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ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER



TO

The Education Committee

OF THE

SALOP COUNTY COUNCIL

1933.

WILLIAM TAYLOR, M.D., D.P.H.



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Medical Staff.

School Medical Officer:

WILLIAM TAYLOR, M.D., D.P.H.

Deputy School Medical Officer:

BERNARD A. ASTLEY WESTON, M.B., Ch.B., D.P.H.

Assistant School Medical Officers:

KATHLEEN PRIESTLEY, L.S.A.
MABEL BLAKE, M.B., Ch.B.
LESLIE WILSON EVANS, M.B., Ch.B., D.P.H. (part-time).
WILLIAM H. HARRIS, M.B., Ch.B., D.P.H. (part-time).
SIDNEY S. PROCTOR, M.D., D.P.H.

School Dental Officers:

STEPHEN KEENAN, L.D.S. FRANK H. BIRCH, H.D.D., L.D.S. GERALD R. CATCHPOLE, L.D.S.

Organiser of Physical Training:

MRS. K. W. DAVEY, Diploma of the College of Physical Education.

To the Chairman and Members of the Education Committee.

LADIES AND GENTLEMEN,

I have the honour to present the Annual Report on the School Medical Service for 1933.

The year has not been one in which there have been any new developments of an important nature, and the Report is largely indicative of the progress that has been made under the various schemes which have now been in existence for a number of years.

Matters of interest have been commented on in the Report, but special mention may be made here of the investigation carried out by the Dental Officers. This was undertaken in order to assist in an investigation suggested by Sir George Newman in his Report for 1931, with a view to determining the factors which contribute to immunity to dental caries. Some of the facts elucidated are of much interest, but further inquiry will be necessary before it will be possible to estimate their significance or to formulate definite opinions of a final nature.

I am, Ladies and Gentlemen,
Your obedient Servant,
WILLIAM TAYLOR,

County Medical Officer and School Medical Officer.

College Hill House, Shrewsbury, May, 1934.

AREA COVERED BY THE SALOP EDUCATION AUTHORITY, NUMBER OF SCHOOLS, DEPARTMENTS, AND CHILDREN ON REGISTER.

The area covered by the Salop Education Authority comprises 858,277 acres, and at the time of the 1931 Census had a population of 211,784. With the exception of the area represented by the Borough of Shrewsbury, which is an independent authority for elementary education, it is co-extensive with the administrative county.

At the end of the year there were 320 departments, comprised in 274 schools. On 31st December, 1932, the number of children on the register was 30,144, as opposed to 30,395 on 31st December, 1933.

STAFF.

Since the issue of the last report there has been no change in the personnel of the Medical and Dental Staffs which consist of six Assistant School Medical Officers (two of whom hold positions of District Medical Officers of Health within the County), and three whole-time Dental Officers. Seven-tenths of the time of the Assistant Medical Officers is devoted to the work of School Medical Inspection, the remainder being given to other branches of the health services.

In addition to the Assistant Medical Officers and Dental Officers above mentioned, there are—

3 Dental Helpers.

1 Organiser of Physical Training.

2 Whole-time School Nurses.

10 Health Visitors undertaking school nursing.

89 District Nurses undertaking school nursing.

CO-ORDINATION.

Every effort is made to link up the various health services in the County, so that they may form a complete and co-ordinated whole. This is achieved to a very great extent by the arrangement under which the areas for which the Assistant School Medical Officers are responsible are, as far as possible, made the same as those for which they act in their capacity of Assistant Maternity and Child Welfare Medical Officers. The children whom they see at the Welfare Centres under the Maternity and Child Welfare Scheme are, later, the same children whom they examine in the schools, and sometimes treat for minor ailments in the school clinics, which are also held in the Child Welfare Centres. In addition, the Orthopaedic Clinics, fifty per cent. of the attendances at which are made by school children, are held, with two exceptions, in the same building and on the same day as the Child Welfare Centres. As the co-operation between the Assistant School Medical Officers and the Orthopaedic Surgeons who attend these clinics is very close, a further linking up of the health services is thus secured. As a child attending any of these clinics can be referred for examination to the Tuberculosis Medical Officers, who keep such children under supervision where considered necessary, and carry out re-examination when it is found desirable, it will be obvious that the various services affecting school children are very closely linked up. A further co-ordination is secured in the arrangement by which two of the Assistant School Medical Officers are also District Medical Officers of Health; and as this is one which assists very materially in the control of outbreaks of infectious disease, it is hoped that it will be found possible further to extend such arrangements.

HYGIENIC CONDITION OF THE SCHOOLS.

The Assistant School Medical Officers are responsible for the sanitary supervision of the schools which they inspect, and are required to make a report on any unhygienic conditions which they find. This is work of fundamental importance, both from an educational and hygienic point of view, and matters requiring to be dealt with are referred to the Secretary for Education. In a rural county, such as Shropshire, it is of course quite impossible to attain anything like uniformity of standard in the various schools, situated as they are both in urban and rural districts, and consequently varying greatly in size. It should be recognised, however, that many of the older schools fall far short of what is required in the matter of lighting, heating and ventilation, and that the nature of the sanitary conveniences provided in certain instances is only partly justified by the limitations imposed by the absence of public services in the localities in which the schools are situated.

Ceiling Heating.

The two new schools in which ceiling heating has been installed have been the subject of special observation, and although the results obtained in comparatively mild weather leave little to be desired, there is some difficulty in securing an adequate temperature in the classrooms when the weather is really severe. Observation has shown that while the heat generated is probably ample, too much of it is finding its way into the space between the roof and the ceilings of the class-rooms. This is due partly to insufficient insulation and partly to the hot pipes not being near enough to the radiating surface, faults which could be overcome without difficulty in future installations. The matter is one worthy of careful consideration by the Works Committee as, if schools are to be constructed on the open-air principle, as they should be if the maximum amount of open-air education is to be secured, only by this method of heating is it likely to be possible to keep the children comfortably warm except under very mild weather conditions.

Of course, the most satisfactory results are likely to be obtained by a combination of different methods of heating, but financial considerations practically preclude such a possibility; and in a room in which the atmosphere is being changed frequently, as must be the case where the whole of one side of the class-room is thrown open to the outside air, the best results should be achieved with radiant heat, the source from which it is obtained being situated in the ceiling.

In the Annual Report for 1932, Dr. Weston, Deputy School Medical Officer, dealt in a comprehensive manner with the various methods of heating in the schools generally, and his comments on the relative merits of the different systems are deserving of careful consideration.

Meals for School Children.

The health of the children is likely to be improved by arrangements whereby a really good meal can be provided in the school during the middle of the day, and at the present time the problem of how to do this is being dealt with in individual schools to varying extents by different methods. The number of schools in which a good, hot meal is provided is not large, but in many schools something is being done as a result of the initiative of the head teachers, and full credit and every encouragement should be given to those who try to provide for the needs of the children in this respect.

Milk.

In 43 schools a regular supply of milk is now being provided in bottles containing a third of a pint at a cost of 1d. This is usually consumed in the middle of the forenoon, and as milk is the very best form of food obtainable, the needs of the children are up to a point met in this way. In a larger number of schools a hot drink, usually consisting of cows' milk modified in some way and sold under a trade name, is given to the children. Although this last is all to the good and many children prefer such a drink to one consisting entirely of cows' milk, it ought to be clearly

understood that the chief nutritive value of these preparations lies in the cows' milk which they contain. As, however, pure milk is the most nutritious form of food obtainable, when a satisfactory supply can be provided for the children its consumption should be encouraged rather than that of some modified form of it. The purchase of cows' milk in modified form is an expensive and uneconomic method of obtaining it.

It is sometimes stated that milk consumption is not altogether free from danger, in that it is a potential vehicle for the conveyance of various forms of infection. Although this is true it is not justifiable to adopt a purely negative attitude, and one must either condemn or recommend it. Its value as a food has been abundantly established, and however unsatisfactory it may be that an absolute guarantee with regard to any milk cannot be given, the fact remains that the value of milk as a food makes it impossible to find any satisfactory substitute for it.

The Local Education Authority is taking every opportunity of encouraging the consumption of milk by school children, but it ought to be understood that, if the consumption of milk is to be encouraged, the farmers must do their utmost to give a sound, clean article in return. Milk is recognised as one of the ways by which tuberculosis can be spread, and, as health authorities cannot whole-heartedly encourage its consumption unless the producer takes every step to ensure that it is a safe food for the child population, the question arises whether the Local Education Authority ought not to disapprove of milk supplied to children during school hours which does not carry with it some such guarantee of safety and cleanliness.

The arrangements for securing a daily supply of milk to the schools is left to the Head Teachers, who are not, of course, in a position to know whether the milk provided is of a satisfactory standard of cleanliness. It is not too much to ask the farmers who supply the milk to guarantee that it is at least of Grade A standard in this respect, and it is hoped to obtain this guarantee by securing that all producers of milk who supply the schools will either be holders of a licence to produce a graded milk, or that they will be on the Accredited Milk Producers' Register of the Agricultural Department. Unfortunately the number of farmers whose names are on the Accredited Milk Producers' Register is not sufficiently large to enable the Head Teachers to arrange in all cases for the milk supplied in the schools to be obtained from such a source, and arrangements have now been made for the sampling and examination from time to time of milk supplied to schools under this scheme.

EDUCATIONAL WORK OF MEDICAL OFFICERS AND OTHERS.

In addition to the instruction which the children receive from the teachers in health matters as part of the school curriculum, addresses are given by the Assistant School Medical Officers when they visit the schools if time and opportunity allow. This important branch of the work is capable of much further development.

Summary of Assistant Medical Officers' Addresses to School Children.

					1933		1932	
Dr. Blake					61 le	ectures.	36 le	ctures.
Dr. Harris					11	,,	18	,,
Dr. Priestley					16	,,	11	,,
Dr. Proctor					9	,,	9	,,
Dr. Weston					8	,,	12	,,
*Dr. Evans					1 le	ecture.	1 le	cture.
	Tota	l numb	per of l	ectures	106		87	

^{*} Lecture on "Essentials of Health" at 20 schools during Oswestry Health Week.

FINDINGS OF MEDICAL INSPECTION.

During the year, 171 schools were visited once only, 126 twice, and 26 three times. This represents a total of 501 medical inspections as opposed to 508 during the previous year. Although seven fewer medical inspections were carried out, there was an increase of 567 in the number of children who underwent routine examination.

The following are particulars of the number of children who underwent medical examination by the Assistant School Medical Officers:—

	Routine Examinations.			Special		
	Aged 5.	Aged 8.	Aged 12.	Ĉases.	Re-examinations.	Total.
Dr. Harris	 552	508	463	171	2,482	4,176
Dr. Blake	 636	641	677	214	2,158	4,326
Dr. Weston	 590	646	637	132	1,457	3,462
Dr. Priestley	 497	455	616	39	2,311	3,918
Dr. Proctor	 778	829	790	155	1,432	3,984
Dr. Evans	 474	473	498	106	850	2,401
Totals for 1933	 3,527	3,552	3,681	817	10,690	22,267
Totals for 1932	 3,371	3,496	3,326	843	11,019	22,055

The apportionment of the children amongst the nurses is as follows :-

District Nurses acting as School Nurses (86))	 	16,535
Whole-time School Nurses (2)		 	5,211
Health Visitors (10)		 	6,518
Nurses working on their own account (2)		 	2,057
Health Visitors and District Nurses jointly	(7)	 	182

Pediculosis.—Although this branch of the school medical service is peculiarly that of the school nurses, it is convenient to include it under the findings of the school medical inspection work.

The instructions given to the school nurses are to examine the heads of the children each term, and to follow up the verminous children by making subsequent inspections in order to get them clean before the end of the term, and there are thus three primary inspections in each year.

It is the policy to give every assistance and advice before prosecuting, and summonses are only issued as a last resort, but proceedings in connection with the radically verminous children who are the source of the trouble, should be commenced at the beginning of the term, instead of waiting until the third inspection, as these children should now be well known.

There can be no doubt, however, that prosecutions are an essential part of any scheme for getting the children's heads clean, and legal proceedings were taken in 18 cases during 1933, and in 5 cases during the previous year, fines ranging from 5/- to 10/- being imposed.

During the year the percentage of children found verminous on primary inspection was 4.3, a decrease of 0.1 per cent. on the previous year. The percentage of verminous heads for 1933 is therefore the lowest which has yet been recorded, but as the following particulars show, little progress has been made during the past three years, and unless energetic measures are adopted to eradicate verminous conditions amongst school children, at the present rate of progress a period of over 40 years must elapse before those parents who send their children to school in an unclean condition can be made to take the steps which health and hygiene require.

Year	Percentage verminous.	Year	Percentage verminous.
1920	14.0	1931	4.5
1925	7.5	1932	4.4
1930	4.9	1933	4.3

The following are the particulars of the primary and following-up inspections during the years 1932 and 1933:—

			Primary	No. of	No.	Percentage
		I	nspections.	Children.	Verminous.	Verminous.
1932			1142	88030	3856	4.4
1933			1135	89794	3853	4.3

Below are details of the findings at subsequent inspections in the case of those found verminous at the first inspections:—

No. of following-up inspections.		No. verininous at hispections.						
		Second.	Third.	Fourth.	Fifth.			
1932		1602	2101	640	184	32		
1933		1731	2082	827	297	85		

Defects of Nose and Throat.—Of the 10,760 children belonging to the code groups who were examined, 412 or 3.8 per cent. required treatment on account of diseases or defects of the throat and nose. Inclusive of special cases, there were in all 1,412 children who were found at medical inspections during the year to be suffering from defects of the throat and nose, of whom 462 required treatment, 950 being kept under observation. Of those recommended for treatment, some required removal of tonsils only, others of adenoids, and some of both. The following are the particulars:—

Tonsils only.		Adenoids only.	Tonsils and Adenoids.	Total.	
1929		576	94	388	1058
1930		529	70	368	967
1931		607	73	439	1119
1932		342	53	235	630
1933		223	54	157	434

Tuberculosis.—Cases of tuberculosis amongst school children are discovered by the Medical Inspectors, either in the course of ordinary routine inspection or by the examination of cases specially referred to them by teachers or school nurses. In addition, all school children who come from homes in which a case of phthisis has been diagnosed are the subject of special examination at each medical inspection. Of 563 children from phthisis homes, 461 were examined by the medical inspectors, and 9 suspected cases were referred to the Tuberculosis Medical Officers for further examination.

The particulars regarding the total number of school children referred to the Tuberculosis Medical Officers from all sources during the year are as follows:—

		Pulmonar	Other forms of Tuberculosis.			
New Cases	No. of hildren. 169	No physical signs. 101	Sus- pected. 12	Diag- nosed.	Diag- nosed. 38	Suspected.
Cases from previous year	 38	7		4	27	

Ringworm.—When authorised by the School Medical Officer, children suffering from ringworm are now admitted to school, if the parent undertakes to carry out certain stringent precautions. It is also an essential condition of admission that the teacher shall undertake to see that the precautions are carried out.

Of the children examined by the Medical Inspectors, 4 were found to be suffering from ringworm of the scalp, and 32 cases were notified by the teachers, although these were not usually based on medical opinion.

Eye Defects.—There were 584 children with defective eyesight or squint requiring treatment, and 139 with lesser degrees of defect that needed to be kept under observation. Of the children requiring treatment, 507 belonged to the code groups, and 77 were special cases. As children aged 5 are not systematically examined for defective eyesight, the code group cases are mostly aged 8 and 12, and the percentage amongst these children needing treatment was 6.1.

The following table shows the percentage of children at the age of 12 requiring treatment for eye defects since the war :—

Year	Percentage of	Year	Percentage of
7070	defects.		defects.
1919	10.0	1926	7.3
1920	10.2	1927	7.9
1921	8.5	1928	8.1
1922	7.6	1929	9.0
1923	7.5	1930	8.9
1924	8.2	1931	6.5
1925	7.9	1932	7.0
		1933	6.1

Ear Disease and Hearing.—Experience has shown that a large number of cases of deafness and otorrhoea are due to an attack of an acute infectious disease, such as measles or scarlet fever, or to throat affections, but especially to the presence of unhealthy tonsils and adenoids. Fifty-three routine cases and 8 special cases were referred for treatment either on account of deafness or otorrhoea, or both. The figures for the previous year were, 35 routine cases and 16 special cases.

Dental Caries.—The following tables show percentages of dental caries at the various age periods amongst the children examined. These percentages of decayed teeth found by the School Medical Inspectors correspond fairly closely with those given by the School Dental Officers.

RESULT OF ROUTINE INSPECTION BY THE MEDICAL AND DENTAL OFFICERS.

			Age 5.			Age 8.		Age 12.		
		No. of children Exam- ined.	Average No. of decayed teeth per child.	Per- centage of children free from caries.	No. of children Exam- ined.	Average No. of decayed teeth per child.	Per- centage of children free from caries.	No. of children Exam- ined.	Average No. of decayed teeth per child.	Per- centage of children free from caries.
Dr. Blake Dr. Evans Dr. Priestley Dr. Weston Dr. Harris Dr. Proctor	 	432 357 431 356 461 497	4.3 3.0 5.2 4.3 3.1 3.0	20 30 13 17 25 28	610 418 432 522 484 621	4.0 2.3 4.0 4.9 2.4 2.4	12 29 9 7 22 24	699 474 627 575 455 647	1.7 1.4 1.8 1.7 1.2	31 39 30 36 44 41
		2534	3.8	22	3087	3.4	17	3477	1.5	36
Dental Officers	 		4.0	18		3.3	11		1.8	25

The following table gives in detail the results of inspection by the School Dental Officers of children of all ages:—

Age	Under 5	5	6	7	8	9	10	II	12	13	14
Average number of teeth decayed . Percentage of	. 3.3	4.0	3.9	3.7	3.3	2.8	2.3	1.9	1.8	1.9	2.22
children free from caries .	. 30	18	10	10	11	12	17	21	25	24	22

In stating the average number of teeth decayed, extracted and filled teeth are counted as decayed teeth. These figures therefore, do not give quite an accurate representation of the actual condition of the mouths of the children, inasmuch as a child's mouth usually has been put into an absolutely healthy and satisfactory condition by means of extractions and fillings, yet each of these has, for statistical purposes, been counted as a tooth showing dental caries. It will be observed that between the ages 5 and 12 the average number of decayed teeth per child gradually diminishes and that the percentage of children free from active caries steadily increases between the ages of 7 and 12.

Average number of decayed teeth per child found by the Medical Inspectors in the years 1919—1932:—

Year	Age 5.	Age 8.	1 10
1919	 2.1	3.6	Age 12.
1920	 2.16	3.8	2.1 2.1
1921	 2.5	3.5	1.9
1922	 3.0	3.6	1.7
1923	 3.4	3.6	1.7
1924	 3.0	3.3	1.6
1925	 3.1	3.4	1.6
1926	 3.0	3.3	1.5
1927	 2.7	3.4	1.6
1928	 2.8	3.1	1.5
1929	 2.9	2.8	1.5
1930	 3.2	2.7	1.8
1931	 3.8	3.1	1.6
1932	 3.7	3.1	1.5
1933	 3.8	3.4	1.5

Investigation of factors contributing to Immunity to Dental Caries.

In "The Health of the School Child, 1931," Sir George Newman suggested that in the year now under consideration an investigation into the question of dental caries should be carried out. Most investigations so far have been undertaken with a view to determining the cause of dental caries, but Sir George Newman suggested that in this instance the inquiry should be directed towards determining the factors which secure immunity to caries.

In order to make the inquiry a practicable possibility, it was suggested that it be limited to children aged between 12 and 13 years, that a record be kept of all children in that age group examined in 1933 who were naturally free from caries, and that the homes of these children be then visited by the School Dental Officers with a view to ascertaining the home circumstances, their habits of life, their dietary habits and the condition of the teeth of the parents, brothers and sisters, etc. The results of this inquiry, which was carried out very carefully by the School Dental Officers, are set out on page 11. It is to be noted that the term "naturally free from caries" applies only to those children concerning whom there is no record or history of their ever at any time having suffered from any dental decay, either of the temporary or permanent teeth. If, therefore, any child had such a history or record of dental caries, such child was excluded from the inquiry, even if at the time of the examination there were no signs of dental caries and no evidence of ever having had dental treatment.

It has not so far been possible to go fully into the facts elucidated with regard to these children, and therefore to draw conclusions from them; and although they are of great interest they will only be superficially commented upon at present. The summary given on page 10 indicates the directions in which there will have to be a further sorting out of the facts ascertained, and it is hoped that by the time of issue of the next Annual Report it will be possible to state more precisely any conclusions which it may be possible to draw. This will involve a large number of cross-references in order to ascertain the factors which have contributed to the groupings of the children given in the table. The following comments may, however, at present be made.

The home circumstances of the children found to be naturally free from caries were "working class." These have been divided into "good" and "poor," and 58 per cent. of the children came from poor homes, and 42 per cent. from good homes. Poor homes, therefore, would seem to favour good teeth, a result doubtless due to dietary habits.

As regards locality, only 27 per cent. were town children and 73 per cent. were country children. Inquiry will have to be made into the distribution of the general population between town and country, and roughly speaking in this county the population is about equally divided between the two. It would appear, therefore, that the teeth of town children are much more affected by caries than those from the country.

An outstanding result of the inquiry is that 98 per cent. of the children found to be naturally free from caries have normal dental occlusion. It is obvious that normal dental occlusion must make it a comparatively easy matter to keep the teeth clean, and this fact lends support to the theory so strongly held and so consistently taught in this county for a long number of years, namely, that the chief and, for practical purposes, the only cause of dental caries is dental uncleanliness. What has yet to be determined are the various factors which bring about normal dental occlusion.

Although 74 per cent. of these children were breast-fed and 25 per cent. were artificially fed, this finding is merely in accordance with the distribution of these forms of feeding in this county during the first nine months of life.

The "dummy," although it ought of course on hygienic grounds to receive unqualified condemnation, would not appear to have the disastrous effects on dental occlusion which are usually attributed to it. It was used by 50 per cent. of these children.

The only comment which is now made with regard to milk is that it is rather remarkable that as high as 34 per cent. of these children appear to have taken it after boiling. There is room for inquiry as to what is understood by boiled milk in this case.

Although 71 per cent. drank hard water, probably this is in accordance with the nature of the water available for the population as a whole, and has no direct relationship to immunity to dental caries. Certainly the effect of hard water would be much less than that of foods rich in minerals, such as milk and vegetables, and as large a proportion as 78 per cent. of these children had vegetables daily. As vegetables ought to be included in every diet, it is possible that their chief significance is that of good management in the home, a sine qua non of freedom from dental caries. It is interesting on general grounds to note, however, that the percentage of children in whose homes there were vegetable gardens is practically the same as the percentage of children having vegetables daily.

The figures relating to cod liver oil, butter, margarine and lard would not seem to lend support to the current theory of the relationship of fat soluble vitamins to dental caries.

As regards the influence of heredity, the findings relating to fathers, mothers, brothers and sisters do not seem to indicate that it has any pronounced significance; and the fact that as many as 45 per cent. of the mothers and only 29 per cent. of the fathers had good teeth is contrary to the theory commonly held that pregnancy has a very injurious effect on the teeth. The relationship of mothers to fathers in this matter appears to be the same as that of sisters to brothers, and is probably a result of greater attention being given to the care of the teeth in the matter of dental hygiene by the female side of the household.

PARTICULARS RELATING TO CHILDREN, OF THE AGE 12 TO 13 YEARS, NATURALLY FREE FROM DENTAL CARIES.

No. of children inspected of the age 12 to 13 years 3,225

No. of these children naturally and entirely free from dental caries 93 or 2.9 per cent.

(The findings of the Dental Officers which are summarised below are expressed in the form of percentages of the data obtained):—

Home circumstan	ices	 Good		41.9	Poor		58.1
Locality		 Town		26.9	Country		73.1
Dental Occlusion		 Normal		97.8	Abnormal		2.2
Infant feeding		 Breast		74.2	Artificial		25.8
"Dummy"		 Used		49.5	Not used		
Milk		 Regularly		49.5	Occasionally		50.5
* Milk		 Raw		62.5	Boiled		50.5
Water		 Hard		70.7	0.0		34.4
Vegetables		 D "	• •				29.3
Vegetable garden		XX7:41		78.5	Occasionally		21.5
regetable garden	• •	 with		76.3	Without		23.7
		High.		No	rmal.		Т
Protein		 1.1			2.8		Low.
Carbohydrates		 35.5					26.1
carbony draces		 55.5		0	1.3		3.2
		Regular.		Occas	sional.	N	ormal.
Eating of sweets		 8.7			5.8	41	25.5
Brushing of teeth		 44.1			8.7		17.2
Cleansing Food		 18.3			7.0		24.7
Cod Liver Oil		 5.4			4.8		
Butter		16.1					59.8
Managaina		 5.4			2.4		21.5
Lord	٠.				1.9		52.7
Lard		 11.8		63	2.4		25.8

PHYSIQUE OF THE CHILDREN.

Good 50.

Average 43.3

Poor 6.7.

NEAR RELATIVES.

	Go	ood Teeth.	Average Teeth.	Poor Teeth.
Fathers (84)	 	28.6	27.4	44.0
Mothers (87)	 	44.8	27.6	27.6
Brothers (193)	 	73.6	21.2	5.2
Sisters (171)	 	83.1	14.6	2.3

^{*} The remaining 3.1 per cent. had Pasteurised Milk.

Crippling Defects.—The numbers of these defects found at the routine medical inspections were:—rickets 45, spinal curvature 51, other forms 224. Probably the most common of school deformities are knock knee, flat foot and spinal curvature. A very close relationship has been observed between these conditions, often all found in the same child, and the presence of unhealthy tonsils and adenoids.

The cases of school children admitted to the Robert Jones and Agnes Hunt Orthopaedic Hospital have been analysed in accordance with causation, and show that :—

21	cases or	20.6 per	cent.	were	due to	Tuberculosis.
16		15.7	,,	,,	,,	Fractures and Dislocations.
12		11.7	,,	,,	,,	Nerve Disease and Injuries.
9		8.8			,,	Osteomyelitis.
		7.8	"	,,		Claw Foot.
8	"		2.7	"	"	Flat Foot.
		6.9	,,	,,,	,,	
6	,,	5.9	,,	"	,,	Spinal Curvature—Non-tubercular.
6	,,	5.9	,,	,,	,,	Arthritis (Septic and Rheumatoid).
5 5 2 2	,,	4.9	,,	,,	,,	Congenital Deformities.
5	,,	4.9	,,	,,		Conditions due to faulty footwear.
9	,,	2.0	,,	,,	,,	Club Foot.
0	,,,	2.0				Rickets.
			,,	,,	,,	Torticollis.
1	. ,,	1.0	,,	"	"	Di ticoms.
1	,,,	1.0	,,	,,	,,	Diseases of the Hip—Non-tubercular.
1	,,	1.0	,,	,,	,,	Injuries to hands.

This classification of cases in accordance with causation is extremely instructive, as most of the conditions here mentioned are comparatively easily cured if got under treatment at the very beginning of the disease. It is particularly important to obtain early treatment for cases of poliomyelitis, rickets, congenital deformities and tuberculosis. Many of the tuberculous cases come under notice after considerable damage has been done, the cause of the trouble not having been recognised in the early stages. The paralytic conditions arising from childbirth are possibly also largely preventable.

Goitre.—In Shropshire simple goitre is not common amongst school children, but it is more common in girls than in boys, especially in the later years of school life.

		Boys.			Girls.		
	Entrants.	Inter.	Leavers.	Entrants.	Inter.	Leavers.	Total
No. of children Cases of goitre	 1791 0	1782 3	1914 8	1736 1	1770 5	1767 27	10760

Dull and Backward Children.—The examination and re-examination of cases of retardation amongst school children takes up a very considerable amount of time of the School Medical Inspectors, especially when the question of certification of mental deficiency has to be decided upon, although the examination of backward children is always tedious and difficult. During the year there were 315 new cases of retardation, the degree of retardation varying from one to five years. The following analysis of the causes of retardation shows the relative importance of the various factors commonly found to account for backwardness in school children:—

Causes of	No. of	Degrees of retardation expressed in years.											
Retardation.	children.	1 year	2 years	3 years	4 years	5 years	Not stated.						
Innate dullness	. 249	10	176	55	4		4						
Insufficiency of education .	. 15	2	9	2	1		1						
Dhaminal defeate	. 9	2	6	1									
Commented Mantal Deficience	. 13		1	8	3	1	1						
Montal Deficiences	. 12		2	4	4	1							
Pad Hama Canditions	. 3	1	2										
Laziness	. 2	1	1										
No Diagnosis	. 12	2	3	7									
	315	18	200	77	12	2	6						

In addition, 1,178 children, diagnosed as dull and backward in previous years, were reexamined, the findings in connection with whom were as follows:—

Backward, but not improving		 	730
Backward, but improving		 	303
Doubtful cases of mental deficiency		 	40
Mentally defective		 	79
Now normal		 	26

INFECTIOUS DISEASES.

Notifications.—The following notifications were sent in during the year by the Head Teachers:—

Influenza	 	7,288	Ringworm	 	132
Coughs and Colds	 	4,791	Diphtheria	 	100
	 	2,398	Other Diseases	 	72
Chicken-pox	 	1,014	Tonsilitis	 	55
Whooping Cough	 	803	Bronchitis	 	39
Mumps	 	610	German Measles	 	34
Sore Throat	 	385	Conjunctivitis	 	29
Impetigo	 	234	Scabies	 	24
Scarlet Fever	 	214	Pneumonia	 	4

Certificates of Exclusion.—Under Article 20 (b), 1,010 certificates of exclusion from school on account of infectious disease and other conditions were sent in by the Assistant School Medical Officers and Tuberculosis Officers, of which the following are the particulars:—

	44				
Impetigo		97	Bronchial Catarrh		71
Coughs and Colds .		43	Rheumatism	***	35
Sore Throat		30	Suspected Phthisis		15
Tonsilitis		68	Whooping Cough		33
Debility		62	Scarlet Fever		8
Bronchitis		42	Otorrhoea		25
Scabies		18	Chorea		20
Influenza		52	Mumps		8
Tuberculous Glands		51	Tubercular Peritonitis		5
Heart Conditions .		18	Chicken-pox		19
Ringworm of Body		22	Anaemia		18
Ringworm of Scalp		7	Diagnosed Phthisis		- 6
			Various Conditions		237

Closure of Schools.—During the year 33 schools were closed by the Local Education Authority to prevent the spread of infectious disease and below are given particulars of school school closures during the year:—

In thirty instances attempts were made to prevent outbreaks of measles by closing the schools for about a week, six or seven days after the occurrence of the first case, with the following result:—

In 13 instances no further cases occurred. Closure in these cases must therefore be considered to have been without effect and, therefore, unnecessary.

In 10 instances cases occurred during closure, and further cases developed on re-opening. Closure again proved to be without effect.

In 2 in tances no cases occurred during closure, but one or more cases developed on reopening. Again closure did not justify itself as these bore no relationship to the first cases.

In 5 instances cases occurred during the closure, and did not attend school till free from infection. There was no further outbreak, and it is justifiable to conclude that closure was effective in checking the spread of the disease.

Reasons for Closure.—There is, of course, no justification on medical grounds for closing a school unless the spread of infection is thereby going to be prevented, and the School Medical Officer has no authority to advise closure on account of poor attendance, notwithstanding the fact that the number of children present is sometimes so low that there is little justification on educational grounds for keeping the school open.

Some Authorities do not close schools at all on account of ordinary infectious disease, believing that outbreaks can better be controlled by keeping them open. Such an attitude can no doubt be justified when the area of a Local Education Authority happens to be a large town in which therefore it is possible for the School Medical Officer to keep schools where there is an outbreak of infectious disease under close, if not daily, supervision. It is not, however, entirely applicable to an area which is co-extensive with a large rural county, where long distances have to be travelled, and in which a school medical inspection may have to be carried out in a direction far removed from those schools in which infectious disease is present. In such circumstances closure not infrequently becomes advisable, although probably it is resorted to somewhat too frequently.

A Joint Memorandum issued by the Ministry of Health and the Board of Education states :-

"While the power to close a school in the interests of public health must continue to rest both with the Sanitary Authority and with the Local Education Authority acting on the advice of their expert officers, it is a power which should be used with scrupulous care and caution. It may be safely laid down as a general principle that if the power to exclude individual children be used to the best advantage, it is only in special and quite exceptional cases that it will be necessary to close a school in the interests of public health."

The infectious disease which most frequently gives rise to criticism of the attitude adopted by the School Medical Officer is measles, an extremely infectious disease, the control of which is made still more difficult by the fact that the period of greatest infectivity is during the three or four days which must elapse between the commencement of the illness and the appearance of the rash. During this stage of the illness the parent often regards his child as suffering from an ordinary cold, and allows him to go to school with disastrous results to the other children who have not had the disease. The procedure is also repeated by the infected children in one another's homes, in Sunday Schools and in places of entertainment. In a populous area therefore it is quite impossible to control an outbreak of measles by closure of the schools, which is the only ground on which the School Medical Officer has authority to advise it.

Dealing more specifically with measles, this Memorandum states:-

"... there is a general concensus of opinion that except in the case of scattered rural populations, it is useless as a means of checking the spread of the disease. As a rule, closure is deferred until a large proportion of the children are already absent, but even in those cases where early class closure has been attempted after the occurrence of a single case, experience appears to show that the only effect is to postpone and prolong the epidemic. It appears certain that in populous districts school closure for measles has but little value as a public health measure."

FOLLOWING-UP.

The whole of the following-up, except such assistance as is given from time to time by the Attendance Officers, is done by the School Nurses, who are notified of the dates of the medical inspections and are always present at the time of the visit of the Medical Inspectors to the schools, unless, as occasionally happens, they are detained elsewhere because of some more urgent matter in connection with their work. The following statement shows how cases recommended for treatment are visited and gives particulars of the number of visits paid:—

District Nurses (87)	 No. of cases. 2251 276 536 1049	No. not visited. 272 55 23 133	Total. visits. 5165 679 2070 1920
Total	 4112	483	9834

FACILITIES FOR TREATMENT PROVIDED BY THE COUNTY COUNCIL.

The following arrangements have been made to provide treatment for school children at hospitals and at clinics held in the County:—

At Hospitals :-

Eye Defects—Eye, Ear and Throat Hospital, Shrewsbury; Kidderminster Hospital.

Ear Defects-Eye, Ear and Throat Hospital, Shrewsbury.

Throat Defects—Eye, Ear and Throat Hospital, Shrewsbury; Kidderminster Hospital; The Lady Forester Hospitals at Broseley and Much Wenlock; Oswestry, Wellington, Ellesmere, Chirk, and Shifnal Cottage Hospitals.

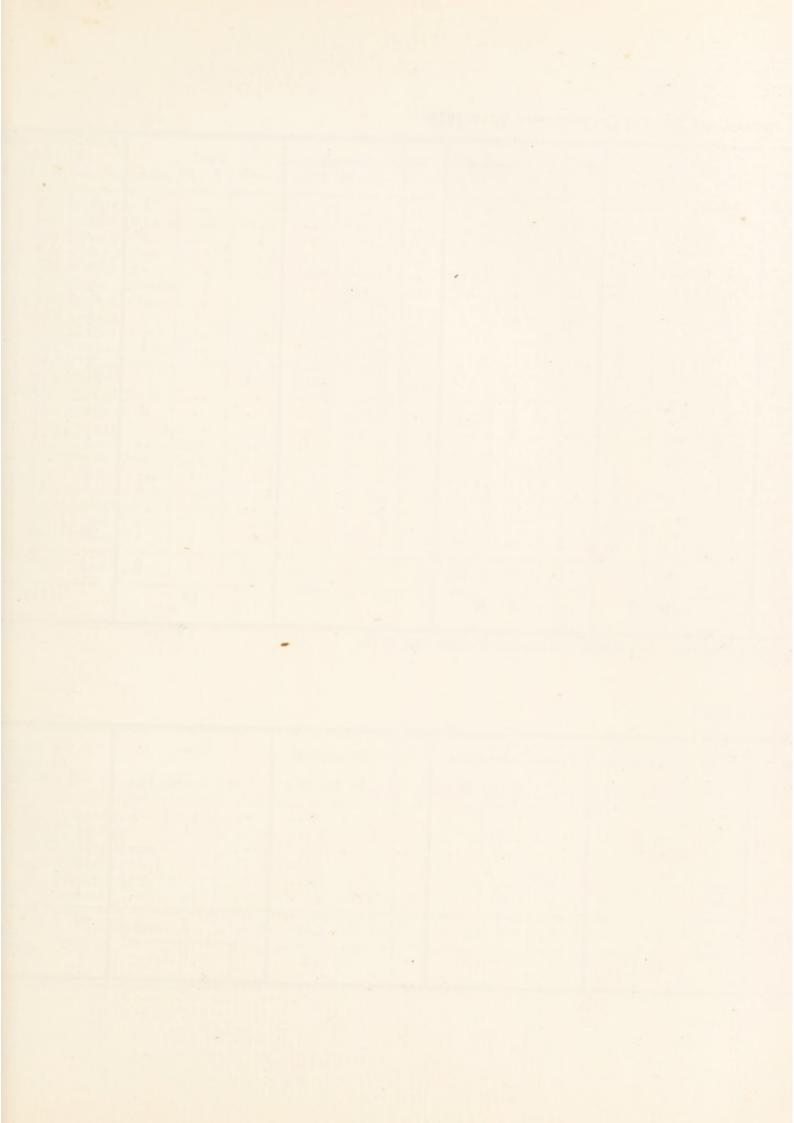
Orthopaedic Conditions—Robert Jones and Agnes Hunt Orthopaedic Hospital.

Pulmonary Tuberculosis—King Edward VII. Memorial Sanatorium, Shirlett; Prees Heath Sanatorium.

At Clinics : --

- School clinics for minor ailments are held at Bridgnorth, Dawley, Ellesmere, Ludlow, Ironbridge, Market Drayton, Newport, Oakengates, Oswestry, Wellington and Whitchurch. These are attended daily by the school nurses, and are visited once a week by the Assistant School Medical Officers, with the following exceptions:— Newport, which is held daily but is only visited fortnightly by the medical officer, and Ellesmere, which is held fortnightly.
- Eye Clinics are held from time to time at Bishop's Castle, Bridgnorth, Highley, Shifnal, Ellesmere, Ironbridge, Cleobury Mortimer, and Whitchurch, and attended by an Assistant School Medical Officer.
- An Eye Clinic at Oswestry is held occasionally and attended by a general practitioner with special experience in eye work.
- Eye Clinics attended by specialists are held weekly at Ludlow, and occasionally at Market Drayton.
- Orthopaedic Clinics, attended by the staff of the Shropshire Orthopaedic Hospital, are held weekly at Bridgnorth, Dawley, Ironbridge, Ludlow, Market Drayton, Oakengates, Oswestry, Shrewsbury, Wellington and Whitchurch, and fortnightly at Ellesmere, Newport and Wem.
- Tuberculosis Clinics are held at Bridgnorth, Ludlow, Oswestry, Shrewsbury, Wellington, and Whitchurch.
- X-Ray Treatment for ringworm is provided at a clinic in Birmingham by special arrangement with the Birmingham Education Authority.

Skin Disease.—In addition to 655 children treated at the County Council School Clinics, particulars of which are given on p. 21, one case was sent to Birmingham for X-Ray treatment for ringworm.



Number of Patients Treated at Shropshire After-Care Centres during the year 1933.

Diagnosis.	To5	tal treat 5—16	ted. 16+	_5	Cured. 5—16	16+		mprove 5—16		Refuse —5	ed treat 5—16	ment. 16+		t Distr 5—16			ed elsev 5—16			mprover 5—16		-5	Died. 5—16	16+	Numl	1/12/3: 5—1	
1. Arthritis 2. Congenital Deformities 3. Claw Foot 4. Erb's Palsy 5. Flat Foot 6. Hallux Rigidus 7. Hallux Valgus 8. Injuries 9. Knock-knees 10. Osteomyelitis 11. Poliomyelitis 12. Rickets 13. Round Back 14. Scoliosis 15. Spastic Diplegia 15. Spastic Diplegia 16. Spastic Hemiplegia 17. Spastic Hemiplegia 18. Spastic Paraplegia 19. Surgical Tuberculosis 20. ? Surgical Tuberculosis 21. Torticollis Others	6 41 3 61 	6 52 39 5 169 2 4 61 91 21 53 16 61 22 5 15 15 7 85	66 8 30 139 5 18 124 3 19 36 1 11 11 4 86 3 	1	2 4 18 2 22 22 13 2 1 3 1	2 1 9 1 1 19 1 2 1 8			12	2 18 1 4 14 11 11 11 11		3 4 226 2 8 2 2 1 1 1 4 15	1		1 1 1 9 2 1 3 2 3 4		1	2 2				1	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	1	1 31 6 18 1 34 2 31 1 2 1 25	64 44 27 4 107 1 2 28 51 115 46 8 45 18 4 10 2 8 8 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	46 7 20 86 3 14 65 6 29 1 6 17 7 1 1 70 3 52
Totals	239	789 1731	703	24	157	45	1	27 129	101	51	234	69	4	13	32	4	16	16	:	3	2	1	3	6	_	527 1113	432

N.B.—Cases from the Borough of Shrewsbury (with the exception of tuberculous patients) are excluded from this Table.

PREVENTIVE CASES.

Diagnosis		tal treat			Cured.		11.17	nprove		Refuse		ment.		ft Distr		Treate			400000	nprover			Died.		3	n Book	
Diagnosis	-0	3-10	10-		3—10	10+		3-10	10+	-5	3-10	10+	-5	3-16	16+	-5	5-16	16+	5	5—16	16+	-5	5-16	16+	-5	5-16	16+
1. Claw Foot	28 34 25	3 119 77 2 33 8	3 1	 1 5	13 7 3 1	i 	:: i	1 2 3 2	::	6 2 4 	13 14 2 7 2	i i		1 1 	::	i	· · · · · · · · · · · · · · · · · · ·	::	::			::	`i 		21 31 15	2 87 52 21 5	1
Totals	89	336	5	6	24 31	1	1	9	<u></u>	13	38 53	2	:	2		1	3		:)		-:-	:)	1	-:-	68	167	1

Tuberculosis.—Eleven School children suffering from phthisis were admitted to the Shirlett Sanatorium during the year, and one to Prees Heath Sanatorium. Other forms of tuberculosis were dealt with at the Shropshire Orthopaedic Hospital, and are included in the particulars given below.

Crippling Defects and Orthopaedics.—The following is a summary of cases treated at the Robert Jones and Agnes Hunt Orthopaedic Hospital during 1933, and paid for by the Public Health and Medical Inspection Committees:—

Disease.		Under 5 years of age.	5—16 years of age.	Over 16 years of age.	Total.
Tuberculosis of Bones and Joints		5	21*	33	59
Fractures and Dislocations		1	16	D. Control	
Diseases and Injuries of the Nerve	s	3	12		17
Osteomyelitis			9		15
Congenital Deformities		4	5		9
Claw Foot			8		9 8
Flat Foot			7		0
Spinal Curvature—Non-tubercular			6		0
Arthritis (Septic and Rheumatoid)			6		0
Rickets		3	9		0
Conditions due to faulty footwear			5		5
Club Foot		2	9		9
Diseases of the Hip—Non-tubercul	ar	ī	1		4
Torticollis			1		2
Injuries to Hands			1		1
			1		1
Total for 1933		19	102	33	154
Total for 1932		18	69	- 26	113

^{*} Includes 6 Shrewsbury Borough School Children.

In addition to those treated in the Orthopaedic Hospital during the year, a much larger number of cases received treatment at the various After-Care Centres. Some of these cases had already received in-patient treatment at the hospital but, having completed this part of their treatment and having been discharged, continued to receive further treatment as out-patients at the After-Care Centres. A much larger number of patients had, however, never received hospital treatment; and, the orthopaedic defect being only of a minor nature, owing in many instances to early detection, it had been found possible to give the necessary remedial exercises or other simple forms of treatment at the After-Care Centres, thus obviating the necessity for in-patient treatment at the hospital. A large amount of the treatment carried out at the After-Care Centres is, therefore, largely and very profitably preventive, and in this way the great majority of cases in this county are never allowed to develop orthopaedic defects so pronounced as to necessitate in-patient hospital treatment.

Full particulars of the patients attending the Orthopaedic Clinics are given in the tables facing this page, but the following is a summary of the work carried out at these centres during 1933:—

No. of attendances				10,748*
No. of patients treated				2,048
No. on the books on 1st January				1,362
No. on the books on 31st December				1,350
37 (705
No. of cases discharged				717
In addition, 66 cases were examined	d and	no tre	eatment	found necessary.
In addition, of cases were creaming				-

^{* 1,419} under five years; 6,037 five to sixteen years; 2,337 over sixteen years, and 955 tubercular cases—all ages.

Eye Defects.—1,278 children were treated for defects of vision, particulars being given below. In addition, ten children received treatment for other defects or diseases of the eyes and four children were operated on for squint.

Hospital or Clinic.	Number of Children seen.	Glasses prescribed	Glasses obtained.	No change of Glasses ordered.	Other treat- ment.	Visit to Salop Hospital advised.	No Glasses or treat- ment necessary.
Salop Eye, Ear and Throat			-00		01		46
Hospital		501	500	155	31		17
Ludlow Eye Clinic		135	135	37	2	2	7
Oswestry Eye Clinic		89	89	5 7			7
Market Drayton Eye Clinic		36	35	1	4		
Kidderminster Hospital	9	9	9				
Newtown Infirmary		1	1				
Assistant School Medical Office			40	10		2	1
at Whitchurch Eye Clinic		41	40	19		1	3
Bridgnorth do		46	45	2		1	3
Highley do		11	11	6		1	1
Ellesmere do		26	26	6		1	1
Shifnal do		7	7	1		.;	2
Ironbridge do	. 11	8	8			1	2
Totals for 1933 .	1278	910	906	235	37	8	88
Totals for 1932 .	1211	901	896	170	40	7	93

Ear Disease and Hearing.

Hospital.		Number of					
		Children seen.	Remedied.	Im- proved.	Not im- proved.	Not known.	No Treat- ment necessary.
Salop Eye Throat l	Ear and Hospital	 35	13	17	5		
Totals for	1932 1931 1930 1929	 41 55 59 55	15 22 18 15	17 27 34 29	9 5 5 8	 1	1 1 1 3

A number of these children required treatment for deafness and otorrhoea as a consequence of unhealthy tonsils and adenoids, treatment for which had previously been refused.

Diseases of the Nose and Throat.—Ten children suffering from purely nasal conditions were seen at the Salop Eye, Ear and Throat Hospital, and 10 were found to require treatment. The commonest conditions, however, which necessitated hospital treatment were unhealthy tonsils and adenoids, particulars of which are as follows:—

Hospital.	Number of Children seen.	Operated on.	Other treatment.	No treatment necessary.
Salop Eye, Ear and Throat Hospital Broseley and Wenlock Hospitals Oswestry Cottage Hospital Ellesmere Cottage Hospital Kidderminster Hospital Wellington Cottage Hospital Chirk Cottage Hospital Shifnal Cottage Hospital	 162 43 47 11 4 93 8 2	162 43 45 11 4 93 8 2		
Totals for 1933 Totals for 1932 Totals for 1931 Totals for 1930	 370 634 833 792	368 632 833 790	1 2	i ::

In addition to the above, 32 cases were operated on under private arrangements, making a total for the year 1933, of 402 operations.

Reports received from the Medical Officers on 595 children who had undergone operative treatment for tonsil and adenoid conditions showed, on the whole, a very great improvement in the health of the children, although in a number of cases tonsils and adenoids had not been completely removed. Below is given in tabular form a brief summary of these reports:—

No. with			T . 127	No. of	Cases not completely dealt with.			
Tonsils and Adenoids.	No. with Tonsils only.	No. with Adenoids only.	Total No. of cases.	cases completely dealt with.	Tonsils.	Adenoids.	Tonsils and Adenoids	
535	55	5	595	544	36	9	6	

EFFECTS OF OPERATION UPON HEALTH.

			Cured.	Improved.	Not improved.
General Health		 	_	482	11
Mouth Breathing		 	273	57	11
Otorrhoea		 	19	1	5
Deafness		 	9	7	1
Catarrhal Symptom	IS	 	41	84	18
Enlarged Glands		 	191	57	26
Minor Deformities		 	2	4	1
Rheumatism		 	1	_	_
Intelligence		 	_	13	_
Speech		 	_	2	_
Bronchitis		 	9	5	1
Chest Expansion		 	-	1	

School Clinics for Minor Ailments.

Table showing conditions for which treatment was received.

			Children referred	Other	Examina- tions by	Attend-	Resu	lts of Treati	ment.
Defect or Illne	Defect or Illness.		at S.M.I.	Children.	M.O.	ances.	Remedied.	Improved.	Unaltered
Skin :			***************************************	***************************************					
Ringworm—head			4	16	39	82	19	1000	1
Ringworm—body			6	21	66	276	27		1
Scabies			10	14	63	126	20		
Impetigo			5	381	533	3140	369	14	
Minor Injuries			10	735	1035	5111	675	38	2
Other skin diseases			7	191	237	1252	173	19	21
Ear Disease			41	145	318	1655	133	25	4
Eye disease (external a	and	100		***	010	1000	100	25	10
other)			38	278	476	1570	236	50	10
Verminous conditions			0	32	13	103	32	50	16
Tonsils and Adenoids			4	32	57	74	35	1:	
Other conditions			109	1368	1952	5554		1	
			100	1000	1932	5554	1066	236	90
Total for	1933		234	3213	4789	18943	2785	383	144
Total for	1932		247	3793	5482	21570	3581	280	106

Table showing attendances at each Clinic.

	Clinic.		Children referred	Other	Examina- tions by	Attend-	Resu	lts of Treat	ment.
			at S.M.I.	Children.	M.O.	ances.	Remedied.	Improved.	Unaltered
Bridgnorth			 	277	252	2046	245	32	
Dawley			 48	184	474	1544	225	7	
Ludlow			 19	238	214	1388	235	21	i
Ironbridge			 15	429	358	1820	315	81	20
Market Dray	ton		 11	339	896	3245	297	29	24
Newport			 3	129	99	722	92	7	33
Dakengates			 17	465	815	2679	381	86	15
Oswestry			 47	503	482	2098	378	51	14
Wellington			 57	449	469	1200	469	33	4
Whitchurch			 17	200	730	2201	148	36	33
	Tota	als	 234	3213	4789	18943	2785	383	144
Cotal for all	Clinics,		 347	1126		8197	1172	238	62
**	,,	1923	 312	1640		10034	1674	206	72
,,	,,	1924	 195	1540		11662	1402	235	77
***	,,	1925	 244	2017		13020	1768	331	82
	"	1926	 329	2507		13005	2211	444	93
,,	**	1927	 405	2717		15158	2505	442	161
***	,,	1928	 301	3006		18409	2537	560	174
**	,,	1929	 211	3117	3831	.17011	2792	357	120
**	,,	1930	 311	3498	5944	24338	3133	454	153
,,,	,,	1931	 237	3844	6317	23691	3496	396	106
,,	"	1932	 247	3793	5482	21570	3581	280	106
,))	1933	 234	3213	4789	18943	2785	383	144

Teeth.—The success or failure of the Dental scheme must depend upon the amount of sepsis removed and the number of permanent teeth saved, and not upon the refinements of dental treatment. Children of all ages in the schools are dealt with at each visit of the Dental Officer.

Not only are all ages dealt with, but the schools are now being visited on an average about once in nine months. This has been possible owing, partly and unfortunately, to the considerable number of refusals, but chiefly to the smaller amount of attention required as a result of previous treatment. The results of inspection and treatment are given in the tables at the end of the report.

One school was not visited during the year. All the remainder were inspected and were also treated during the year.

38 departments were treated twice during the year, and

11 schools were inspected twice, but the second treatment was not given until 1934.

The number of unsaveable permanent teeth is a measure of the imperfection of the dental scheme. In 29,663 examinations of children, only 4,632 unsaveable permanent teeth were found, and 4,157 of these were due to refusal of treatment at the previous inspection. Only 475 can therefore be legitimately attributed to any shortcomings of the scheme. Of this number, 225 were due to lack of opportunity to complete the treatment of the mouth on the previous occasion, 78 were due to unusually long inter-inspection period, and only 211 were due to the fact that the caries was so rapid as to destroy the tooth in the ordinary inter-inspection period. These figures show that if there were no refusals, and no extra long periods between inspections, there would be very few permanent teeth destroyed. In the East of the County the total number of unsaveable teeth, apart from refusals, was only 23.

The difference between the number referred for treatment (including 1,551 cases brought forward from 1932) and the number treated was 5,784. The details are given in the following statement:—

	Refusals.	Absent on day of Treatment	Left School.	To be treated next year.	Treatment deferred.
East of County (Mr. Birch) South of County (Mr. Keenan) . North of County (Mr. Catchpole) .	. 1058	232 92 225	25 10 24	608 245 102	0 51 13
Totals for 1933	9019	549 512	59 80	955 1551	64 93

The following table shows the schools in which the percentage of consents was very high, and those in which it was very low. During the year under consideration 48 schools had over 90 per cent. of consents as opposed to 52 in the previous year; and the number of schools with less than 50 per cent. of consents rose from 14 to 26 in the same period. This is a reversal of the previous trend, and is in fact the first year in which there has not been an increase in the number of schools with over 90 per cent. of consents and a decrease in the number of schools with less than 50 per cent. of consents.

PERCENTAGE OF "CONSENTS" FOR TREATMENT.—SCHOOLS WITH 90 PER CENT. OR OVER.

School.				S	chool.			
Langley Council Infants			100	Cardington				94
Buildwas			100	Acton Burnell				94
Eaton Constantine			100	Brockton				94
Kynnersley			100	Bourton				94
Donington			100	Hadley Council G	irls			93
Sutton Maddock			100	Loughton				93
Stanton-on-Hine-Heath			100	Bishop's Castle G	irls			93
Longden-on-Tern			98	Stockton Norton				92
Woodcote			98	Malins Lee Institu	ute			92
Langley Council Girls			98	Albrighton				92
Richard's Castle			98	Hopton Wafers				92
Smethcote			97	Hopesay				92
Ryton			96	Crudgington				91
Melverley			96	St. George's Girls				91
Bishop's Castle Infants			96	Wrockwardine W		uncil S	nr.	91
Lee Brockhurst			96	Jackfield C.E. Mi	xed			91
Quatt			95	Adderley				91
Wroxeter			95	Condover				91
Hordley			95	Lea Cross				91
Madeley C.E. Boys			95	Onibury				91
Worfield			95	Newport R.C.				90
Little Wenlock			94	Rushbury				90
Wellington R.C			94	Edgton				90
Broughall			94	Bicton				90
	SCHOOL	S WITH	NGT MORE	THAN 50 PER CENT	Γ.			
School.				S	chool.			
Dawley C.E. Infants			50	Kinlet				44
T-4-1-111			50	Whitchurch C.E.	Boys			43
M			50	Edstaston				42
37 (1			49	Coreley				41
117			48	Clee St. Margaret				41
Bridgnorth St. Mary's M	ived		47	Whitchurch Meth				40
	ixed		46	Button Oak				40
Welshampton			46	37 3				38
Chirbury			45	TO 1				38
Stoke-on-Tern			45	0.1				37
Great Wollaston			45	-				34
Newtown				TT 1 .				23
Weston Rhyn			44		••			22
Prees C.E			44	Bromlow				22

Mr. Stephen Keenan, L.D.S., reporting on the Southern Division of the County, states :-

"Although the number of children in my area is so great, the main object of the Dental Scheme is for the most part attained. With rare exceptions every child who has received treatment once a year during school life, leaves at the age of fourteen with the mouth free from dental disease, all saveable teeth treated by filling and all unsaveable teeth removed.

"By concentrating upon the permanents and dealing with the caries in its earliest stages an effort is made to preserve the whole of the permanent dentition. This is not always practicable, however, although the number of those who suffer loss of permanent molars is becoming less each year.

"When treatment is carried out at a clinic, the work may be completed owing to the possibility of securing a second appointment. In the rural areas where the work is done in the school, that which is calculated to be of the greatest benefit is undertaken—the extraction of septic teeth and the filling of the six year molars. When for some reason the work cannot be

completed an appointment to attend at the nearest centre is made.

"It is satisfactory to report that there is a decided willingness on the part of the parent to comply with this request, and the patient seldom absents himself. That progress is being made is evidenced by the steady decrease in the number of unsaveable permanent teeth. One has to admit that this decrease is very gradual, but this must be attributed to the persistent refusals who show increasingly worse conditions. The returns show a greater number of extractions of the permanent teeth during the current year. This is explained by the securing of consents from among these habitual refusals, and is not due in any way to any tendency to lose ground.

"There is also an increase in the number of permanent teeth filled. Probably this is accounted for by the fact that the cavities to be dealt with were less advanced in caries and

accordingly more rapidly and more easily treated.

"The treatment of the temporary teeth has consisted mostly of extractions. The filling of the cavities of those teeth would take up time which could be much more profitably spent

upon the permanent teeth.

"The spread of dental education has done much to lighten the work of the School Dental Officer. This is not only noticeable in the substantial rise in the percentage of consents to treatment, but in the whole attitude of the parents to the School Dental Service. Where formerly one found apathy or mere tolerance, there is now almost everywhere interest and enthusiasm. Parents are now eager to point out the defects, and often have a very fair idea of the treatment required. Credit for this state of things is due to the Teachers, Nurses and School Medical Officers. The Dental Officer is so fully occupied with the great amount of practical work which presents itself that he has little time to devote to propaganda.

"I look forward with hope to the suggested greater facilities for the dental work in the Welfare Centres. A well lighted room, equipped with a dental chair and spittoon would be an

enormous boon.

"It is to Research we look for much needed help in our struggle with dental disease. Much valuable knowledge has been brought to dental science by such investigators as Broderick, Sprawson, Mellanby, and Wallace. Although they differ in their mode of attack upon caries, they seem to be at one on the question of its causation, namely, the acid-forming micro organisms of the mouth. Methods of prevention which aim at the establishing of a better calcium metabolism judging by the results claimed, have much to recommend them. Nevertheless, if carbohydrate stagnation be the direct cause of decay, the simple methods calculated to attack the malady at its source cannot fail to make a very strong appeal.

"The disquieting fact that the condition of the teeth of the school entrants (aged five or six years) continues to be very bad, calls for a still more intense campaign in this direction.

"It is my belief that it will be through the adoption and observance of the rules of oral hygiene embodied in your leaflets and taught with such success in this county that the much desired improved conditions will be brought about."

OPEN AIR EDUCATION.

Playground Classes are encouraged, but they are held only in a comparatively small number of schools, and owing to climatic conditions it is unlikely that there will be any great development of open-air education until it is possible to give it by educating children in schools constructed on the open-air principle.

Residential Open-Air Schools.—There are always a certain number of children who are in a persistently poor state of health, not traceable to any definite physical defect, but probably attributable in most instances to poor home circumstances, lack of proper food and unhygienic conditions. No form of purely medical treatment can be expected to restore them to normal health, and the only remedy would seem to be to get them removed to where there are better conditions of life, and where their physical requirements will be more adequately met. It is for such children that a period of residence in an open-air school is particularly beneficial.

The Local Education Authority maintains three beds for such children in open-air schools. These beds are not occupied continually by the same children, but carefully selected children are sent for a period of three months, when their places are taken by other children equally suitable.

Three children were in the St. Catherine Home, Ventnor, Isle of Wight, at the beginning of the year, and eight more cases were sent there during the year. In addition, four cases were admitted to the Liverpool Open-air Hospital for Children, Leasowe, Wirral. Twelve children were discharged during the year, leaving three children in the Liverpool Open-air Hospital at the end of the year. All the children discharged were reported as having improved, some in a very marked degree.

The number of children who are sent to open-air schools has, of course, to be limited, and the length of stay in the schools to be curtailed in order to make these special facilities available for as large a number as possible. The number of children in ordinary elementary schools who could benfit from a change to an open-air school very much exceeds the accommodation available, and if the requirements of this County were to be met, many more than three beds would need to be at the disposal of the Local Education Authority.

In this County, during the year 1933, the School Medical Inspectors reported 549 of the children examined at routine medical inspections as suffering from malnutrition due to one cause or another. As the number of children so examined only represented about one-third of the children on the registers, it can be calculated that about 1650 children attending Elementary Schools suffer from poor health, which shows itself in the form of malnutrition. These figures are sufficient to show that, if a special open-air residential school were provided, where the children would be well fed and would live under the best hygienic conditions, the expenditure involved would be abundantly justified in the benefit to health of a large number of the child population of school age. The benefit to these children would not be confined only to matters of health, as the majority of the children who suffer from malnutrition come from poor homes, and to have had an opportunity of living under satisfactory conditions for a number of months would have a far-reaching effect in many other ways.

PHYSICAL TRAINING.

The work of the Organiser of Physical Training is developing along satisfactory lines, and is helping to bring about a gradual improvement in the general condition of the school population.

The Organiser of Physical Training not only visits the schools in order to supervise and guide the teachers in this branch of their work, but also arranges special classes for teachers which are held in various parts of the County in the evenings and on Saturday mornings, of which the following are the particulars:—

Centre.	Duration	Class Students.		dents.	Student	Percentage.
	From To	Hours.	Men.	Women.	Hours.	
Ludlow	 30th Jan.—10th April	71	2	25	170	83.9
Ludlow	9th Oct.—4th Dec.	12	3	22	216	72.0
Oswestry	 9th Oct.—5th Dec.	131	14	41	627	84.4

The acquisition of playing fields is proceeding in various parts of the County, and arrangements have been made, either by acquisition or payment of rent, by which playing fields have now become available for the use of the scholars in 65 schools. Although progress in this matter is somewhat slow, and the ground secured is not always, for various reasons, entirely suitable, the difficulties which have to be met and overcome are often very great.

Report of the Organiser of Physical Training.

Pending the publication of the New Syllabus of Physical Training, fewer classes of instruction for teachers were arranged this year.

Soon after the commencement of the Oswestry Class in September, the Organiser received an advanced copy of the Syllabus and began at once to introduce some of the newer exercises and activities. Towards the end of the course the new book was published and the Local Education Authority sent out one copy to each school.

Teachers were advised to begin with the simpler tables of exercises first, and endeavour to work up gradually to the tables suggested in the syllabus as being suitable to the various age groups or classes.

It is too early yet to judge of the general reception of the New Syllabus in the schools. Nevertheless the teachers in the schools which have been visited since its publication appear to welcome the definite advance in the nature of the work; they realise that the more adventurous and freer type of exercise cannot fail to appeal to and stimulate the interest of the children.

It will be necessary for all concerned to make a great effort to procure suitable footgear if all the activities in this new book are to be attempted; also the provision of mats or boards (on which children can sit, kneel or lie) becomes essential.

In rural schools especially, where the surface of the playground is often deplorable, much of the newer type of work will be impossible, and the ingenuity and enterprise of the teachers will be tested to the utmost in carrying out the suggestions in the syllabus. Credit must be given to those who tackle many of the difficulties successfully.

Fortunately each year sees a gradual improvement in the state of some playgrounds. Good surfaces are more essential from the point of view of Physical Training than ever before.

Swimming.—Wonderful progress was made in this branch of physical training this year. This was no doubt partly due to the hot summer, and also partly to more careful and methodical training.

The number of certificates gained showed a great increase on last year's record. For the first time small certificates were issued to each child who could swim one length (i.e., 25 yards). This proved a great incentive—to beginners. The test for the Proficiency Certificate remained the same, i.e.:—

25 yards breast stroke, 25 yards on back without use of arms, 25 yards any other stroke they wish, and a good dive in the deep end of the bath and as a rule it takes two seasons steady work to reach this standard.

Altogether at the various centres 312 "length" certificates and 120 "proficiency" certificates were gained.

The new open-air swimming bath at Market Drayton was opened officially in May. Arrangements have been made for the children from all schools in Market Drayton to attend for instruction each week.

The Teachers began at once by using good teaching methods and the results were remarkably satisfactory.

Market Drayton has every reason to be proud of its Swimming Bath, and the benefit to the children of the town should be inestimable.

Of course the wonderful weather throughout the season helped to make the initial season a great success.

On May 2nd, Mr. J. B. Hall, of Cheshire, gave a lecture at Monkmoor Senior School, Shrewsbury, on the "Organisation of Swimming Lessons in Elementary Schools." The County Teachers were invited to attend, and the response was very satisfactory. The expenses of £2 2s. 0d. were shared by the County Local Education Authority and the Shrewsbury Schools' Athletic Association.

Apparatus.—The provision of equipment for Physical Training lessons, although limited in extent, is still greatly appreciated in all schools, and it helps the Teachers to get the right type of work going in their lessons.

Grants.—Only three grants of £5 each were available this year to enable Teachers to attend Vacation Courses, and the following teachers were selected:—

Mr. Boon, Oswestry Senior Boys; Miss Holland, Market Drayton Senior; Mr. W. Moss, Wrockwardine Wood Senior.

Mr. Porter, Market Drayton Senior School, attended a Swimming Course in Scarborough at his own expense.

General.—The progress in most branches of Physical Education throughout the County is quite appreciable, although not rapid.

In so far as efforts are made to carry out suggestions from the New Syllabus, one may reasonably hope to see some very interesting developments during the ensuing year.

K. W. DAVEY,
Organiser of Physical Training.

CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.

PARENTS.—A notice is sent to all parents inviting their presence at the routine medical and dental inspections, and a special effort is always made to get the parents of seriously defective children to attend.

Teachers.—In addition to the help which the teachers give at ordinary school medical inspections, the assistance which they give during the inter-inspection periods in bringing their influence to bear on the parents to secure the treatment which has been advised is very great. This is especially so in the matter of dental treatment, and the effect of a change of head teacher is often very markedly reflected in the number of children whose parents consent to treatment. In the absence of the co-operation of the teachers the value of the medical side of the work would be very much reduced, as they are often instrumental in bringing to the notice of the medical inspector children in whom abnormalities and defects have begun to develop during the inter-examination periods.

School Attendance Officers.—School Attendance Officers are present at the medical inspections when required, and are available for bringing up children who are absent and whose examination is considered desirable. In persistently verminous cases, where it is necessary to take legal proceedings and the nurse objects to appearing in court, they are always present at the final examination of the child, and are therefore able to give evidence when required.

The opportunities which they have of seeing whether children absent from school on medical grounds are getting treatment are often greater than the opportunities of the school nurse, and they are now instructed to report at once any such children who are absent and are apparently not receiving or carrying out treatment, so that they can be further investigated if necessary by the medical department.

VOLUNTARY BODIES.—The Inspectors of the National Society for the Prevention of Cruelty to Children have been of great help in obtaining medical treatment where other means have failed, and in dealing with cases of gross neglect.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

The following table gives particulars of the children certified as exceptional during the year by the Medical Officers:—

	Certified suitable for Special School.	Notified to Local Authority as uneducable.	To be kept under observation.
Mentally Defective	76	23*	34
Epileptic	4		3
Blind	2		
Deaf and Dumb	1		
Physically Defective	84		

^{* 14} Imbeciles, 3 Idiots, 5 feeble-minded uneducable children, and 1 feeble-minded child discharged from a special school on attaining 16 years of age.

Special Schools.—The number of exceptional children admitted to special schools during 1933, whether examined during that year or previously, was—Blind 1, Deaf and Dumb 2, Epileptic 1, Mentally Defective 5, Physically Defective 103.

Mental Defectives.—Although 76 children were certified as mental defectives and found suitable for special schools, only four were admitted during the year, thus leaving 72 for whom no special provision was made. The reasons for their non-admission are as follows:—

 Parents' refusal
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The accommodation available is not sufficient for the needs of the County, and would be grossly insufficient if all suitable cases were compulsorily removed. There are at present 17 children in Sandlebridge Special School, 1 at Monyhull Residential School, and 1 at Besford

Court Catholic Mental Welfare Hospital from this County.

During the year 1933, the striking feature was the large number of mentally defective children attending the Public Elementary Schools. These to a considerable extent consisted of children who had been certified for a special school, but either their parents objected to their removal or they were considered too defective for admission. These children are now put under systematic supervision of the whole-time school nurses, and at the age of 16 are transferred to the supervision of the Health Visitors, although they cannot be notified formally to the Local Authority under the Mental Deficiency Act.

Physical Defectives.—The more serious orthopaedic cases are admitted to the Orthopaedic Hospital, which is also a special school for physically defective children within the meaning of the Education Act, on the recommendation of the School Medical Officer. The cases are discovered principally by the School Medical Officers and nurses, every effort being made to get the cases as early as possible.

Blind and Deaf Children.—In both these classes of children accommodation in special schools is always found if the parents are willing for removal. Every effort is made to get these children admitted as early as possible.

NURSERY Schools.—There are none of these schools in the County; nor does the need for provision appear to be particularly urgent.

CONTINUATION SCHOOLS.—There are no Continuation Schools in the County.

EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

The children over 12 years of age in private employment come under the notice of the Assistant School Medical Officers at each visit to the Schools.

If a Medical Officer considers that any of these employed children are not in a fit state of health to be employed outside of school hours, the facts are transmitted to the Secretary for Education for appropriate action to be taken.

SECONDARY SCHOOLS.

Medical inspection is carried out in 16 of the 18 Secondary Schools in the County. Five of the Secondary Schools are Aided Schools; and of these Aided Schools three undergo medical inspection. As five of the Secondary Schools, namely, Bishop's Castle, Cleobury Mortimer, Bridgnorth Grammar, Coalbrookdale High School and Market Drayton Grammar School are mixed schools, they have to be inspected by male and female medical officers. An effort is made to carry out an inspection in each school every term, and with the exception of eight inspections cancelled owing to the extremely small number of scholars due for examination, this has been done. The number of children in attendance in Secondary Schools in the County in September, 1933, was 3,363, and the number of children on the registers of those secondary schools which undergo medical inspection was, on that date, 2,926.

No general arrangements have been made by the Local Education Authority for providing treatment for children attending Secondary Schools in whom defects are found at routine medical inspections. If, however, a free place scholar is found to be in need of treatment for a visual defect and the parents are unable to secure the necessary treatment, the Local Education Authority undertake to provide facilities. In addition, dental inspection is carried out in Secondary Schools as in the case of Elementary Schools, and free dental treatment is provided for those scholars who have free places. The Orthopaedic After-care Centres are, of course, available for scholars from Secondary Schools just as for Elementary School children, but the Local Education Authority does not undertake to provide beds in the Orthopaedic Hospital in the case of the former. The parents of Secondary School scholars are not visited by school nurses, as is the case in Elementary Schools, in order to point out the necessity for treatment and urge the parents to take immediate steps to obtain it, and the whole question of securing treatment is left in the hands of the Head Masters and Head Mistresses, who write to the parents regarding any children for whom treatment has been advised by the medical inspectors.

The children who undergo routine medical examination at the visit of the medical inspector are entrants, children aged 12 and 15, and leavers. In addition, re-examination is carried out in the case of those children in whom some defect has been found at a previous examination, and progress is recorded on a treatment card till further examination on account of defects found is no longer indicated. The head master or head mistress also brings forward for special examination any children, not included in the groups mentioned above, in whose case there seems to be a condition or defect requiring medical attention.

Amongst Secondary School children treatment for defects of the grosser type is more readily obtained by the parents than amongst Elementary School children, but when a defect is of the minor type, a large number of those discovered in Secondary School children go untreated. This last is probably to be attributed partly to the fact that, after a medical inspection in an Elementary School, the homes of the children in whom defects have been found are visited by the school nurses, who point out to the parents the necessity for obtaining treatment at the earliest possible moment, and partly to the fact that facilities for treatment of children in attendance at elementary schools are provided by the Local Education Authority. As, however, about half of the children in attendance at Secondary Schools have free places, and therefore come from substantially the same class of home as the children in Elementary Schools, the considerations which make desirable the provision of treatment under County Council Schemes for children in attendance at Elementary Schools apply with at least equal force to about 50 per cent. of the children in attendance at Secondary Schools.

Below is given in tabular form particulars of the children examined by the medical inspectors.

POUTINE MEDICAL INSPECTIONS

	A.— ROUTINE MEDICAL INSTRUCTIONS.																			
Age			4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total.
Boys				1	1	4	8	9							18		18	11	.;	654 804
Girls				9	7	5	5	8	75	123	239	39	39	160	36	31	24	3	1	804
Tota	ls for	1933		10	8	9	13	17	137	250	400	72	69	315	54	47	42	14	1	1458
		1932		8	7	10	20						76	316	52	4.1	28	10		1464

RE-EXAMINATIONS	. SPECIAL EXAMINATIONS	. TOTAL.
Boys 509	4	513
Girls 820	43	863
Totals for 1933 1329	47	1376
Totals for 1932 1197	43	1240

DEFECTS FOUND AND TREATMENT RECEIVED.

On page 41 are tables giving details of defects found, requiring either observation or treatment; and below is given in convenient form for reference a summary of the defects, with a statement of the number of children found during the year by the medical inspectors to have obtained treatment for defects discovered at previous examinations.

	Eyesight.	Tonsils & Adenoids.	Ear Conditions.	Skin	Orthopaedic Defects.		Total.
Defects discovered	1 121	17	7	9	71	54	279
Defects treated	170	15	14	10	238	4	451

Of the above conditions, the only one for which the Local Education Authority undertakes to provide treatment, and that only when the parent is unable to arrange for treatment himself, is the defect of eyesight.

During the year, 34 cases were dealt with under the scheme of the Local Education Authority,
 through private practitioners or hospitals, and 25 otherwise.

Spectacles were prescribed and obtained in 141 cases, 28 under the Local Education Authority's scheme and 113 otherwise.

DENTAL INSPECTION AND TREATMENT.

All the schools in which medical inspection is carried out are visited by the Dental Officers, and all the scholars are inspected at each visit. Only those scholars, however, who have free places receive treatment under the scheme of the Local Education Authority. The parents of the other scholars are advised to obtain the necessary treatment through the agency of private dentists.

Two schools were not visited during the year, one school was inspected during 1932, but the treatment was not carried out until 1933, and in 13 school inspection and treatment were carried out once.

The findings of the School Dental Officers are given in the tables below, in which the condition of the mouths of free placers, fee paying and elementary school children are compared.

AVERAGE NUMBER OF DECAYED TEETH PER CHILD.

	Age	 7 and under.	8	9	10	11	12		14			17	18	Total
Free-placers Fee-paying Elementary		 3.2	3.1	2.5 2.8	2.1	2.0	1.8 2.1 1.8	2.6	3.1	3.5	3.8 4.1	4.0 5.4	4.7 5.3	2.8 2.9 2.3

PERCENTAGE FREE FROM CARIES.

	Age	 7 and under.	8	9	10	11	12	13	14	15	16	17	18	Total.
Free-placers Fee-paying Elementary		 21	8 11	18 12	17 33 17	34 29 21	30 24 25	18 21 24	.17 17 22	19 15	8 12	13 20	7 17	21 21 18

It will be seen that, while there is an average of 2.9 decayed teeth amongst the fee-paying children, the average is only 2.8 amongst the free-placers.

On page 42 a statement is given in tabular form of the number of children inspected by the School Dental Officers in Secondary Schools, of the findings of these inspections, and of the number of free-placers who were actually treated by them. The following are the chief facts:—

		Fe	ee-paying.	Free-placers.
Total No. of inspections	 		1071	839
No. of children referred for treatment	 		504	480
No. of children actually treated	 		_	317

STATISTICAL TABLES—ELEMENTARY SCHOOLS.

TABLE I.—A—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections-

nper of Code G	roup	mspect	10115			
Entrants						3,527
Intermediates						3,552
Leavers						3,681
			Total			10,760
Number of	f othe	r Routi	ne Inspe	ections		0
	в.—0	THER I	NSPECT	IONS.		
Number of Spe	cial I	nspectio	ons			4,030
Number of re-i					• •	12,266
			Tot	2]		16 296

TABLE II .- A .- RETURN OF DEFECTS FOUND AT MEDICAL INSPECTION IN THE YEAR ENDING 31st December, 1933.

	Camparar III are the camparar	Routine I	nspections.	Special In	spections.
		No. of	Defects.	No. of 1	Defects.
	Defect or Disease.	Requiring treatment.	Requiring to be kept under observation, but not requiring treatment. (3)	Requiring treatment.	Requiring to be kept under observation, but not requiring treatment.
Malnutritio	on	2	547	5	4
Uncleanlin	ess	589		6	
	Ringworm—				
	Scalp Body	4 2		2	
Skin	Scabies	7	111	5	
	Impetigo	11	.:	4	- ::
	Other Diseases (non-tubercular)	27	1	1	
	Blepharitis	28	11	1	2
	Conjunctivitis	20		2	
	Keratitis	•:	.:	1	
§Eye	Corneal Opacities Defective Vision (excluding	1	1		
	Squint	424	119	68	6
	Squint	83	9	9	5
	Other Conditions	8	2	2	
	Defective Hearing	12	7	4	2
Ear	Otitis media	41	4	4	
	Other ear diseases	1	1	10	::
Nose	Enlarged tonsils only	204	742 53	19 8	34
and	Enlarged topolla and adapaids	46 141	80	16	10
Throat	Other conditions	21	22	7	6
Enlarged	Cervical Glands (non-tubercular)	6	236	1	14
Defective			79		2
	ental Diseases	421		24	
Heart	Heart Disease		00		0
and	Organic	2	69	1	2
Circula- tion.	Functional	15	41 23	i	5
	Bronchitis	16	31	1	4
Lungs	Other non-tuberculous diseases	5	12	i	2
	Pulmonary—				
	Definite	1			
	Suspected	6			
T	Non-pulmonary	10		3	
Tuber- culosis	Glands Spine	18 2	2	1	
Cuiosis	Hip	2			
	Other bones and joints	4			
	Skin	2 4			
	Other forms		1		
Nervous	Epilepsy	2	4	2	2
System	Chorea	3	3 5	2	i
	Other conditions	15	30	4	10
Deform-	Spinol Curvatura	28	23	3	
ities	Other forms	175	49	29	3
Other defe	ects and diseases	123	758†	12	87‡

[§] In addition there were 225 "Routine" and 6 "Special" cases of defective vision which had been corrected by glasses at the time of examination.

This only includes the grosser cases requiring immediate treatment, others being left over for routine treatment by the School Dental Officer.
 † Includes 545 Dull and Backward Children.
 ‡ Includes 36 Dull and Backward Children.

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

	Number	Percentage of children found	
Group. (1)	Inspected. (2)	Found to require treatment. (3)	to require treatment.
Code Groups :— Entrants	3527 3552 3681	423 517 451	12.0 14.6 12.3
Total (Code Groups)	10760	1391	12.9

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA AT THE END OF 1933.

(No child is entered under more than one heading).

Children suffering from Multiple Defects.

Blindness (NOT Partial Blindness).
Deafness (NOT Partial Deafness).
Mental Defect.
Epilepsy.
Active Tuberculosis.
Crippling.
Heart Disease.

Eight children were found to be suffering from combinations of the above defects.

Blind Children.

At Certified Schools for the Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
7				7

Partially Blind Children.

At Certified Schools for the Blind.	At Certified Schools for the Partially Blind.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
1	1	9		2	13.

Deaf Children.

At Certified Schools for the Deaf.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
14	2		1	17

Partially Deaf Children.

At Certified School for the Deaf.	At Certified Schools for the Partially Deaf.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
2				5	7

Mentally Defective Children.

(FEEBLE-MINDED CHILDREN).

At Certified Schools for Mentally Defective Children.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
18	132	9	66	225

Epileptic Children.

CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
3			11	14

Physically Defective Children.

A .- Tuberculous Children.

I.—CHILDREN SUFFERING FROM PULMONARY TUBERCULOSIS.
(Including pleura and intra-thoracic glands).

	(Including pleur	a and intra-thora	cic glands).	
At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
		13	8	21
II.—Сн	ILDREN SUFFERING	FROM NON-PULM	ONARY TUBERCULOSI	is.
At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
8	69	10	53	140
	В.—1	Delicate Children.		
At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
3	137		31	171
	C.—	Crippled Children.		
At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
12	122	1	44	179
	D.—Childr	en with Heart Di	isease.	
At Certified Special Schools.	At Public Elementary Schools.	At Other Institutions.	At no School or Institution.	Total.
	32		25	57.

Table IV.—Return of Defects Treated during the Year ended 31st December, 1933.

Treatment Table.

GROUP I .- MINOR AILMENTS.

			Number of defects treated, or under treatment during the year.								
De	efect or	Disea:	se.	114			Under the Authority's Scheme. (2)	Otherwise.	Total.		
Skin-											
Ringworm—Scalp							20	5	25		
Ringworm-Body							27	5 3 2	30		
Scabies							24	2	26		
Impetigo							386	1	387		
Other Skin Diseases							233	11	244		
Minor Eye Defects— (External and other,	but ex	cludin	g cases	falling	in						
Group II.)							316	11	332		
Minor Ear Defects							186	16	197		
Miscellaneous	: .		• • • • • • • • • • • • • • • • • • • •				2258	26	2284		
(e.g., Minor injuries	s, brui	ses, sor	es, chill	olains	etc.)						
			Total				3450	75	3525		

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I.)

Manager Landson		Number of defects de	alt with.	
Defect or Disease.	Under the Authority's Scheme.	Submitted to refrac- tion by private practitioner or at Hospital apart from the Authority's Scheme. (3)	Otherwise.	Total.
Errors of refraction (including Squint)	1182	59	39	(5)
Other defect or disease of the Eye excluding those recorded in Group I.)			3	10
Total	1189	59	42	1290

Total number of children for whom spectacles were pre-	scribe	d :		
(a) Under the Authority's Scheme (b) Otherwise				 924 81
Total number of children who obtained or received spect				
(a) Under the Authority's Scheme (b) Otherwise	::		::	 902 79

GROUP III .- TREATMENT OF DEFECTS OF NOSE AND THROAT.

							1	vumbe	er of D	efects.	- 1			
			Rece	ived C	perat	ive Tr	eatmer	nt.						
Auth	Under ority Clin Hospi	s Sche	me	Hos	Practit pital, he Au	Private tioner apart thority heme.	or from		То	tal.		Received other forms of Treatment.	Total number treated.	
		(1)			30.					(3)		(4)	(5)	
(i) 64	(ii) 26	(iii) 275	(iv)	(i) 8	(ii)	(iii) 23	(iv)	(i) 72	(ii) 27	(iii) 298	(iv)	26	427	

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

GROUP IV .- ORTHOPAEDIC AND POSTURAL DEFECTS.

	Under t	he Authority's (1)	Scheme.				
	Residential treatment with education.	Residential treatment without education.	Non- residential treatment at an orthopaedic clinic. (iii)	Residential treatment with education.	Residential treatment without education.	Non- residential treatment at an orthopaedic clinic. (iii)	Total number treated.
Number of children treated	85	11	1031				E031

GROUP V. DENTAL DEFECTS.

NUMBER OF CHILDREN DEALT WITH.

						Agi	E GRO	OUPS	INSP	ECTE	D.					
		Age	 Under 5	5	6	7	8	9	10	11	12	13	14	15	Specials.	Total.
East of County (Mr. Birch)			 257	662	. 756	929	938	1038	1047	1080	1092	1038	122	_	85	904
South of County (Mr. Keenan)			 177	735	1076	1186	1192	1186	1262	1246	1316	1253	114	3	_	10746
North of County (Mr. Catchpo			 160	778	1011	1076	1129	1100	1156	1115	1130	1072	139	_	7	9878
Te	otal		 594	2175	2843	3191	3259	3324	3465	3441	3538	3363	375	3	92	29663
		,		No.	of Cr	HILDR	EN R	EFERI	RED I	FOR T	REAT	MENT				_
		Age	 Under 5	5	6	7	8	9	10	11	12	13	14	15	Specials.	Total
East of County South of County			 92 29	344 287	477 536		594 722	629 663	573 662		537 593	474 557	45 42	=	85	5044
North of County			45	405	620		718	673				508	66	=	7	5357 5483
	Total		 166	1036	1633	1981	2034	1965	1889	1712	1684	1539	153		92	15884
(b)		erred for				1					.001	1000	100		02	10004

NUMBER OF TEMPORARY TEETH DECAYED.

				S	AVEA	BLE.	,					Unsaveable.										
t of	 Un- der5	5	6	7	8	9	10	11	12	13	14	Un- der 5	5	6	7	8	9	10	11	12	13	14
t of ounty th of	 1124	3548	3857	3959	3228	2574	1777	949	413	139	12	166	707	1058	1266	1021	882	625	409	285	113	8
ounty th of	 240	1450	2033	1919	1439	967	509	285	115	32	-	38	445	851	1035	980	764	610	412	209	105	4
ounty	 226	910	917	543	407	315	178	112	49	14	2	163	1558	2175	2287	1961	1261	930	474	225	88	8
otal	 1590	5908	6807	6421	5074	3856	2464	1346	577	185	14	367	2710	4084	4588	3962	2907	2165	1295	719	306	20

NUMBER OF PERMANENT TEETH DECAYED.

					SAVE	EABLE	š.								Un	SAVI	EABLE		_			_
Age East of	5	6	7	8	9	10	11	12	13	14	15	5	6	7	8	9	10	11	12	13	14	1
East of County	17	55	267	483	839	991	1125	1389	1467	162	-	0	0	1	5	21	34	78			37	
South of County	5	35	117	278	419	613	801	1073	1269	125	4	0	0	12	57	98	190	258	417	642	84	
North of County	12	114	320	768	984	1260	1314	1538	1557	247	-	0	7	22	145	193	277	409	549	674	118	
Total	34	204	704	1529	2242	2864	3240	4000	4293	534	4	0	7	35	207	312	501	745	1121	1465	239	

PARTICULARS OF TIME GIVEN AND OPERATIONS UNDERTAKEN.

No. of Half-days	No. of Half-days	days Attendances made by the Children at the Clinics.	No. Perma Teet	anent	No. Temp Tee	porary	Total	No. of Administra- tions of		No. of other Operations.	
devoted to Inspec- tion.	devoted to Treat- ment.		Ex- tracted.	Filled.	Ex- tracted.	Filled.	No. of Fillings.	General Anaesthetics.		Temp- orary Teeth	
East of Co 81	unty. 341	4015	216	1968	3800	402	2430	_	1749	454	
South of C	County. 334	4342	518	1511	3563	183	1719	-	1500	354	
North of C	County. 301	3771	607	1802	4753	26	2004	3	1781	29	
Total 242	976	12128	1341	5281	12116	611	6153	3	5030	837	

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

 Average number of visits per school made during the year by the School Nurses Total number of examinations of children in the schools by the School Nurses 	 9.0 101,505
(3) Number of individual children found unclean	 3,035 арргож.
(4) Number of children cleaned under arrangements made by the Local Education Authority	 0
(5) Number of cases in which legal proceedings were taken :—	
	 0
(a) Chief the Lieuward Land	18
(b) Under School Attendance Bye-laws	

RETURN OF DEFECTS (SECONDARY SCHOOLS).

				Routine I	Inspections.	Special In	aspections.
				No. of	Defects.	No. of	Defects.
	Defect or Disea	se.		Requiring treatment.	Requiring to be kept under observation, but not requiring treatment. (3)	Requiring treatment.	Requiring to be kept under observation but not requiring treatment. (5)
Malnutritio					56		
Uncleanline	/Ringworm-					::	::
21-1-	Scalp						
Skin	Body						
	Y						
	Other diseases (no	n-tuberc	ulous)	7			
Teeth	Dental Diseases	··· ··		101		.;	
Nose	(Enlarged Tonsils			13	56	4	
and	Adenoids only			2			
Chroat	Enlarged Tonsils	and Ader	noids	2	1	::	::
mlarged C	Other conditions			2	3		
oitre	ervical Glands (non-				6		
OTELO	(External Eye Dise	2356		2 8	2		
ye	Defeation Tree	ase .		116	117		
	(including squ	uint)		110	117	5	8
	(Defective Hearing			2	1	1	
ar	Otitis media			3		1	• • • • • • • • • • • • • • • • • • • •
Valentine C	Other Ear Disease	s			2 2 5		
efective Sp	(backward)			1			
leart and C	(backward)				16		
naemia				2 2	19		1
	/Pulmonary-			4	3	••	
	Definite	.,					
	Suspected			1	1		••
	Non-pulmonary-				,		
uber-	Glands			2			
ulosis	Llie						
	Hip Other Bones a	nd loint					
	Skin					.:	
	041 (- ::			1	
ungs	(Bronchitis				i		
ungs	Other non-tubercu	lous dise	ases	i	3		
ervous	(Headache						i
ystem	Signs of Overstrain	١			4		
heumatism							
igestion .				3	1		
	(Crimal Comme				1	•:	.;
eform-	Flat Foot			7 39	46 62	1	4
ities	Other Deformity .		::	21	8	3	2
ther Defect	0		::	25	20	4	i
emedial Ex	ercises advised .		-	59		2	
				35		2	
umber of in	dividual children fo	und at R	outine				
Inspection	to require treatmen	t		236		_	

DENTAL INSPECTION OF SECONDARY SCHOOL CHILDREN.

				Age Groups Inspected.												
		Age		7 and un- der.	8	9	10	11	12	13	14	15	16		18 and over	Total.
Fee-paying Free-place	::	::	::	 24	24	34	61 12	123 103	193 159	234 136	150 126	95 129	66 84	44 63	23 27	1071 839
		Total		 24	24	34	73	226	352	370	276	224	150	107	50	1910
						No.	of Sch	olars	refe.	rred i	for tr	eatm	ent.			
		Age	• •	7 and un- der.	8	9	10	11	12	13	14	15	16	17	18 and over	Total
Fee-paying Free-place		Age		and un-	8	9			12		14	15	16	18	and	Total 504 399

^{*}Actually treated (Free-place) 317

PARTICULARS OF TIME GIVEN AND OPERATIONS UNDERTAKEN (SECONDARY SCHOOLS).

No. of Half-days devoted to Inspec- tion.	No. of Half-days devoted	Total No. of Attendances	No. Perma Tee	anent	No. Temp Tee		Total	No. of Administra- tions of	No. of other Operations.		
	Treat- ment.	made by the Children at the Clinics and Schools.	Ex- tracted.	Filled.	Ex- tracted.	Filled.	No. of Fillings.	General Anaesthetics.	Per- manent Teeth.	Temp orary Teeth	
Total 20	49	390	117	367	63	0	384	0	368	0	