed on page 34 et seq. in the Report for 1919.

" Specials " examined	at	Clin	ic			117
Cases of contagious	disea	ise	(includi	ng	sus-	
pected cases subm	itted	by	Teacher	s)		4031
Cases submitted by Se	chool	Att	endance	Of	ficers	43
Further examinations						622
Re-examinations						2187
						7000

(In 1920 the number was 7066.)

6.-INFECTIOUS DISEASES.

The measures taken to prevent the spread of infectious disease have been the same as in previous years and will not be repeated here.

The number of cases of **Notifiable** infectious disease occurring among school children during 1921 is shown in the following table :—

Year.	Scarlet Fever cases	Diph- theria. cases	Enteric Fever. cases	Pulmon- ary Tuber- culosis. cases	Other Tuber- cular Diseases cases
1921	196	48		16	37
1920	67	44	1	-	-

A larger number of cases of scarlet fever occurred during 1921 than in any year since 1915.

The epidemic which began at the end of August continued until the end of the year; most of the cases arising in the St. John's and Orford Wards. The cases were mostly of a mild type and no deaths resulted from the disease. The next table shows the number of cases of **Non-Notifiable** infectious disease, although this does not represent the total number of cases occurring in the town among school children, but only those that came to our notice : —

Year.	Whooping cough cases.	Chicken- pox cases.	Mumps cases.	Sore throat cases.	Measles. cases	German Measles. cases
1921	417	283	175	$\begin{array}{c} 652\\ 416\end{array}$	277	8
1920.	110	713	95		1244	2

During the early part of 1921 there was an epidemic of whooping cough, more cases being reported than in any of the previous three years. Two deaths from this complaint occurred among children of school age.

School Closure was not resorted to as a preventive measure for any outbreak of infectious disease in 1921 (Article 45(b) and 57 of the Code).

Closure is resorted to only in very exceptional circumstances, because as soon as the schools are closed one of our most valuable sources of information regarding sickness amongst the child population is cut off.

In order to minimise as far as possible the risk of conveying infection to school certain children are referred daily to the Medical Officer of Health. These cases consist of

convalescents from infectious disease;

contacts with infectious disease;

children who are suspected of infectious disease;

children suffering from sore throats;

and the numbers dealt with in 1921 are shown in the next table :---

CHILDREN EXAMINED BY MEDICAL OFFICER OF HEALTH AS TO FREEDOM FROM INFECTION.

	1	Cases Detected.			
Disease.	Number of Examinations	Scarlet fever.	Diphtheria		
SCARLET FEVER (Convalescents examined as to their fitness to return to School.) DIPHTHERIA Ditto. CONTACTS with cases of Diph- theria examined previous to being allowed to attend School after case removed to	194 46		=		
Hospital. SORE THROATS	156	-	1		
(examined previous to being allowed to attend School).	399	18	-		
Totals	795	18	1		

Cause of dea	ath.	1	1916.	1917.	1918.	1919.	1920.	1921.
Scarlet Fever			-	-	2	_	1	_
Diphtheria			3	1	3	8	3	
Enteric Fever .			-	_	-	-	-	_
Measles			1	5-	-	-	1	-
Whooping Cough .			2	-	4	-	-	2
Diarrhœa			-	-	_	-	-	
Tuberculosis of Lux	ngs		13	9	4	7	2	5
Other Tubercular I	Diseases		-	6	5	6	8	6
Influenza			-	-	26	11	3	1
All other causes .			39	37	46	26	31	18
То	tals		58	-58	90	58	49	32

Deaths from Infectious Diseases and all other causes among children of school age during the past six years are given in the following table :---

The following table shows the number of visits paid by the Sanitary Inspectors to the homes of school children in investigating and supervising outbreaks of infectious disease : —

To premises where cases of Scarlet Fever, Enteric Fever or Diphtheria occurred	244
Re-visits to ascertain if contacts with Scarlet Fever, Enteric	
Fever and Diphtheria were free from infection and fit to return to School	295
Re-visits to cases of Scarlet Fever, Diphtheria or Enteric Fever being treated at home	22
Visits to premises where there were cases of Measles	413
Re-visits to homes where cases of Measles are being treated	442
Visits to homes of children reported by Education Depart- ment as being absent from School, owing to either Whooping Cough, Chickenpox, or Mumps	887
Re-visits to homes of children suffering from either Whoop- ing Cough, Chickenpox, or Mumps	1919
Visits to homes of children absent from School with Sore Throat or Suspicious Rash	637
Visits to homes where there were cases of Influenza or Pneumonia	190
Visits to homes of children suffering from Pulmonary and Non-Pulmonary Tuberculosis	908

Total 5957

BACTERIOLOGICAL EXAMINATIONS.

Examinations made for the detection of Diphtheria :-

Year.	Exa	Number	Positiv Result	 Negative Results.
1913		200	 7	 193
1914		197	 5	 192
1915		123	 6	 117
1916		195	 6	 189
1917		191	 3	 188
1918		110	 1	 109
1919		96	 1	 95
1920		329	 15	 314
1921		186	 11	 175

7.--" FOLLOWING-UP " OF CHILDREN SUFFERING FROM PHYSICAL DEFECTS AND WORK OF THE SCHOOL NURSES.

A large amount of work is done annually in following up the cases to see that the defects found at Routine Inspections and at other special examinations of the children are dealt with promptly and satisfactorily.

The procedure adopted has been fully explained in previous Reports.

The Tables at the end of the Report show the results obtained, but no record is given of the actual number of re-examinations made in each case by the doctor, or of the number of visits paid by the Nurses and School Attendance Officers (see also page 19) in advising parents and in offering facilities for treatment.

Only as a last resort are parents summoned to attend before the School Medical Service Committee for not obtaining satisfactory treatment for the children (see page 31).

Work of the School Nurses.

A very large amount of work has been carried out during the year 1921 in a very thorough manner both in the Clinic and in the Schools by the four Nurses (Miss Mason, Miss Brown, Miss Griffiths, and Miss Parker). Although the mere formal representation by statistics of their routine work does not by any means do full justice to them, the following duties have been performed in addition to the large amount of work in the Clinic (see page 18):—

Visits paid to Schools to treat minor	
ailments (page 19)	1289
Visits to homes of children (in many cases	
assisting with treatment)	2117
Attendances at Routine Medical Inspection	
in the Schools with the A.S.M.O	387
Notices sent to teachers with reference to	
excluded children	1920
"Surprise visits" to Schools (see page 26)	85
Administered nasal douches in cases of	
tonsils and adenoids after operation	1832
Assisted in the Dentel Clinic when necessary	

Assisted in the Dental Clinic when necessary.

8.---TREATMENT OF DEFECTS OF CHILDREN DURING 1921.

Whenever the circumstances warrant it, cases are induced to obtain treatment from a private medical practitioner.

Arrangements have been made, as detailed in previous Reports, for dealing with minor ailments and dental defects at our School Clinic, and with visual defects and defects of the nose and throat at the Local Infirmary. Facilities are now afforded, too, for X-ray treatment of cases of ringworm of the scalp. Cases of uncleanliness receive attention mainly in their own homes under the supervision of the School Nurses.

Tables summarising the work done under the various healings are given at the end of the Report (pages 57-60).

In Table VI. a summary is given of the number of children who were treated during 1921 of those inspected at the Routine Inspections only.

The proportion (82.1%) who received treatment is high, and would be still higher, but obviously those who are only discovered to be defective towards the end of the year cannot always receive treatment before the beginning of the next twelve months. Especially is this so with children suffering from defective vision and enlarged tonsils and adenoids, which cases will be seen to make up a big portion of the total.

A.-Minor Ailments.

		No. of Children.	No. of Attendances.
 		159	847
 		72	454
 		141	8553
 		307	1384
 		676	3104
 		330	2068
 		125	537
 		1201	5256
 		3011	22203
···· ··· ···	···· ···		Children. 159 72 141 307 676 330 125 1201

The cases of minor ailments that attended the School Clinic were as follows : —

Included above are 1,158 children who attended on 4,837 occasions, being dealt with after school hours and not excluded from school as there was no risk to the patient or to other children in allowing them to do so.

Of those excluded, the average length of treatment found necessary to render the child fit to return to School is shown as follows :---

	eated		Cases in which treatment completed.						
Disease.	No. of cases treated in School Clinic	Total No. of attendances.	No. of cases.	No. of attendances.	Average no. of attendances per case.	No. of days under treatment.	Average no. of days necessary for treatment.		
Aural Discharge	68	185	68	185	2.7	203	2.98		
Ringworm Skin .	72	454	72	454	6.3	526	7.3		
" Scalp .	141	8553	108	6053	56.0	8287	76.7		
Conjunctivitis	263	1226	263	1226	4.6	1496	5.6		
Impetigo Skin	413	2054	413	2054	4.97	2581	6.2		
Impetigo Scalp	330	2068	330	2068	6.2	2485	7.5		
Blepharitis, &c.	90	398	90	398	4.4	502	5.5		
Miscellaneous	476	2328	476	2328	4.8	2555	5.3		

In past Reports a summary has been given of the average periods taken to render a child suffering from minor ailments fit to return to School. It is noteworthy that the average duration of treatment of cases of aural discharge, ringworm of skin, conjunctivitis, blepharitis, and miscellaneous conditions for the year 1921 was the shortest on record, Attention was drawn in my last Report to the loss of school attendance due to the incidence of minor ailments in children, and a scheme was outlined from which it was hoped that considerable improvement would result from regular visits of the Nurses to the Schools.

The system was introduced in May, 1921. The town was divided into two districts and two Nurses were responsible for visiting all the schools in each district twice a week.

In this way all minor ailments not requiring exclusion of the child were dealt with promptly and a great deal of loss of attendance was obviated.

In addition, the services of the Nurses were very useful ic regularly watching sore throat cases and infectious disease contacts.

The amount of work done by them will be seen from the following table : —

	Boys.	Girls.	Totals.
Impetigo scalp	835	755	1,590
,, skin	8,202	5,950	14,152
Miscellaneous	13,068	10,287	23,355
Eczema	2,058	1,267	3,325
Eyes	2,005	2,170	4,175
Ears	2,346	1,465	3,811
	28,514	21,894	50,408

NUMBER OF DRESSINGS IN THE SCHOOLS.

Special examinations of sore throat cases

and infectious disease contacts ... 998

This large amount of work in the schools has greatly reduced the work in the Clinic, although this is not obvious from the figures.

In 1921, 3,011 children attended 22,203 times, compared with 3,500 who attended 26,853 occasions in the previous year.

But in 1921 the majority of these cases attended during the first four months of the year before the system of school visiting had been instituted.

January to May, 1921 May to December, 1921	 Cases. 1853 1158	at Clinic. 11868 10335
	3011	22203

A large number of these cases, too, attended out of school hours.

Altogether, nearly 20,000 school attendances were saved during the year compared with the previous one as shown in the following table:—

KETURN showing the num ber of children affected and the number of school attendances lost in consequence of contagious diseases during the years 1916, 1917, 1918, 1919, 1920, and 1921.

					0									
	RING	RINGWORM.	IMPE	IMPETIGO.	CONJUNCTIVITIS.	CTIVITIS.	AURAL DISCHARGE	AAL ARGE.	UNCLEAD	UNCLEANLINESS. OTHER AILMENTS	OTHER A	ILMENTS	TOT	TOTALS.
	Chil- dren.	Attend- ances.	Chil- dren.	Attend- ances.	Chil- dren.	Attend- ances.	Chil- dren.	Attend- ances.	Chil- dren.	Attend- ances.	Chil- dren.	Attend- ances.	Chil- dren.	Attend ances.
1916	282	10324	1195	28022	656	17082	134	3411	313	4483	654	17193	3234	80515
1917	293	9751	1356	31707	435	9494	62	1702	275	3434	652	13617	3090	69705
1918	266	10421	1641	39482	1503	30737	121	2171	354	7083	660	14559	4545	104453
1919	271	9847	11711	36296	775	17023	163	2880	479	6495	480 -	10851	3879	83392
1920	603	21091	1277	26427	471	8904	87	1045	729	6816	754	18672	3921	82955
1921	296	18763	818	15584	423	7527	69	266	662	7069	672	15896	3000	65836

The benefit derived by the children from this closer supervision has been marked.

Our thanks are due to the Teachers who, by their hearty co-operation with the Nurses, have assisted to make the scheme a success.

Slight modifications in the system in the current year, chiefly in the direction of referring more cases to the parents and of more home visiting in order to induce a certain class of parents to attend themselves to small defects in the earlier stages, will, it is hoped, make the work still more useful.

Ringworm of the Scalp.—Towards the end of the year arrangements for providing X-ray treatment for cases of ringworm of the scalp were approved by the Board of Education.

The cases are treated by a General Practitioner (Dr. Fox) at his own Surgery.

The cost per case is as follows : ---

For five exposures	. 42	/-
For a single exposure	. 10	-
For two or more exposures	. 9	- per exposure.

As far as possible, parents are asked to contribute to this cost according to their means.

In every instance the parent or guardian is required to sign a declaration asking for this form of treatment and agreeing to have the child's hair cut.

Four children selected by the A.S.M.O. are sent to Dr. Fox's Surgery every Tuesday.

Selection and Preparation of Cases.

These cases are selected by the A.S.M.O. a week in advance from cases submitted by the School Nurses. In order to ensure the attendance of four children, the nurses at first submit the names of six children to the Education Office, when arrangements are made for them to be called up for examination by the A.S.M.O. on the Tuesday. Cases with marked pustular eruptions on the scalp are not put on the list. Care is taken, if there is more than one case in a house, that all receive treatment at the same time in order to mitigate the risk of re-infection.

The Special Officer visits the cases and at the same time obtains the parent's signature to the required declaration. He is careful to read the agreement to the parent before obtaining the signature. If the Officer meets with any difficulty in obtaining the parent's consent to the cutting of the child's hair, he advises the parent to see the School Medical Officer. As soon as the necessary declaration has been signed by the parent, the school nurses see that the child's hair is cut short. (This is done all over the scalp, unless in very exceptional cases, and it is pointed out to parents that treatment is not as efficient, and possibly diseased spots may be overlooked if attention is not paid to the whole scalp.) No irritant of any kind is applied to the scalp for at least one week before exposure to X-Rays. Parents are warned that the hairs that fall out are infectious, and they provide a linen cap to cover the child's head.

This cap is worn from the time of application of X-Rays until all the hair has fallen out over the part affected.

Observation and After Treatment.

The routine after treatment (unless ordered otherwise) is that the child attends the Clinic every Monday, Wednesday and Friday during the three weeks after the exposure for observation. During this time white precipitate ointment is applied to the scalp.

If there is any acute reaction, calamine lotion is substituted for the above ointment, and the case at once submitted for examination by the Medical Officer.

At the end of the third week cases attend again at Dr. Fox's Surgery for re-examination. For this purpose the scalp is cleansed on the preceding day, and no ointments, etc., re-applied.

Again at the end of the 6th week the cases are submitted for a further examination by Dr. Fox, whether all the hair has fallen out or not. When all the hair has not fallen out over the affected area, a report on the microscopical examination of the hair and scales for spores is sent with the child and entered on the special form.

The child is fit for school as soon as the hair has fallen out. The case is under observation until all the hair has grown again.

Home Treatment.—In addition to the minor ailment cases dealt with at the Clinic, a certain number are referred for treatment in their homes under the supervision of the Nurses.

During 1921 the following were thus treated :-

					No. of cases.	No. of days under treatment.
Scabies					132	1235
Ped Cap.					786	4300
Miscellaneous					55	474
	A	total	of	973 c	ases.	

B.—Treatment of Visual Defects.

From the table on page 58 it will be seen that 781 children were referred for refraction, of which 298 were cases from the previous year.

Out of these, 484 were satisfactorily dealt with.

I am indebted to Dr. Fox, who carries out the work at the Infirmary, for the following summary :---

	Hyp Hyper- metropia.	ermetropi Astig- matism.		Myopic Astig- matism.	Mixed Astig- matism.	Total
Vision improved) 57	71	27	28	3	186
Vision not improved	1 27	-		-	-	27
Defective Vision not due to errors of						
refraction	29		-			- 29
Normal Vision, or 6/	9 16			-	-	16
	129	71	27	28	3	258

(In 1920 238 cases were treated.)

24 cases of squint.

2 ", ", optic atrophy. 1 case of traumatic cataract.

Spectacles.

Spectacles are provided by the Local Authority at cost price, and in necessitous cases parents are allowed to pay for them by easy instalments.

No. of pairs of Spectacles provided			
Authority in 1921			163
No. of pairs of Spectacles repaired			7
Cost of Spectacles-Spherical Cylindrical and	Compound	$\begin{array}{cc} \dots & 4/3 \\ \dots & 6/6 \end{array}$	per pair

The total cost is recoverable. In certain cases spectacles have been provided before the cost has been paid by the parents who have agreed to pay as soon as their means permit. In addition to the above numbers of spectacles provided there has been a number of cases where the parents of children needing glasses have been in receipt of Poor Law Relief and the Guardians have supplied the spectacles.

In order to ensure that the child wears glasses regularly after they have been prescribed, each case is notified to the teacher and entered in the School Spectacles Register.

If the child fails to wear the spectacles regularly the case is reported by the teacher to the Education Department, visited by a School Attendance Officer, and, if necessary, followed up in the usual way.

C.—Treatment of Defects of Nose and Throat (see page 58).

Altogether, 451 cases (of which 130 were brought forward from the previous year) were referred for treatment of defects of the nose and throat, mainly adenoids and enlarged tonsils. This treatment is not necessarily operative in every instance and only where the child shows signs of deafness, of marked nasal obstruction, or other serious defect an operation is advised.

Of the 451 cases, 325 cases received satisfactory treatment, 215 of these undergoing an operation. The remaining 117 will be dealt with in 1922, compared with 151 similarly brought forward from 1920 and treated this year.

The delay is mainly due to the fact that cases are kept under observation for a considerable time in order that we may ascertain that the condition is not a temporary one.

Our arrangements with the Warrington Infirmary (detailed in 1917 Report) include the operative treatment of all cases of enlarged tonsils or adenoids in school children referred by us and considered by the Surgeon to require it.

About six cases are referred to the Infirmary each week, and the work is carried out by Dr. Binns.

Out of the 215 cases receiving operative treatment during the year, 186 were dealt with at the Infirmary under our scheme and the remaining 29 by private practitioners.

After-Treatment of "Tonsil and Adenoid " Cases.

After the operation the child attends from time to time at the School Clinic, where nasal douching (see page 17) is performed in cases requiring it. As soon as the School Medical Officer thinks it advisable the child returns to the Infirmary to be seen by the operating Surgeon, and if he is satisfied the case is marked off.

A leaflet on breathing exercises for the child is given to the mother and she is informed of the importance of seeing that the child breathes through the nose. In addition, a notice is sent to the School informing the Head Teacher of the fact that the operation has been performed and asked that the child should be corrected for mouth breathing.

D.—Treatment of Dental Defects (see page 59).

The policy adopted for dealing with dental defects amongst school children in Warrington is for the Dental Officer to begin each year inspecting and treating the 6 to 8-year-olds. As soon as this group is finished he passes on to the higher age-periods, 8 to 9, 9 to 10 years, and so on, for the remainder of the year.

Age periods.	Dates.	Boys.	Girls.	Totals.
5 to 7 years 8 to 10 years 11 to 14 years Specials	Jan. 26th to April 18th Feb. 3rd to June 24th Sept. 26th to Dec. 23rd —	1518 2152 1848 535	1303 2241 1678 478	2821 4393 3526 1013
	the second s			11,753

The Dental Clinic established in 1912 was carried on as usual during the year.

Roughly speaking, each week's inspection in the schools is followed by two weeks' treatment at the Clinic to deal with the defects found.

In addition, all cases found by the Medical Officer at his Routine Inspections to require treatment are referred to the Dentist and receive attention.

Statistics showing the conditions found by the Dental Officer and the treatment undertaken at our Clinic, both for children attending the Public Elementary Schools and the Secondary School, will be found in the tables on page 59.

The following is the Report on the work by the School Dentist (Mr. Hutchison):—

TO THE EDUCATION COMMITTEE OF THE COUNTY BOROUGH OF WARRINGTON.

GENTLEMEN,

I beg to submit my Annual Report on Dental Inspection and Treatment for the year 1921.

The number of children inspected by me during the past year was 11,753. Of those children, 3,593, or 30.6 per cent., were found to have sound dentition, and 8,160, or 69.4 per cent., were found to have defective dentition.

The number on whose behalf parents desired free treatment at the Clinic was 5,865, or 71.9 per cent.; and the number whose parents declined treatment at the Clinic was 2,295, or 28.1 per cent

All the children presenting themselves at the Clinic received treatment.

It will be noticed that the number actually inspected for the past year is smaller; on the other hand, the number treated shows an increase of 300. I am pleased to emphasise this.

During the past year parents attending the Clinic with children for treatment have in many instances expressed their thanks verbally to me, and others have written letters of gratitude, which shows that this work is being appreciated.

Several very bad cases who refused treatment were followed up, reinspected, and requested to attend at the Clinic. The parents complied and the treatment was given, thus avoiding the necessity for further steps. Groups.

- 5-7. Children of this group required careful supervision, there being a large number of decayed temporary teeth which caused extensive Pyorrhœa; consequently extractions were numerous.
- 8-10. With regard to this group, on the whole I observed a distinct improvement, due no doubt to previous treatment having been given to the temporary and permanent teeth. There were some cases of very septic conditions of the mouth, causing foetid breath, anæmia and general debility of the child. These cases after special treatment showed considerable improvement.
- 11-14. There is steady progress here. The parents are being gradually enlightened as to the seriousness of neglecting the teeth. Advice given to the children and the care and attention which they have received on former occasions are showing good results.

SECONDARY SCHOOL.

- 11-18. The pupils of the above School were twice inspected during 1921. On the whole, I am satisfied that care is being taken in the brushing of the teeth and the cleansing of the oral cavity. I found that septic conditions and dental caries were not so pre
 - valent. Forty-one cases which required treatment attended at the Clinic.

It is interesting to note that several of the Head Masters of the Elementary Schools have informed me that there had been a great decrease in the number of children who complain of toothache during school hours.

I am, Gentlemen,

Your obedient Servant,

W. HUTCHISON

(School Dental Surgeon).

E.-Treatment of Uncleanliness.

The methods adopted for supervising the cleanliness of the children have been given in previous Reports, and in 1919 particulars of the treatment of cases of pediculosis of the head were detailed.

The percentage of children suffering from verminous heads given on page 6 does not represent the total found, but only those present at the Routine Inspections, because as soon as discovered such cases are excluded by the Teachers.

There is, however, for the year a most marked improvement in this respect in spite of the higher standard of cleanliness adopted. Such improvement is due : —

- (a) to the work of the School Nurses both at "Surprise" Visits and at the ordinary bi-weekly visit recently instituted for all schools;
- (b) the co-operation of the Teachers.

The system of surprise visits was described in the last Report.

The following are the particulars of the work done during 1921, exclusive of the 1,289 bi-weekly visits paid (see page 19):—

Number of Schools in the Borough Average number of visits per annum paid by Nurses	23
each School	 3
children during 1921	14117
Number of individual children found unclean	 560
Number found suffering from minor ailments	 247

The method adopted for remedying uncleanliness was detailed in the 1920 Report,

Legal Proceedings are taken when necessary under the School Attendance Byelaws.

If the child is not certified "fit" within 7 days the parents are summoned before the School Attendance Committee. This Committee warns and advises the parents and usually orders the case to be prosecuted for non-attendance at school if a further period of seven days elapses before the child is fit to be re-admitted into school.

In this connection during 1921 :--

Number of cases of Ped, Cap. sum	mon	ed bef	ore tl	ne Con	nmitt	ee	98
Number of cases prosecuted							4
Number of convictions obtained							3
Result of prosecutions :							
Fined 5/							2
Fined 2/6							1
Dismissed							1

F.—Treatment of all Other Defects.

The other defects found during the year requiring treatment and given in Table II. on page 54 were : —

Malnutrition				 41
Enlarged Cervical Glands (non-tu	ibercu	lar)	 4
Diseases of the Heart and	Circu	lation		 11
Bronchitis				 84
Tuberculosis-				
Lungs				 2
Chorea				 1
Other Defects and Diseases				 54
	Total			 197

All of these cases were satisfactorily treated during the year (see Summary, Table IV.). This does not necessarily mean that all cases were cured, and some may still be under treatment.

In the first instance, all the above cases are advised to receive treatment from their own doctor.

If the parents cannot afford to do this we assist them in obtaining a recommendation for attendance at the local Infirmary, or, if necessary, from the Poor Law doctors.

In a few cases, where the parents were unable to bear the expense and the child had to be taken to special Institutions in Liverpool or Manchester, they were assisted by the Guild of Help. All cases are ultimately re-examined by the School Medical Officer and only marked off the "follow-up" list when he is satisfied that no further beneficial results can result from treatment.

The miscellaneous defects shown in para. (l), page 10, are dealt with in a variety of ways:—Sore throats referred to M.O.H. (page 14), scarlet fevers admitted to Isolation Hospital, etc.

Malnutrition cases are kept in a special register and frequently re-examined, whilst all children suffering from or suspected to be suffering from **Tuberculosis** are referred to and kept under observation by the Medical Officer of Health.

During 1921 the following cases were examined at the Health Office, where a record was kept of their weight and the physical signs entered on a special chart:—

					No. of Cases.	No. of Examinations.
Tuberculosis	of	Lungs		 	 28	. 104
Suspected Tu			of Lungs	 	 33	101
Tuberculosis	of	Glands		 	 14	25
,,	.,	Ankle		 	 2	2
,,	33	Spine		 	 4	10
,,	,,	Hip		 	 8	19
,,	,,	Periton	leum	 	 2	4
**	,,	Knee		 	 1	1
,,	,,	Cheek	(Abscess)	 	 1	5
,,	,,	Hand		 	 1	1
					-	
					91	272

The need for a special institution for treating and educating many of these cases is fully recognised.

During the year under our general tuberculosis scheme negotiations in conjunction with neighbouring Local Authorities were entered into with the Managers of the Leasowe Special Tuberculosis Hospital for the use of a certain number of beds for Warrington cases.

The necessary accommodation could not be provided without the erection of additional buildings, the cost of erection of which could not be entertained for the time being, and the matter has been postponed.

When accommodation was available at our Sanatorium at Sankey selected cases were admitted for treatment. During 1921, two children of school age were thus dealt with. Although the new Sanatorium at Weaverham was opened in August, 1921, it was only found possible to use 30 beds out of the total of 80 which it is hoped to provide. As soon as sanction is received to the utilisation of our full accommodation, we will probably be able to admit certain cases of tuberculosis in school children requiring this form of treatment.

Eleven deaths occurred among children of school age from tuberculosis during 1921 (lungs 5, peritoneum 4, spine 1, hip 1).

9.-OPEN-AIR EDUCATION.

There can be no doubt as to the good results achieved from the education of tubercular and weakly children on strictly open-air principles, and if fresh air proves of such benefit to the ailing it must surely be of value to the healthy.

It is very desirable that more provision for open-air education should be made, and it is to be hoped that this will be taken into consideration in planning all the new schools.

There is at present for elementary school children in Warrington no open-air day or residential school, neither are there any open-air classrooms in connection with the ordinary schools.

So far as possible the teachers make use of the playgrounds and sheds as much as they can in the summer time in fine weather. In addition, there are the casual visits to the parks for Nature lessons.

10.—PHYSICAL TRAINING.

Reference was made to this subject in the Report for 1919. No Area Organiser has been appointed, and usually each teacher is responsible for his or her own class.

As far as possible every school child undergoes physical training for a period of twenty minutes each day. The syllabus is based on the Syllabus of Physical Training for Schools issued by the Board of Education in 1919. The Town Hall, Parks and Baths Committee have recently given permission for the use of Bank Park for organised games during school hours.

A number of Teachers have attended Summer Schools for Physical Training and thus become acquainted with the most recent methods of teaching the subject. The teachers have organised competitions in Football (Association and Rugby), Netball, Rounders, Hockey, and Swimming which take place outside of school hours and are participated in by all the schools.

11.-PROVISION OF MEALS.

It has not been found necessary during recent years to exercise our powers under the Provision of Meals Acts, 1906-14.

The last time that meals were provided for school children was in the year 1914.

The School Medical Officer approved of the suitability of the dietary and the general arrangements made, and in many instances selected the children.

12.-SCHOOL BATHS.

Baths were installed in two of the schools in the town—at Bolton Council School in 1913, and at Evelyn Street Council School in 1914.

For a fuller description of them, reference must be made to the Reports of those years.

Full use was made during 1921 of the facilities afforded, and great benefit would undoubtedly accrue to the children in other areas if bathing accommodation was provided.

	Bolton Council School.					Evelyn Street Council School.					
в	.	G.	Infts.	Total.	в.	G.	Infts.	Total.			
	1	Once	a week.			Once a	fortnight.				
20	0	136	69	405	180	125	54	359			

Very few objections are raised by parents to the children having the weekly bath, and in nearly all instances such objections are based not on the fear of any detriment to the child, but on the fact that the child's underclothing may be defective or uncleanly.

All children in attendance in those classes in which the average age of the scholars is between 11 and $11\frac{1}{2}$ years attend the public swimming baths during school hours.

These children attend twice each week for a period of about eight weeks, but no child is allowed to attend who is suffering from any physical defect which would result in exposure of either himself or other children to undue risks.

The lessons cover a period of 25 to 30 minutes each. During the past year 414 boys and 252 girls received instruction in swimming, but the Baths were closed for over half the season owing to the shortage of fuel. During a full normal season about 950 boys and 600 girls will receive the instruction.

13.-CO-OPERATION OF PARENTS.

In the majority of cases the parents act at once on the advice offered and co-operate willingly in obtaining adequate attention for their children.

It is noteworthy that during 1921, 7,662 cases of defects and minor ailments received satisfactory treatment, and only in 39 instances was it necessary to take the cases before the School Medical Service Committee in order to obtain the desired result.

Committee Cases and Prosecutions.

Only as a last resort are parents summoned to appear before the School Medical Service Sub-Committee. During 1921 this was found necessary for the following cases : —

Enlarged	nsiis				 	 8
Adenoids		1999 3	. 44. 47	de	 	 6
Squint	 				 	 1
Chorea	 			`	 	 1
						39

One parent was prosecuted for failure to provide spectacles for a child for whom a prescription had been given. The magistrates adjourned the case, which was afterwards withdrawn, as the parent, in the meantime, had paid the cost of the spectacles and the cost of the summons.

The steps taken for dealing with cases of uncleanliness are given on page 26.

14.-CO-OPERATION OF TEACHERS.

The success of the work of the School Medical Service is due in large measure to the help given by the Teachers who co-operate, almost without exception, both willingly and usefully at medical inspections and in the treatment and aftercare of the children. This has been even more evident during 1921 than previously, owing to the adoption of the system of bi-weekly visits of the Nurses to the schools. Without the ready assistance of the Teachers this would not have proved the success that it has.

15.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

I have alluded in previous years to the useful services of the School Attendance Officers and need only repeat that they have again rendered every assistance possible to our Department.

16.—CO-OPERATION OF VOLUNTARY BODIES.

The branches of voluntary organisations in the town, such as the Guild of Help, National Society for the Prevention of Cruelty to Children, National League of the Blind, work in close co-operation with the School Medical Department, and advantage is taken of their services in all cases in which their help is likely to be effective.

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

Arrangements are made for a special examination by the School Medical Officer at the earliest possible date of any child suspected of being defective in any way.

There are as yet no special schools in the Borough, but all the blind or deaf children found suitable are admitted to institutions in neighbouring districts.

Our method of supervising the various defective children in the area has been described in detail in previous Reports. Registers are kept of all mentally and physically defective children in the town in attendance at school or unable to attend school as the case may be, and the children are re-examined several times during the year by the School Medical Officer.

A summary of the exceptional children in the area is given on page 27 of Report for 1919 (see also Table III., page 55).

Mental Deficiency Act, 1913.

The following cases were notified to the Local Control Authority (in the case of Warrington—the Lancashire Asylums Board) by the Local Education Authority during the year 1921:—

	Boys.	Girls.	Total.
Feeble minded	1	-	1
Imbecile	. 4	3	7
Idiot	-	2	2
Total	5	5	10

18.-NURSERY SCHOOLS.

There are no nursery schools in the area.

19.—SECONDARY SCHOOL.

All the children attending the Secondary School are medically examined once each year. In addition the School Doctor visits once each term to re-examine certain children and to see any special cases.

The medical inspections being made at the end of the year for reasons given in my last Report any defects found may not receive treatment before the 31st December, and our statistics for defects found and defects treated are not always comparable.

However, our experience shows that there is no difficulty in inducing the parents of children attending this school to obtain at once adequate treatment for any defect to which we draw their attention—in other words, 100% of all defects found receive satisfactory treatment.

The Board's schedule card is used in every instance and the examination made is a thorough one.

During 1921 there were examined at the Secondary School (see Table I.): —

Boys	 	 	146
Girls	 	 	164
			310

Malnutrit	ion	 	 	 	1
Scabies		 	 	 	1
Eczema		 	 	 	2
Defective	Vision	 	 	 	16
Enlarged	Tonsils	 	 	 	3
					23

The defects found requiring treatment were :-

In addition, four cases of functional disorder of the heart were found which, though not requiring treatment, were kept under observation.

As regards the nutrition of the 310 children, the classification was as follows :---

Girls Boys		 Above Normal. 28 8	Normal. 115 135	Below Normal. 20 3	Markedly Defective. 1
	Total	36 1.6%	250 80.6%	23 7.4%	1 .3%

Records of the cases treated are given in the tables at the end of the Report and the result of dental inspection and treatment on page 59.

20.-CONTINUATION SCHOOLS.

When established it is proposed to extend our present system of medical and dental inspection and treatment to the Continuation Schools.

21.-EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

(See also page 38.)

Some remarks on this important subject were given in the 1920 Report, and the following particulars are supplementary: —

Section 13 (1) (ii) of the Education Act, 1918, came into operation on the 1st April, 1920, and an Employment Officer was appointed.

The Bye-laws dealing with the Employment of Children and Street Trading were confirmed by the Home Secretary on the 11th July, 1921. As soon as possible after the confirmation of the Bye-laws, shopkeepers and all persons likely to be affected were notified by the Director of Education that the Bye-laws had come into force and 1,100 notices were served by the Employment Officer, who also distributed a resumé of the Bye-iaws, and where necessary personally explained their effect. Full copies of the Bye-laws were issued free of charge to all applicants. The following shows the number of children who have been licensed by the Education Department since the approval of the Bye-laws and the total number holding licences on the 31st December, 1921:—

Employment of children 207 Number withdrawn 26	Street Traders 69 Withdrawn 22	
In force on the 31st Dec., 1921	In force 31st December, 1921 —	

Where children have been found to be contravening the Bye-laws, the Employment Officer has in the first case verbally warned the employers and the parents, and if a further cause for complaint arose the Director of Education has sent a letter of warning. When further action was necessary the cases have been considered by the School Medical Service Committee.

The following are the particulars of the cases prosecuted :

Street Trading-1	Fined 1	0/	 			 	1
	1	5/	 			 	3
				Total		 	4
Employment of C	hildren			 yment	of		3 1
				Total		 	4

The School Medical Officer has been asked to examine only those children who are apparently unfit for employment. Two cases have been examined (1 Street Trading and 1 Employment of Children), and in both cases the children were reported fit for employment.

In all cases where children are employed out of school hours the Teachers are notified and asked to report any signs of lassitude or debility, &c., in order that the Medical Officer may re-examine the cases with a view to determining that the occupation is not deleterious.

No children have been prohibited from employment during the year under Section 15, Education Act, 1918.

22.—SPECIAL INQUIRIES.

The effect (if any) of the Daylight Saving Act on the health of school children.

In response to a request from the Chief School Medical Officer of the Board of Education (Sir George Newman), the following report was submitted on the above subject :--- In considering the question of the effect, if any, of the Daylight Saving Act on the health of school children, it is evident at the outset how difficult it is to obtain any reliable statistics as a basis upon which to work.

It must be remembered that the social condition of the child has changed considerably in the last few years, and that it is not easy to attribute to any one change any alteration that might be evident in the physical condition. For instance, practically the whole of the time that the Daylight Saving Act has been operative, the working classes have been receiving comparatively high wages. The improvement in dietary consequent on this has had a beneficial effect on the child which may have masked to some extent any deleterious factors at work.

Again, the hours of labour in recent years have been shortened, and a later start made at work in the morning. In many instances the household has therefore not been disturbed at so early an hour, which to some extent must compensate for any loss of sleep the night before.

Also, just at the time when attention is being focussed on this inquiry, the country is faced with a period of unemployment, of which the effect upon the child must not be overlooked.

(1.) Evidence of loss of sleep.

It is not possible to obtain any reliable evidence of loss of sleep among the school children as a direct consequence of the Act. The replies received from parents and children on the matter are most unreliable, although probably not intentionally so. It is true that children play about to a late hour in the parks and recreation grounds and in the streets because it is light, but there is nothing to show that if they were in their homes they would be in bed.

In fact, in this area, both in winter and summer, the majority of children go to bed when the parents do. If this is so, there is no reason why the children should obtain less sleep during the operation of the Daylight Saving Act than at other times.

The improvement in the financial position of the working classes of late years has enabled them to spend much more money on recreation than formerly, and there are few families that do not attend one or more houses of entertainment during the week, very often taking the children with them. At any rate, the younger members of the family stay up at night waiting for the adults to return.

On the other hand, the earlier closing of public-houses in recent years has had considerably more effect in many instances in enabling the family to retire to rest at an earlier hour than formerly.

Opinions seem to differ very much as to whether school children go to bed any later than usual. Out of 47 teachers interrogated on the matter, 71 per cent. thought that the Daylight Saving Act had made no difference at all, whilst the others thought that the children were at present obtaining less sleep.

It is a fact, however, that our Health Visitors often find the younger children of the family in bed later in the mornings now than they used to, the parents offering as an excuse that the child can't get to sleep owing to the light evenings or to the noise made by the other children in the neighbourhood playing in the streets until a late hour.

(2.) Signs of fatigue at school, and effect on response to general instruction.

Out of 47 teachers who were questioned, only 34 per cent, thought that the children were now more listless in school first thing in the morning. It must be borne in mind that we have always found that there were signs of more fatigue in the summer than in the darker months, quite apart from the operation of the Daylight Saving Act. Practically no difference has been found in the punctuality or regularity in attendance of the pupils as a result of the Act. There has been, if anything, a little increase recently in the number of children who have been late, but this is mainly accounted for by the fact that late rising is more common in many households at present owing to unemployment not necessitating the wakening of the working members of the family.

(3.) Evidence of loss of weight and general nutritional defects.

No evidence of any deleterious effect on the physical condition of the child as a result of the Act has been found by the School Medical Officer. The general nutrition of the children in recent years probably reached a higher level than before owing to better feeding. The general physical appearance is probably better, especially in the case of the girls.

(4.) General.

There appears to be no evidence that the operation of the Summer Time Act has had an injurious effect on the health of the school children in this area. At the same time one would not recommend any extension, the proposal that the clock be put forward two hours instead of one is undesirable.

I am inclined to think that in certain cases, especially among the children of the younger age groups, there may be some loss of sleep as a consequence of Summer Time, but it is entirely a question of parental responsibility. The suggestion that schools should begin at 10 a.m. instead of 9 a.m. would not improve matters, but probably the reverse. At any rate, it would be impracticable in a large industrial town unless hours of labour were also altered to meet it, as the children have frequently to carry dinners at mid-day to the place of employment for working members of the family.

(5.) Some steps that might be taken to prevent any injurious effects of the Act are:-

- (1.) Instruction of parents by leaflets, Press notices, &c., warning them of the necessity for securing an adequate amount of sleep for children, the necessity for darkened, well-ventilated sleeping accommodation, &c.
- (2.) Byelaws prohibiting the attendance of children of school age at places of amusement after 9 p.m. (i.e., after the first performance).
- (3.) Stopping of unnecessary street noises (such as those caused by children playing after a certain hour) if necessary by police action, or even prohibition of playing in the streets after 9 p.m.

G. W. N. JOSEPH.

15th June, 1921,

II.--AN INQUIRY INTO THE OCCUPATIONS OF CHILDREN ON LEAVING SCHOOL.

Introduction.

The question of the employment of children, both before and after leaving school, has very necessarily obtained much greater prominence of recent years. The powers of Local Education Authorities in supervising forms of employment of children have been considerably widened under the Education Act, 1918. In addition, a further enactment—The Employment of Women, Young Persons and Children Act, 1920—dealing with the matter came into operation on the 1st January, 1921. Still more recently Lord Chelmsford's Report upon an Inquiry into Juvenile Employment has again drawn the attention of Education Authorities to the importance of the subject whilst inviting them to consider the advisability of exercising their full powers under the Choice of Employment Act, 1910.

With a view, therefore, to obtaining some information about the different forms of employment in which children become engaged on leaving school, the following inquiry was conducted in Warrington towards the latter end of 1921.

The object was to elicit as far as possible facts regarding the effects physically and socially on children—to discover, for instance:—

- (a) whether children with certain physical defects were engaged in suitable or unsuitable occupations;
- (b) whether the children have contracted illness or developed defects through certain occupations;
- (c) the reasons why children who are healthy and mentally bright become unskilled workers.

A special inquiry card was printed and full details under the various headings were required in the case of every child who left the elementary schools during the year.

In order to secure as much uniformity as possible, a memorandum of instructions was drawn up showing some of the main points, and this was distributed to all the visitors taking part in the inquiry.

The school nurses, health visitors and sanitary inspectors were all engaged in the work, and I must specially thank Mr. Snailham, Mr. Stevens and Miss Pettie for their assistance in summarising the particulars obtained.

A "questionnaire" was sent to all the principal firms in the town, and I would like to acknowledge here my indebtedness to them, for, without exception, every employer who was approached willingly supplied us with all the information at his disposal.

A.-The Leavers.

All the children who left the public elementary schools during the year 1919 were selected for the inquiry. They were a total of 1,428, made up as follows:—

(a) Children exempted by the Education Authority	dales.	Females.	Total.	
before the age of 14 years		344	728	
(b) Children who left at the age of 14 years (non-exempted)	334	366	700	
. Total	718	710	1,428	

The medical record of each child was traced and it was found that about 28.5% had suffered from certain defects, all of which practically had been remedied before the child left school.

Although it was not possible to obtain a return from the Certifying Factory Surgeon (Dr. E. E. Bowden) of the number of children examined by him and of the number of defects found during 1919, he states that only on rare occasions were children rejected on medical grounds, and then generally on account of defective vision, which had been corrected by spectacles at school, but which were not being worn by the child when presented for examination.

The Chief Occupations in Warrington.

Warrington is an almost entirely industrial community, the staple trades being the manufacture of iron in various branches and tanning; but a remarkable number of other businesses exist, *e.g.*, soap-making, velvet-cutting, glass-making, and file-cutting. There is only one cotton mill.

Nature of Manufactures, &c.

- 1. Wire Manufacture-Wiredrawers, weavers, winders, etc.
- 2. Iron and Steel-Puddlers, rollers, labourers.
- 3. General Engineering—Iron moulders, erectors, fitters, turners, blacksmiths and labourers.
- 4. Gas Stove and Fire Range Manufacture—Fitters, grinders, labourers, etc.
- 5. Toolmakers-Die-makers, file-cutters, gauge-makers.
- Building Trade and Construction—Carpenters, bricklayers, masons, painters, plumbers, labourers.
- Soap, Oil, Grease and Resin Manufacture—Soap boilers, packers and general workers—labourers.
- 8. Tannery Works-Skin and leather workers.
- 9. Workers in Breweries and Distilleries.
- 10. Paper, Printing and Stationery-Printers, bookbinders, paper, box and bag makers.
- 11. Brick, Cement and Glass Workers.
- 12. Cotton Weaving, Spinning and Velvet-Cutting.
- Bakeries, Boot and Shoe Repairers, Cloggers, Dressmakers, Milliners, Tailors and others.

In all, there are 225 factories and 205 workshops.

At the census in 1911, 23,795 males and 8,045 females were engaged in these occupations.

THE OCCUPATIONS OF THE CHILDREN WHO LEFT SCHOOL IN 1919.

The following tables show the occupations in which children were engaged on leaving school; also the present occupations with percentage of total children in that group:--

				MA	LES.			
		Exem	PTED.			Not E:	CEMPTEI	o.
	First Occupation.		Present Occupation.		First Occupation.		Present Occupation	
Wire Workers Errand Boys Iron Workers Miscellaneous Jobs Junior Clerk Tannery Workers Glassworkers Shop Assistants Bakers, &c Boot Repairers Printing Trade Motor Repairer, &c Rubber Worker Leather Belt Maker Out of Work Soap Worker Fire Clay Worker Butcher Left Town, &c Tinsmith Painter &c. Hairdresser Basket Maker General Labourer Clock Repairer Railwayman Dead	No. 160 59 45 23 12 10 10 9 7 6 6 5 5 3 3 2 2 2 2 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{c} \% \\ 40.6 \\ 15.1 \\ 11.7 \\ 6.1 \\ 2.6 \\ 2.3 \\ 1.8 \\ 1.5 \\ 1.5 \\ 1.3 \\ 1.3 \\ 7 \\ .7 \\ .5 \\ .5 \\ .5 \\ .5 \\ .5 \\ .5 $	No. 125 29 85 8 12 14 8 6 14 5 6 4 5 6 14 5 6 14 3 2 15 1 3 2	% 32.5 7.5 21.8 2.08 3.1 3.6 2.08 1.5 3.6 1.3 1.5 1.04 1.3 1.5 2.66 6.1 1.04 1.3 1.5 2.66 6.1 1.04 1.5 3.9 2.5 7.5 2.5 3.9 2.65 7.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2	$\begin{array}{c} \mathrm{No.} & 87 \\ 43 \\ 59 \\ 2 \\ 14 \\ 9 \\ 15 \\ 5 \\ 7 \\ 1 \\ 2 \\ 2 \\ 3 \\ 3 \\ 4 \\ 14 \\ 3 \\ 1 \\ 20 \\ 3 \\ 3 \\ 15 \\ 2 \end{array}$	$\begin{array}{c} \% \\ 26.0 \\ 12.8 \\ 17.6 \\ .6 \\ 4.1 \\ 2.6 \\ 4.4 \\ 1.4 \\ 2.0 \\ .3 \\ .6 \\ .9 \\ .9 \\ .9 \\ 1.1 \\ 4.1 \\ .9 \\ .3 \\ 6.0 \\ .9 \\ .9 \\ .9 \\ 4.4 \\ .6 \end{array}$	No. 51 19 76 11 7 17 14 1 10 3 2 2 13 4 28 8 2 1 19 3 9 1 12 2	% 15.2 5.6 22.7 3.2 2.0 5.0 4.1 .3 3.0 .9 .6 .6 3.8 1.1 8.3 2.3 .6 .3 5.6 .9 2.7 .3 3.5 .6
Building Trade Student Coopers, &c Electrician Gas Stove Worker	2	.5	3	.7	4 5 8	$1.17 \\ 1.4 \\ 2.3$	3 2 5 7 2	.9 .6 1.4 2.4 .6
Total	384		384		334		334	

	FEMALES.								
	Ex	EMPTED	FEMAL	ES.	Not	Exemp	ted Fe	MALES	
		rst pation.		sent oation.	Fi Occup	rst ation.	Pres Occup		
	No.	%	No.	%	No.	%	No.	%	
Cotton Workers	136	39.5	122	35.4	58	15.8	53	14.4	
Iousehold Duties	**	16.8	59	17.1	48	13.1	47	12.8	
Sewing Machinist	22	6.3	17	4.9	19	5.1	10	2.7	
Errand Girl Shop Assistant	18	5.2	2	.5	7 19	$1.9 \\ 5.1$	7 23	1.9 6.2	
Velvet Cutter	18 16	$\frac{5.2}{4.6}$	17 22	4.9 6.3	21	5.7	19	5.1	
Baking Trade	13	3.7	4	1.1	9	2.4	7	1.9	
Dressmakers, &c	13	3.7	7	2.0	17	4.6	13	3.5	
Paper Bag Makers	11	3.1	17	4.9	15	4.0	12	3.2	
Vireworkers	8	2.3	5	1.4	11	3.0	3	.8	
Cannery Workers	5	1.4	4	1.1	5	1.3	3	.8	
Printing Trade	4	1.1	5	1.4	11	3.0	9	2.4	
aundry Workers	4	1.1	1	.29	2	.5	4	1.0	
temoved, &c	4	1.1	7	2.0	20	5.4	20	5.4	
urniture Manufacturer	3	.8	2	.5					
ard Box Maker	3	.8	11	3.3	21	5.7	23	6.2	
llerk Nurse Girl	22	.5	7	2.0	6 2	1.6	15	4.0	
Carthenware Tile Trade.	1	.5 .29	22	.5 5	22	.5	32	.8	
Sycle Repairer	1	.29	-	9		.0	-		
ilecutter	î	.29	3	.8	4	1.0	7	1.9	
Rubber Worker	1	.29	2	.5	8	2.1	2	.5	
ron Worker			4	1.1	3	.8	3	.8	
Soap Packer			6	1.7	32	8.7	31	8.4	
Out of Work			11	3.3	5	1.3	36	9.8	
Hassworker			1	.29					
Bassinette Worker			1	.29					
Vaitress			1	.29					
liscellaneous Jobs			2	.5	5	1.3	8	2.1	
Student					13	3.5	3	.8	
Dead					3	.8	3	.8	
Total	344		344		366		366		

It will be seen that a large number of the children have changed their occupations since leaving school, altogether 439 males (61%) and 378 females (53%) out of the total leaving.

Out of 728 exempted children, 227 males (31%) and 198 females (27%) changed.

Out of 700 non-exempted children, 212 males (30%) and 180 females (25%) changed their occupations.

Of the exempted children, 23% of males and 19% of females changed their occupations before the age of 14 years.

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FEMALES

The chief reasons given by the parents for the changes were:—(a) better wages; (b) dislike of the work; (c) work unsuitable, e.g., noise of machinery or heat in works; (d) leaving domestic service or household duties and going into industrial occupations; (e) leaving the town; (f) trade depression.

The foregoing tables will be of more interest when compared with the total persons employed in these various industries as shown from the census figures of 1921 when published.

It is evident, however, that most of the boys take up wire-working on leaving school.

More exempted boys remain as errand boys than do non-exempted boys at the end of two years.

More of the exempted boys become general labourers later on than at first, whereas among the non-exempted some of those who begin with this class of work had given it up at the time of inquiry.

Comparatively speaking, the number out of work in December, 1921 (a period of great unemployment) was small (3%), and the proportion in both groups exempted and non-exempted was practically similar.

The following are the numbers of children at present engaged in indoor and outdoor occupations:---

 Number engaged in indoor occupations
 1124 or 78%

 Number engaged in outdoor occupations
 136 or 9%

 Number engaged partially indoor and outdoor occupations
 12 or 0.8%

 Number at present out of work or left the town, etc.
 156 or 10%

The following table shows the number of children engaged in skilled, semi-skilled and unskilled occupations at the present time:--

	Sk	illed.	Semi	-skilled.	Uns	skilled.		d or left town.	Total.	App	rentices
Exempted Children	99	25.7%	71	18.4%	211	54.9%	3	0.7%	384	69	17.9%
Left School at the age of 14 years.	107	32%	101	30.2%	108	32.3%	18	5.3%	334	83	24.8%
Totals	206	28.6%	172	23.9%	319	44.4%	21	2.9%	718	152	21%

MALES.

Skilled Workers.

In addition to those apprenticed to a particular trade, the following occupations have been included, *e.g.*, clerks, skilled ironworkers, skilled foundry and selected tannery workers:---

Notes.

Out of 718 boys, 152 or 21% were apprenticed to trades, but a further 54 boys, although not apprenticed, are engaged in skilled work, so that 206 or 28% are classified under this head.

The parents of 44 boys stated they intended or would like to give their boys a skilled trade, but as these boys are now practically 16 years of age it is doubtful if they will succeed. With the exception of wiredrawers, the apprenticeship age for skilled trades generally is between 14 and 16 years of age, but a number of employers prefer boys between the ages of 15 and 16 years. Consequently many boys temporarily obtain work of an unskilled nature and receive a fairly high wage. This particularly applies to exempted boys who leave school at 13 years of age.

When the time comes for them to transfer to an apprenticeship they and their parents are reluctant to accept the lower rate of pay. Consequently whilst their earlier intention was to take up a trade this has not ultimately been carried out.

Parents and boys frequently fail to realise that a temporary sacrifice in early life will be compensated later on.

The old indenture system of apprenticing boys to trades appears to have almost become obsolete except in the case of premiumed apprenticeships. The system had the advantage of ensuring the boy completing the recognised period of training, which was usually when he arrived at the age of 21 years. At the same time it enabled the master to recoup himself in the later years of the boy's apprenticeship for any losses or mistakes made by the apprentice in the earlier years.

In cases where no premium is paid, apparently there is no guarantee that the boy will be taught the trade, for not only does the boy leave when he chooses, but the employer, if business is slack, in certain instances discharges the apprentice.

In the early days of the war there was an outcry against apprentices being taken for military service and many were exempted, but later practically all physically fit were compelled to serve. Probably to some extent war conditions assisted in abolishing the indenture system, but the change has apparently been slowly taking place for a number of years.

Semi-Skilled Workers.

Included are those who are engaged in occupations which require a certain amount of skill, but to which an apprenticeship is not served, *e.g.*, wire-weavers, winders, nail-makers, rubber workers, shop assistants, motor drivers, certain iron workers, foundry and tannery workers.

Out of 718 boys, 172 or 24% are in this class. Wire-weavers, winders and wire workers are included because a certain number may become apprenticed to wiredrawing between the ages of 16 and 18 years of age; also certain ironworkers and foundry workers may become skilled workers, such as puddlers, rollers, moulders, etc., but there is no guarantee; this will depend upon trade conditions, vacancies occurring, the boy's intelligence and conduct.

Unskilled Workers.

Are those engaged as manual workers, *e.g.*, labourers in ironworks, foundries, wireworks, tanneries, outdoor occupations, errand boys, without any prospects.

There are 319 or 44% classified as unskilled workers. This is possibly due to the fact that the trades in Warrington generally demand a large proportion of this class of labour in ironworks, wireworks, soapworks, breweries, tanneries, etc.

In this figure are those out of work at present, but who will possibly always belong to this class.

Lack of guidance is undoubtedly the cause of a large number of bright boys selecting unskilled work.

Francial	Sk	illed.	Semi	skilled.	Uns	killed.	0.000	or left town.	Total.	Appr	entices
Exempted Girls	24	6.9%	222	64.5%	93	27%	5	1.4%	344	17	4.9%
Girls left at 14 years of											
age	36	*9.7%	206	56.5%	100	27.3%	24	6.5%	366*	15	4%
Totals	60	8.4%	428	60.2%	193	27.2%	29	4%	710	32	4.5%

* 3 of these are still at schools training.

Notes.

Skilled Workers.

In addition to those who are apprenticed to a particular trade, clerks have been included. The apprenticeship period is usually about two years. Out of 710 girls, 32 or 4.5% are apprenticed to trades, a further 28 girls have been added whose occupations are considered skilled work, making a total of 60 or 8.4%. The parents of a further 27 girls stated they intended or would like the children to have a skilled occupation.

Semi-Skilled.

These include cotton weavers, spinners, winders, carders, sewing machinists (shirt and blouse makers), velvet cutters, cardboard box makers, paper bag makers, section of printing trades, certain shop assistants, machine file and tool makers, rubber workers, wire weavers and winders, bakers, laundry and soap workers.

Out of 710 girls, 428 or 60% come under this head.

Although in such work as cotton weaving, spinning, winding, etc., and wire weaving, there is a short period of probation, approximately about six months, the employees may have to continue as helpers or assistants indefinitely until vacancies occur.

Velvet cutters also serve a period of probation. Practically all these semi-skilled workers are engaged at piece-work rates when they become efficient.

Unskilled Workers.

Out of 710 girls, 193 or 27% are classified as unskilled workers.

These are chiefly those engaged in household duties, errand girls with no prospects, girls engaged in bazaars or market stalls, nurse girls, a large section of girls engaged in soap packing, and those out of work who have no prospect of skilled employment,

FEMALES

MENTAL ABILITY OF CHILDREN ENGAGED IN THE VARIOUS OCCUPATIONS.

The mental condition of the children as assessed by the School Medical Officer and the Teacher and recorded on the School Medical History Cards was considered.

The number of mentally bright boys in the two categories exempted and non-exempted is shown in the following table, with the proportions who became skilled workers:—

	Total men- tally bright.	Skilled workers.	Number of apprentices among these skilled workers.	Semi-skilled & unskilled.
Exempted Children Children who left School	137	48 or 34%	33 or 24%	89 or 66%
at 14 years of age	122	52 or 42%	45 or 36%	70 or 58%
Totals	259	100 or 38%	78 or 30%	159 or 61%

Of the boys classed as mentally bright, 38% are engaged in skilled occupations, although only 30% are apprenticed.

The proportion of exempted children (34%) who ultimately obtain skilled work is lower than the proportion of non-exempted children (42%).

The enquiry only deals with children leaving the elementary schools, and in addition probably 100 children left the Grammar School, the Secondary School, and the various commercial schools during the year. These children, with a higher standard of education, would often have preference in obtaining the more skilled occupations.

THE INCIDENCE OF ILLNESS AND ACCIDENTS.

The following table shows the percentage of those leaving school in 1919 who were ill or met with accidents from the time of leaving school up to date of inquiry:—

	MA	LES.	FEMALES.		
	Exempted.	Left at 14 years.	Exempted.	Left at 14 years.	
Sickness of various kinds Accidents ,, ,, Dead	4.7% 2.3% 0.3%	7.4% 0.9% 1.2%	8.1% 	9.8% 0.5% 0.5%	
Totals	7.3%	9.4%	8.1%	10.8%	

The defects, as revealed at the last medical inspection of the child at school and the number who suffered from illness after commencing work are shown as follows:--

Exempted Chi	Idren	•		Childre	n leavi	ng at 14 years.
Nature of defects.	Num- ber.	Num- ber ill.	Percentage of defects.	Nub- ber.	Num- ber ill.	Percentage of defects.
Defective Vision Tonsils Adenoids Malnutrition Enlarged Thyroid Weak Chest Undersized Rickets Heart Glands Mentally Defective Anæmia Nasal Obstruction Defective Speech Aural Discharge Psoriasis	21 12 1 2 6 1 2 8 2	5 4 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0	10.4% 17.3% 4.7%	$\begin{array}{c} 44 \\ 7 \\ 5 \\ 13 \\ 2 \\ 3 \\ -1 \\ 3 \\ 3 \\ 1 \\ 1 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	1 2 1 3 1 1	2.2% 28.5% 20% 23% 50% 33.3%
Deafness Totals	1 132	0	8.3%		10	11.9%
NIL (i.e., no medical defects found at school)	252	17 or	7.1%	250	18 or	7.2%

MALES.

Freedord Obilder

There appears to have been only a small amount of sickness, etc., during the period of employment. The lowest percentage is among the exempted children, both male and female.

This may to some extent be accounted for by the fact that children who were granted exemption had been able to attend school regularly; on the other hand a number of those leaving school at the age of 14 years have suffered from defects which have prevented regular attendance at school, and consequently exemption would not be granted.

Again, the period of work, *i.e.*, from 1919 to December, 1921, has been short, and the effect of the work on the physical condition of the child may not have become evident. During this period there has been a considerable amount of short time owing to depression in trade, and the physical strain on the child has proportionately been reduced.

The incidence of disease is apparently not much heavier among the exempted children who were found to be defective at school than among those who were quite normal, and this is especially so among the exempted children—8.3%, compared with 7.1%. At the same time, as the difference is more marked among the non-exempted—11.9%, compared with 7.2%—it seems to point to the fact that when defects are treated satisfactorily during school life the child is no more handicapped afterwards than the normal child.

The exempted children are in all cases children who have been satisfactorily treated for the defect, otherwise exemption would have been refused; whereas occasionally certain children of the other class may leave school before the defect has received attention.

The results obtained concerning the girls were somewhat similar and the table is not published, but there was not so striking a relationship between the children who had suffered from defects and those who had not.

The following table shows the occupations in which the children were engaged at the time they were ill or received injuries:—

M	Δ.	Е	. 14	а,	с.	
	en.	۰.		**	2	•

FEMALES.

Occupations.	Exempted children.	Children leaving at 14 years of age.	Occupations,	Exempted children.	Children leaving at 14 years of age.
Wireworkers : Labourers, nail- makers, winders, &c Errand boys Ironworks labourers Foundry workers Boot repairers Iron moulders Fitters' apprentices Glass worker Bakers' assistants Plumber's apprentice	children. 16 11.1% 3 6.8% $\begin{cases} 1 \\ 4.6\% \\ 2 \\ - \\ 1 \\ 1.5\% \\ - \\ 1 \\ 12.3\% \\ 1 \\ 16.6\% \end{cases}$		Cotton workers Cardboard box makers Shop assistants Baking, &c., trades Domestic servants Household duties Sewing machinists Dressmakers, &c Soap workers Velvet cutters Gas stove and iron- works workers	children. 8 6.2% 1 14.2% 2 11.7% 3 33.3% } 5 8.6% 4 21% 1 5.2%	
Electrician French polisher Tool maker Tannery worker Clerk Printer's apprentice Dead	1 		Wardmaid Wireworkers Errand girl Rubber workers Tannery workers Bookbinder Paper bag maker Dead	1 16.6% 1 10% 	
Totals	28	32		28	39

The above percentages are worked out on the total of those who left school in 1919 and engaged in the particular occupation.

SOME REASONS WHY CHILDREN TAKE UP PARTICULAR FORMS OF OCCUPATION.

Some of the reasons elicited as to why children who are healthy and mentally bright drift into unskilled occupations are shown in the next table:—

D	<i>(</i>)	7.7	6.0	
B		1	-	
	20		20	

Causes.	Exempted	children.	Children leaving at 14 years.		
	Percentage of unskilled workers.	Percentage of those leaving school.	Percentage of unskilled workers.	Percentage of those leaving school.	
Family income Parents' indifference	33.5% 35.0%	18% 19%	25.9% 52.8%	8.3% 17.1%	
Trade depression Death of one of	12.3%	6.7%	12.9%	4.0%	
parents	9.8%	5.2%	3.8%	1.2%	
Health reasons and other causes	9.4%	5.2%	4.6%	1.5%	
Total percentage	100%	54.1%	100%	32.1%	

The table for girls is somewhat similar.

Remarks.

Boys.

Family Income.

It was difficult during the enquiry to ascertain the full financial circumstances of the homes. At the time when these boys left school, *i.e.*, 1919, trade was good and there was a great demand for boy labour at a fairly high rate of pay.

This demand for labour and the rate of pay must have influenced parents to apply for exemption of their children from school.

It was, however, also apparent that family income plays by no means so important a part as parental indifference in determining the boy's future career; whilst in some instances parents attributed the fact that the boy was not in a skilled occupation to the necessity for immediate high wages, the real reason was evidently insufficient effort on the part of parents to find more suitable employment.

Parents' Indifference.

There is a large amount of parental indifference especially in the case of boys, and this is more noticeable in the homes of the labouring classes. A father who is himself a labourer is content to allow his son to drift into the same class of work. This must have been particularly so during the year under review, when the remuneration of labourers in many classes of work was only slightly below that received by the skilled artisan. Again, a number of parents leave the boy to his own resources. This was frequently commented upon by the visitors. In many cases the only interest taken by the parents appeared to be concerning the amount of money the boy could earn.

In some instances, on the other hand, the parents had obviously placed the boy in an occupation entirely against his own inclination, *e.g.*, boys engaged in offices when they strongly desired manual work.

Trade Depression.

Trade depression has played a small part in boys becoming unskilled workmen. Some parents, anxious to give their boys a trade, were unable to obtain the necessary opening. In other instances, boys who had commenced to work at a trade were discharged or suspended, and after being out of work for a time had to accept the first available occupation.

Girls.

The foregoing remarks apply generally to boys and girls. It must be borne in mind that there are fewer openings for girls than boys, and a smaller number of skilled but a greater number of semi-skilled trades.

A number of girls are kept at home to assist the mother, particularly where there are large families or the mother's health is not robust.

Again, many parents do not attach much importance to girls learning a skilled trade owing to the fact that on marriage they will be employed in their own homes and not as wage-earners.

The following table shows the number of instances where the occupations in which the boy or girl is at present engaged was selected or accidentally obtained:

	MA	ALES.	FEMALES.			
	Selected.	Accidentally obtained.	Selected.	Accidentally obtained.		
Exempted children	170 23.6%	186 25.9%	205 28.8%	139 19.5%		
Children who left school at 14 years of age	181 25.2%	102 14.2%	193 27.1%	79 11.1%		
Totals	351 48.8%	288 40.1%	398 56%	218 30.7%		

Out of 718 males :- 48% selected their occupations;

- 40% accidentally obtained their present occupations;
- 11% are at present out of work, left the town, dead or unable to work.

Out of 710 females :- 56% selected their present occupations;

30% accidentally obtained their occupations;

13% are at present engaged in household duties, out of work, left the town, or dead.

Conclusions.

Many further particulars not published here were obtained and summarised.

Much interesting information with regard to average numbers of children (male and female) employed in various processes, average annual vacancies, average rate of pay on entrance and at 16 years and at 21 years, welfare work, etc., was elicited, but with the time and staff at our disposal it has been found difficult to go as fully into the matter as one could wish.

One thing, however, is abundantly manifest, and that is, that after all the care and expense bestowed both on the child's education and on his physical welfare during school life there is an enormous waste of valuable effort and material through the slipshod manner in which a large proportion of our future citizens are allowed to drift into any form of occupation; and it seems very probable that if more attention was paid to this matter there would in later years be less industrial unrest among adults.

To a large extent the parts of the machinery necessary for dealing with the problem are in existence.

The usual procedure is that a few weeks before the end of each school term the Education Authority forwards to the Labour Exchange a special "school-leaving card" duly filled up for every child about to leave the school.

The Labour Exchange Officer writes to the parents of these children pointing out the advantages of registration. A voluntary organisation (the Juvenile Organisations Committee) is in existence for giving advice to any applicants and acts as an "After-Care Committee," keeping in touch with children by visiting the homes of those who have recently left school, and endeavouring to persuade them to attend evening classes, etc. There is not much "following up" when once the child obtains some occupation unless the child leaves or is thrown out of work and re-registers.

There may be a certain amount of lack of correlation between the efforts of Juvenile Employment Committees, Factory Medical Services and Local Education Authorities, together with their medical services, each of which bodies is doing excellent work. But the main factor appears to be that parents either are unaware of the facilities provided or fail to appreciate the value of them.

I am indebted to Mr. H. Fielder, manager of the Employment Exchange, for the following approximate figures of the number of applications received and dealt with during the year 1919.

The total leavers during this period are shown in the table on page 38.

RETURN OF REGISTRATIONS AND PLACINGS FOR THE YEAR, 1919. (Commencing 7/2/19.)

(1) 13 Years of Age.

Total number of children exempted from school (*i.e.*, aged 13 years) who applied for employment :--

Boys 13

13 Girls 15

Total number of those for whom employment was found and the various occupations:--

Boys 8 Girls 12

The girls were mainly placed as errand girls, and the boys in similar occupations.

(2) 14 Years of Age.

Ap

Total number of children leaving school at 14 years of age who applied for employment :---

Boys 150

Boys 132

Girls 136

Girls 124

Total number of those for whom employment was found and the various occupations :--

pprentice	Lithographer	1	Soap Workers	49
	Moulder	10	Printing	
	Fitters	4	Pin Makers	2
	Turners	1	Prov. Packers	
,,	Wheelwright & Body-	1	Palahausa Assistant	0
"	makers	5	Bakehouse Assistant Toy Makers	1 2
,,	Cabinet-maker	1	Shirt Makers	8
,,	Cooper	1	Painters	4
	Grinder	1	Leather Workers	11
	French Polisher	1	Paper Workers	9
	Electrician	11	Rope Workers	2
	Blacksmith	1	Rubber Workers	4
	Patternmaker	î	Velvet Cutters	3
"	Sheet Metal Worker	5	Apprentice Dressmakers	1
,,	Copper Worker	1	PO Massangar	
	Shoemakers	0	P.O. Messenger	1
.,		26	Clerical Shop Assistants	1
	Soap Workers	6	Doily Cleaning	68
**.	Van Boy	0	Daily Cleaning	8 2
		1	Errand Girls	z
	Errand Boy	1		
	Warehouse Boy	1		
	0	10		
	Clerks			
	Rivetter	3		
	Saw Milling	1		
	Steel Tube Workers	3		
	Rubber Workers	3		
	Rolling Mill Workers	9		
	Tannery Workers	1		
	Electric Cable Makers	3	the second second second second	
		100		

Total 132

Total 124

There is here evidently a large field of work that might be undertaken by a voluntary organisation.

One of the first things to be done would be to draw up concise particulars of all the various forms of employment open to children in the area —the conditions, the qualifications required, the possibility of vacancies, the prospects for steady workers, and so on. The assistance of foremen and experienced welfare workers would be helpful in this.

The information, once compiled, would be found useful by parents and teachers and School Medical Officers amongst others.

The last six months of a child's school life should be devoted mainly to discovering what the child is best suited for, and here the advice of the head teacher of a school and the Medical Officer is invaluable.

The parent and the child should be the first to consider the matter, but useful information and advice would be welcomed at this stage by most parents. In those cases where parents appeared to be indifferent or to be leaving the question of employment to chance, the organisation would endeavour to get in touch with them, and by personal interviews, leaflets, etc., a larger proportion of parents would be readily induced to take an interest once they realised the importance of it.

Certainly there must be hewers of wood and drawers of water, and every child cannot take up a skilled trade, but time after time, in the course of this inquiry, we have come across both parents and children who regretted that they had no advice or guidance at the time they entered the industrial market.

February, 1922.

G. W. N. JOSEPH.

23.-MISCELLANEOUS.

Examination of Bursars, Student and Pupil Teachers.

During 1921, 12 Candidates for Bursarships and Scholarships and 3 for Student Teacherships were medically examined and found fit by the School Medical Officer.

Examination of Children Before Entry to Special Schools,

	Tota	ıl	 8
Boys			 2
Girls			 6

Number of Children Examined Before Summer Camp.

The total children examined by the A.S.M.O. as to fitness to attend the Summer Camp in 1921 was 304.

100

TABLE I.-NUMBER OF CHILDREN INSPECTED 1ST JANUARY, 1921, TO 31ST DECEMBER, 1921. A.-ROUTINE MEDICAL INSPECTION.*

	Entrants.						
Age.	3	4	5	6	Other Ages.	Total.	
Boys			507	132	4	643	
Girls			533	126	3	662	
Totals			1040	258	7	1305	

		ermedia Group.		1	Leavers.		Other	Total.	Grand
Age.	8	9	10	12	13	14	Ages.		Total.
Boys	705	90	2		758	23	146	1724	2367
Girls	775	36	1		689	30	164	1695	2357
Totals	1480	126	3	-	1447	53	310	3419	4724

*Secondary School.

B.-SPECIAL INSPECTIONS.

	Special (Cases.†	Re-Examinations (i.e. No. of Children Re-examined)		
Boys}	Public Elëmentary. 4650	Secondary. 3	Public Elementary. 2134	Secondary. 53	
Totals	465	4653		37	

C.—TOTAL NUMBER OF Individual Children INSPECTED WHETHER AS ROUTINE OR SPECIAL CASES (no Child being counted more than once in one Year).

No. of Individua	al Children inspected.
	0.022
	9377

* Routine Medical Inspection is medical inspection carried out on the lines of the approved Schedule at the time when routine medical inspection is due and made on the school premises.

t "Special Cases" are those children specifically referred to the Medical Officer and not due for routine medical inspection under the Code at the time when specially referred. Such children may or may not be of Code-group age and may be referred to the Medical Officer at the school or the clinic by the Committee, Medical Officers, School Nurses, Teachers, Attendance Officers, Parents or otherwise,

TABLE II.—RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION IN 1921.

This table is, except as regards the final line, a record of *dejects* and not of individual children who are defective. For the sake of convenience cases of defect of Nose and Throat are included in one only of the subheadings. (See also Table IVD.)

			ROU	FINE IN	SPEC'	TIONS.		
		entary ools.	Sec Sc	ondary hool,	To	otals.	Spe	cials.
Defect or Disease.	© Number referred tor Treatment.	Number requiring to be kept under observa- tion, but not referred tor Treatment.	 Number referred for Treatment. 	Number requiring to be kept under observa- © tion, but not referred for Treatment.	 Number referred for Treatment. 	Number requiring to be kept under observa- ition, but not referred for Treatment.	© Number referred for Treatment.	Number requiring to be (6) kept under observa- tion, but not referred for Treatment.
Malnutrition	40	5	1	-	41	5	4	1
Uncleanliness : Head Body	171 45		- 1- 1	-	171 45		4 2	=
Skin (Ringworm : Head Body Scabies Impetigo Other diseases (non Tubercular)	15 15 20 43 24	1111	1 2		15 15 21 43 26	1111	$\frac{4}{1}$ 12 7	
Eye Blepharitis Conjunctivitis Keratitis Corneal Ulcer Corneal Opacities Defective Vision Squint Other Conditions	$ \begin{array}{r} 24 \\ 27 \\ - \\ 5 \\ 1 \\ 286 \\ 41 \\ 2 \end{array} $	 1 14 3 1		111111	$24 \\ 27 \\ -5 \\ 1 \\ 302 \\ 42 \\ 2 \\ 2$		1 4 1 2 104 32 2	
Ear Ear Defective Hearing Otitis Media Other Ear Diseases		$\frac{1}{-1}$			25 8	$\frac{1}{1}$	22 6	2
Nose and Throat Nose and Charged Tonsils Adenoids Enlarged Tonsils and Adenoids Other Conditions	123 113 16 1	33 14 2 5	3 	2 	125 113 16 1	35 14 2 5	18 34 3	2 5
Enlarged Cervical Glands Non-Tubercular	4	7		-	4	7	1	2

.

		55						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Defective Speech	-	3	_	-	-	3	-	13
Teeth—Dental Diseases	48	-	-	-	48	-	1	-
Heart and Circula- tion. Lungs Heart Disease : Organic Functional Anæmia Other Non-Tuber-		11 17 8 7	1111	- 4 -		11 21 8 7	2 2 2	1 2
Tuber- culosis Pulmonary : Definite Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Suspected Spine Other Bones and Joints Skin				1 11 11 11			1 11 11 11	
Nervous System { Epilepsy Chorea Other Conditions		- - 1	111.		- 1 -	1	- - 1	3 1 1
Deform- ities { Rickets Spinal Curvature Other Forms Other Defects and Diseases		4 3 8 8	1111	 6		4 3 8 14	 	$\frac{2}{5}$ 12
Number of Individual Children having Defects which re- quired Treatment or to be kept under Observation	1256				1290		341	

1631

TABLE III.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA IN 1921.

		Boys.	Girls.	Total.
(including partially blind) within the meaning of the	Attending Certified Schools for	22		
(including partially deaf) within the meaning of the	Attending Certified Schools for		- 4 1	- 4 1

			Boys.	Girls.	Total.
		Aftending Public Elementary Schools.	3	1	4
		Attending Certified Schools for	-	-	-
	Feeble Minded.	Mentally Defective Children. Notified to the Local Control Authority by Local Education	1	-	1
Mentally Deficient.		Authority during the Year. Not at School	4	5	9
		At School	1	-	1
	Techneilen		-		School
	Imbeciles,	Not at School	8	5	13
	Idiots.		3	2	5
		Attending Public Elementary	5	3	8
		Schools. Attending Certified Schools for	-	-	-
Ept	leptics.	Epileptics. In Institutions other than	1	1	2
		Certified Schools. Not at School	8	7	15
		Attending Public Elementary Schools.	40	23	63
	Pulmonary Tuberculosis.	Attending Certified Schools for Physically Defective Children	-	-	
	Tuberculosis.	In Institutions other than Certified Schools.	-	-	-
		Not at School	6	10	16
		Attending Public Elementary	10	6	16
Physically	Crippling	Schools. Attending Certified Schools for Physically Defective Children	-	-	-
Defective.	due to Tuberculosis.	In Institutions other than Certified Schools.	-	-	-
	•	Not at School	9	1	10
	Crippling due	Attending Public Elementary	39	33	72
	to causes other than Tuber- culosis, i.e.,	Schools. Aftending Certified Schools for Physically Defective Children	-	-	-
	Paralysis, Rickets,	In Institutions other than Certified Schools.	-	-	-
	Traumatism.	Not at School	5	3	8

		Boys.	Girls.	Total.
Other Phy Defectives, delicate other chil suitable admission Open-A Schools childre suffering f severe he disease	and Affending Open-Air Schools Attending Certified Schools for Physically Defective Children other than Open-Air Schools. Not at School an rom art	102 23	68 — 33	170* 56
Dull or Backward.	Retarded 2 years Retarded 3 years	261 40	238 35	499 75

*This includes 139 Tuberculesis cases, e.g., glands, etc., not causing crippling.

TABLE IV.-A. TREATMENT OF MINOR AILMENTS

	Number of Children.								
Disease or Defect.	Referred for Treatment	Under Local Education Authority's Scheme.	Otherwise.	Total.					
Skin-									
Ringworm-Head	150	141	9	150					
Ringworm-Body	72	72	-	72					
Scabies	136	132	4	136					
Impetigo	752	743	9	752					
Minor Injuries	59	49	10	59					
Other Skin Diseases	74	69	5	74					
Ear Diseases	70	68	2	70					
Eye Diseases (external and other).	404	353	51	404					
Miscellaneous	696	358	206	564					

*33 from last year; 8 left school; 124 under observation. Secondary School, nil.

This does not include the number of minor ailments treated in School by the Nurses under the special scheme referred to in the body of the Report (page 19).

]	Number	r of Chil	ldren.			
Re- ferred for Re- frac- tion.	Under Local Educa- tion Autho- rity's	By Private Practi- tioner or Hospital		tion. Total.	For whom Glasses were Pre- scribed.	For whom Glasses were Pro- vided.	Recom- mended for Treat- ment other than by Glasses.	Received other Forms of Treat- ment.	For whom no Treat- ment was con- sidered neces- sary.
EI *781	LEMENT 265		HOOL +142		336	336	4	4	144
*298	from pr	evious ye	ear; 26	484 6 unde	r observ	ation; 31	left scl	nool.	
As	ighly 50% sistant S CONDA	chool M	edical	es are Officer,	children not to	found, need trea	on re-exa tment.	mination	by th
*34	2	10	10	22	17	17	-	-	5
*18 f	rom prev	ious year	; 12 ur	nder ob	servation				

TABLE IV. B.-TREATMENT OF VISUAL DEFECT.

TABLE IV. C .- TREATMENT OF DEFECTS OF NOSE AND THROAT.

		Number of	Children.	
Referred	Received	Operative Treat	tment.	
for Treatment.	Under Local Education Authority's Scheme—Clinic or Hospital.	By Private Practitioner or Hospital.	Total.	Received other Forms of Treatment.
ELEMENTA	RY SCHOOLS.			
*451	186	29	215	110
130 from prev	ious year; 9 left	school; 117 und	er observati	on.
SECONDAR	Y SCHOOL.			
•8	-	2	2	3
5 from previo	us year; 3 under o	bservation.		1

TABLE IV. D.-TREATMENT OF DENTAL DEFECTS.

1. Number of Children dealt with in 1921.

ELEMENTARY SCHOOLS.				А	ge G	iroup	18				"Specials."	Total.
	5	6	7	8	9	10	11	12	13	14		
(a) Inspected at School and Clinic	175	1154	1492	1516	1471	1406	1181	1149	1010	186	1013	11753
 (b) Referred for treat- ment (c) Treatment accepted 	66 44			1195 843		1074 3 9 0			0.00	95 55	1013 1013	8 60 5865
 (d) Presented for Treat- ment (e) Re-treated* (result) 	26	232	385	508	617	573	397	320	221	14	1013	4306
of periodical inspec- tion).	1	35	179	349	358	470	325	262	201	15	717	2912

SECONDARY SCHOOL.

•

1

	Age Groups.								"Specials."	Total.
	11	12	13	14	15	16	17	18	-	
(a) Inspected at School and Clinic	19	56	73	71	52	35	6	1		313
b) Referred for treat- ment (c) Treatment accepted (d) Presented for Treat-	$14 \\ 6$	33 21	35 21	38 18	25	15 4	-	11		156 73
ment (e) Re-treated* (result of periodical inspec-	3	13	17	8	-	-				41
tion).	-			-		-	-	-		-

* It is understood that cases under this head are also included under (d) above.

2.-Particulars of time given and of operations undertaken in 1921.

No. of Half- days	Half- Half- Atten-		No. of Permanent Teeth		Temp	o. of porary weth	No. of gas Extrac- tions	No. of other Operations.		
devoted to Inspec- tion.	devoted to Treat- ment.	made by the Chil- dren at the Clinic.	Ex- tracted.	Filled.	Ex- tracted.	Filled.	included in (4) and (6).	Per- man- ent Teeth,	Tem- porary Teeth.	
(1.)	(2.)	(3.)	(4.)	(5.)	(6.)	(7.)	(8.)	(9.)	(10.)	
166	NTARY 344 DARY SC	4306	.S. 327	570	5803	106	-	781	42	
6	4	41	2	21	16	-	-	33	-	

.

TABLE V.-SUMMARY OF TREATMENT OF DEFECTS AS SHEWN IN TABLE IV. (A, B, C, D).

	Number of Children.						
	Referred		Treated.				
Disease or Defect.	for Treatment.	Under Local Education Authority's Scheme.	Education authority's Otherwise.				
Minor Ailments Visual Defects Defects of Nose and	*2414 †815	1985 267	297 239	$2282 \\ 506$			
Throat Dental defects Other defects	2459 8316 197	186 4347	144 	330 4347 197			

*33 from previous year. (See also footnote to Table IV. A.) †316 from previous year. ‡135 from previous year.

TABLE VI.-SUMMARY RELATING TO CHILDREN MEDICALLY INSPECTED AT THE ROUTINE INSPECTIONS DURING THE YEAR 1921.

(1) The total number of children medically inspected at the routine inspections.*	4724
(2) The number of children in (1) suffering from-	
Malnutrition	46
Skin Disease	120
Defective Vision (including Squint)	360
Eye Disease	61
Defective Hearing	1
Ear Disease	34
Nose and Throat Disease	- 311
Enlarged Cervical Glands (non-tubercular)	11
Defective Speech	3
Dental Disease	48
Heart Disease-	
Organic	11
Functional	22
Anæmia	18
Lung Disease (non-tubercular) Tuberculosis—	92
Pulmonary { definite	2
	4
Nom-pulmonary	3
Disease of the Nervous System	2
Deformities	15
Other defects and diseases	68
(3) The number of children in (1) suffering from defects (other than uncleanliness or defective clothing or foot- gear) who require to be kept under observation (but not referred for treatment).	176
(4) The number of children in (1) who were referred for treatment (excluding uncleanliness, defective clothing, &c.).	1022
(5) The number of children in (4) who received treatment for one or more defects (excluding uncleanliness, defective clothing, &c.).	840
0,	040