[Report 1931] / School Medical Officer of Health, Salop / Shropshire County Council.

wellcome collection

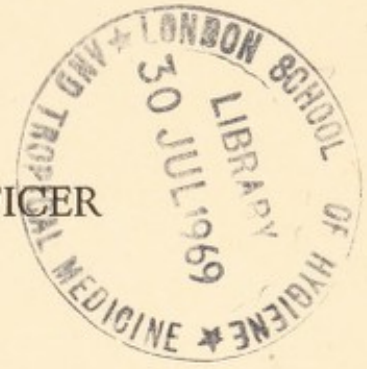
Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
https://wellcomecollection.org

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

TO



The Education Committee

OF THE

SALOP COUNTY COUNCIL

1931.

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

Medical Staff.

School Medical Officer :

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

Assistant School Medical Officers :

KATHLEEN PRIESTLEY, L.S.A.
MABEL BLAKE, M.B., Ch.B.
LESLIE WILSON EVANS, M.B., D.P.H. (part-time).
BERNARD A. ASTLEY WESTON, M.B., D.P.H.
WILLIAM H. HARRIS, M.B., D.P.H. (part-time).
CHARLES M. NICOL, M.B., D.P.H. (ceased duty 30th September, 1931).

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 for 1931.

Considerations of economy have of necessity placed definite restrictions on the opportunities for new developments, but the work of the School Medical Service is being gradually extended on definitely established lines. The school clinic at Ironbridge, for example, is now being held daily instead of, as formerly, once a week, and 1931 was the first complete year in which dental treatment of Secondary School Scholars who have free places was carried out.

A feature of the work in connection with the School Dental Service which is worthy of special mention is the increase in the number of children in Elementary Schools whose parents consent to dental treatment. During the year 1930 there were 5,604 " refusals," but in the year under consideration these fell to 4,589, a result which is reflected in an increase of 13 in the number of schools with over 90 per cent. of " consents," and a corresponding decrease of 17 in the number of schools in which the " consents " were 50 per cent. or less.

As treatment of unhealthy conditions of the teeth is only second in importance to complete prevention of dental caries, this must be considered a very gratifying advance. It indicates not only an increasing appreciation on the part of the parents of the benefits of dental treatment, but also the effect of the cordial co-operation of the Head Teachers who have used their influence to secure the consent of the parents to the treatment recommended. It must also be regarded as a tribute to the consideration and understanding of the Dental Officers in dealing with the school children.

I am, Ladies and Gentlemen,

Your obedient Servant,

WILLIAM TAYLOR,
County Medical Officer and
School Medical Officer.

COLLEGE HILL HOUSE,
SHREWSBURY,
May, 1932.

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

The area covered by the Salop Education Authority, which at the time of the 1921 census had a population of 211,946, comprises 858,277 acres, and with the exception of the area represented by the Borough of Shrewsbury, which is an independent authority for elementary education, is co-extensive with the administrative county.

During the year 1931, the Ketley Bank Boys and Girls Departments were amalgamated as a Junior Mixed School; the new Wem Council School replaced the Wem Undenominational School; and the Harlescott Temporary and Sundorne Schools, which were closed, were replaced by the Harlescott Council School.

At the end of the year there were 330 departments comprised in 277 schools. On 31st December, 1930, the number of children on the register was 29,425, as opposed to 29,867 on 31st December, 1931.

STAFF.

There are six Assistant School Medical Officers, two of whom hold positions as District Medical Officers of Health within the County, seven-tenths of their time being devoted to the work of School Medical Inspection and three-tenths to Maternity and Child Welfare work.

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

3 School Dental Officers.
1 Organiser of Physical Training.
2 Whole-time School Nurses.
10 Health Visitors undertaking school nursing.
90 District Nurses undertaking school nursing.
3 Dental Helpers.

CO-ORDINATION.

As the School Medical Officer is the County Medical Officer, and as the Assistant School Medical Officers are also the Assistant Child Welfare Medical Officers, this allows of complete co-ordination of the school medical services with the other health services of the County, namely, Child Welfare, Tuberculosis, Mental Deficiency, Venereal Disease, and the work of the District Medical Officers of Health. In the case of the Oswestry Urban and Rural Districts, and the Urban and Rural Districts of Ellesmere, in which County Council Assistant Medical Officers are also the District Medical Officers of Health, a further means for co-operation and co-ordination between the various branches of the health services is provided.

The advantages of the above arrangements become apparent when the work in the various clinics in the County is borne in mind. The same Medical Officers attend both the School Clinics and the Child Welfare Clinics, which are held in the same buildings on the same day. In addition, the Orthopaedic Clinics, although conducted by other than County Council Medical Officers, are also held in the same buildings and at the same time as the Child Welfare Clinics. By such an arrangement those responsible for one branch of the work can readily refer any child to a Medical Officer responsible for another branch, according to the nature of the defect from which the child is suffering. The Assistant School Medical Officers, therefore, have every opportunity of keeping in touch with those children under five years of age, and also with those over that age, who are under the necessity of attending one or other of the various clinics.

The co-ordination with the Tuberculosis Scheme is also very close, and arrangements are in force whereby a child, whose physical condition is such as to render the opinion of a Tuberculosis Officer desirable, can readily be referred to him for examination, and for continued supervision and re-examination, if such is considered necessary or advisable.

By these various arrangements the care of the debilitated children under school age is adequately provided for, especially as the health visitors, who attend the Child Welfare and Tuberculosis Clinics, are also responsible for School Nursing.

HYGIENIC CONDITION OF THE SCHOOLS.

In a County such as Shropshire, in which the population is about equally distributed between Urban and Rural Districts, it naturally follows that there are great differences in the hygienic condition of the schools. The size of the schools varies so greatly, and the means for making provision for sanitation differ so widely with the locality, that nothing like uniformity is obtainable, and in certain instances there is ample room for improvement. Steady progress in this respect is, however, being made, and each year sees advances not only in the provision and improvement of sanitary arrangements and water supplies, but also in the matter of heating, lighting and ventilation. In certain of the older schools the design of the class-rooms is so bad that the distance across is greater than that from back to front, the result being that, if the teacher is to get all the children comfortably within his field of vision, it is necessary to crowd all the desks as far as possible into one-half of the floor-space. Such an arrangement is extremely bad, as it does not permit of proper spacing of the children and is conducive to the spread of infectious disease, which is, as a rule, conveyed from one child to another through the inhalation of air contaminated by infected particles sprayed into the atmosphere as a result of coughing.

Heating and Ventilation.

It is important not only to have adequate spacing of the children, but also to have ample ventilation in order to flush out the vitiated atmosphere and replace it with fresh air, and this can only be obtained if, in addition to proper ventilation, there are also satisfactory means for heating. The problems of heating and ventilation cannot be considered separately, as they are one and the same, and the final solution must always result in a compromise.

Ventilation which promotes a feeling of chilliness by lowering the body temperature depresses the vitality, and is unsatisfactory in that it renders the child susceptible to any infection with which it comes in contact. Warmth which is provided at the expense of adequate ventilation is equally harmful in that it is obtained by shutting out fresh air, which leads to vitiation of the atmosphere of the class-room and in some instances the loading of it with infective material. The more fresh air a child obtains the better, but the means of heating the school must be such that the debilitated and weakly children can maintain the normal body temperature ; otherwise the results are likely to be harmful.

It must be recognised, therefore, that it is practically impossible to provide adequate ventilation unless steps are taken to keep the children comfortably warm, especially if they are underclothed or underfed ; and it is difficult to find fault with a teacher who on a cold winter day keeps all the windows closed in an effort to heat the school, when the only means of heating the class-rooms is by means of a fire placed in one corner, especially if the fire-place is of faulty construction.

Open-air Schools.

The ideal is of course an open-air school, and the Local Education Authority is approaching as near to this as is possible in this country by constructing all new schools on the open-air principle. Doors are placed along one side of each class-room in such a way as to enable the whole of this side of the room to be thrown open to the outside air, and in order to enable these facilities for bringing the children into contact with the open air to be utilised to the fullest extent, special heating arrangements are being installed. It is hoped that in this way not only will an improvement in the general health of the children be promoted, but that there will also be a reduction in the prevalence of infectious disease. It is a lamentable fact that many parents succeed in keeping their children free from serious forms of infectious disease till they begin to attend school, only to find that they then go down with one form of infection after another, sometimes with most unfortunate consequences. If, therefore, the heating arrangements in the schools constructed on the open-air principle are such that the children can be kept warm when the whole of one side of the class-room is thrown open, it is hoped and expected that considerable improvement in the general health of the children will be brought about.

Ceiling Heating.

It must be recognised that at the present time the usual method of heating is one which results in warming the air contained in a room. In an open-air school this principle is of course quite impracticable, if the doors to the outside are to be kept open to any considerable extent. An atmosphere which is continually changing, as will be the case in an open-air school, cannot be a warm atmosphere ; and, if considerations of warmth will not permit of a changing atmosphere in such a school under normal conditions in this country, schools constructed on the open-air principle must to a great extent be considered a failure. It is intended to heat the children rather than the room, and the only practicable way of doing this is to place the source of heat in such a position that the rays of heat will fall directly on them. The principle of ceiling heating has therefore been adopted, and although this method is more or less in the experimental stage, it is confidently expected that the children will be kept warm in the same way as when standing in the rays of a bright sun ; and that they will in addition experience the stimulating effect of breathing and coming in contact with a surrounding cool atmosphere, a most important factor in the promotion of good health and of the natural powers of resistance to disease.

In the new schools at Harlescott and Wem, in both of which the method of ceiling heating has been installed, special observations are being made, and it is intended to report later on the efficacy of this method of heating when more reliable data are available. When the whole of one side of a class-room is thrown open to the outside air the actual temperature in the room gives no real indication of the extent to which this method is proving satisfactory, because, as stated above, a new principle is involved, the successful application of which should result in a cool, fresh atmosphere in the room through which heat rays are being transmitted from the ceiling on to the children. It is, of course, too much to expect that in all weathers it will be possible to keep the whole of one side of the class-rooms open, but this method of heating ought at least to allow of a close approximation to open air conditions in these schools at certain times of the year. To what extent the objects will be secured which it was hoped would be obtained by the installation of this method of heating partly depends on the teachers ; and time must be allowed them to ascertain by experience in different kinds of weather how to utilise to the greatest advantage the facilities at their disposal. It is, however, a matter to which the Head Teachers of these schools might be requested to give special attention, as the success or otherwise of this method of heating in these schools must to a certain extent be a governing factor in deciding on the method of heating to be employed in the schools either in the process of construction or the construction of which is under 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.

Cows' Milk and Malted Milk.

In an increasingly large number of schools a regular supply of milk is now being supplied 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 of malted milk

can be obtained in the middle of the day. Although this last is all to the good, and many children prefer malted to ordinary milk, it cannot be too clearly stated that fresh, clean cows' milk is much to be preferred. Milk being the most nutritious form of food obtainable, it naturally stands to reason that in malted milk the most important and beneficial constituents are those which are obtained from the cows' milk which is used to make it. The purchase of cows' milk in the form of malted milk is, therefore, a very expensive and uneconomic method of obtaining it.

The Local Education Authority is taking every opportunity of encouraging the consumption of milk by school children, and it is hoped that, if the habit of drinking milk is acquired during school life, it will be continued after the school age has been passed, as, although milk is absolutely necessary for the health of a growing child, it is only a little less important in the case of an adult. While the standard of cleanliness of milk production in this country is gradually being raised, it ought to be stated 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, but the advantages to health of milk consumption far outweigh any risk of disease which might possibly be conveyed in the milk.

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 or not 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. The only names allowed to remain on this register are those of producers whose milk is consistently of a Grade A standard of cleanliness.

EDUCATIONAL WORK OF MEDICAL OFFICERS AND OTHERS.

The most effective form of Education in matters pertaining to health, as probably in other things, can be provided by a practical demonstration ; and for this reason it is particularly desirable that the hygienic condition of the schools should be of the highest standard obtainable.

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, when time and opportunity allow. This important branch of the work is capable of much further development, and now that the school medical inspection staff has been brought up to full strength it ought to be possible to devote a larger amount of time to it. An address from one who has had an opportunity of acquiring a knowledge of medical facts and physiological principles ought to be very helpful, both to the teachers and to the scholars. This is especially so in the matter of food and nutrition, factors which are so important in maintaining the health of the growing child.

Through the agency of the Dental Board of the United Kingdom, the services were secured of a lecturer who gave addresses on the care of the teeth and how to prevent dental caries. She remained in this county for one week and visited fourteen schools. The lectures were accompanied by demonstrations, large wax models of teeth in various conditions of health and decay, and of the anatomical parts related to them, being used for the purpose. The children were most interested, and therefore attentive, and it is hoped that, as a result of these lectures and demonstrations, a large number of " consents " to treatment will be secured in the schools visited. The schools selected for this special educational campaign were those with a large number of senior scholars, and an effort was made to arrange for the lecturer to visit such of those schools as had a large percentage of refusals of dental treatment.

Summary of Assistant Medical Officers' Addresses to School Children.

Dr. Blake	38 lectures.
Dr. Harris	16 ,,
Dr. Priestley	16 ,,
Dr. Nicol	11 ,,
Dr. Weston	9 ,,
Dr. Evans	7 ,,
Total number of lectures ..	97

FINDINGS OF MEDICAL INSPECTION.

During the year, 162 schools were visited once only, 154 twice, and 15 three times. This represents a total of 515 medical inspections as opposed to 492 during the previous year. Notwithstanding the fact that it was possible to carry out 23 more medical inspections in 1931 than in 1930, the actual number of children who underwent routine medical examination was less, being 9,333 in 1931 and 10,383 for the previous year. This means that the arrears which had accumulated owing to shortage of staff had been cleared off, and more time was given to re-examination of defective children and also to special cases. It must also be borne in mind that a larger amount of time is being taken up by the examination of backward and mentally defective children.

The following are particulars of the number of children who underwent routine medical examination by the Assistant School Medical Officers, special cases and re-examination cases not being taken into account in giving these figures :—

	Aged 5.	Aged 8.	Aged 12.	Total.
Dr. Blake	765	777	492	2034
Dr. Weston	634	725	450	1809
Dr. Harris	525	523	391	1439
Dr. Nicol (resigned 30th Sept.)	527	497	399	1423
Dr. Evans	440	536	367	1343
Dr. Priestley	422	510	353	1285
Totals for 1931 ..	3313	3568	2452	9333
Totals for 1930 ..	3901	4171	2311	10383

The school nursing is done by 2 whole-time school nurses, 10 health visitors, part of whose time is devoted to school nursing, 87 district nurses working for Associations connected with the Shropshire Nursing Federation, 1 nurse employed by an unaffiliated association, and 2 nurses working on their own account.

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

District Nurses acting as School Nurses ..	16169 children.
Whole-time School Nurses	5114 ,,
Health Visitors	6336 ,,
Nurses working on their own account	2005 ,,
Health Visitors and District Nurses jointly ..	188 ,,

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. The inspection in each term is begun *de novo*, so that there are three primary inspections in each year.

The time has now arrived when verminous conditions can no longer be tolerated, and when the procedure of separation in school, exclusion and finally prosecution should be strictly carried out in accordance with instructions. 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.

It is the policy to give every assistance and advice before prosecuting, and summonses are only issued as a last resort. There can be no doubt, however, that prosecutions are an essential part of any scheme for getting the children's heads clean, as, without them, the really careless and dirty people will continue to be dirty and verminous, and will be a constant danger to the clean part of the school. Legal proceedings were taken in 14 cases during 1931, and in 14 cases during the previous year, fines ranging from 2/6 to 10/- being imposed.

During the year the percentage of children found verminous on primary inspection was 4.5, a decrease of 0.4 per cent. on the previous year. At one time or another during the primary and subsequent inspections, 10.5 per cent. of children were found verminous, a decrease of 0.3 per cent. on the previous year. The percentage of verminous heads for 1931 is therefore the lowest which has yet been recorded. The following are the particulars :—

Year	Percentage verminous.	Year	Percentage verminous.
1920	14.0	1926	6.4
1921	12.3	1927	5.7
1922	9.9	1928	5.4
1923	9.0	1929	5.6
1924	8.0	1930	4.9
1925	7.5	1931	4.5

The following are the particulars of the primary and following-up inspections during the years 1930 and 1931 :—

	No. of Primary Inspections.	No. of Children.	No. Verminous.	Percentage Verminous.
1930	1135	87242	4296	4.9
1931	1111	86571	3975	4.5

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. verminous at inspections.			
		Second.	Third.	Fourth.	Fifth.
1930 ..	1696	2209	789	216	83
1931 ..	1628	2183	811	256	57

Defects of Nose and Throat.—There were 2,361 children found at medical inspections to be suffering from defects of the throat and nose, of whom 1,133 required treatment, 1,228 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

Of the 9,333 children belonging to the code groups who were examined, 960 or 10.3 per cent. required treatment on account of diseases or defects of the throat and nose.

Tuberculosis.—Cases of phthisis 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 578 children from phthisis homes, 453 were examined by the medical inspectors, and 22 of those referred to the Tuberculosis Officers for further examination were definitely suspected to be suffering from phthisis.

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

		Pulmonary Tuberculosis.			Other forms of Tuberculosis.	
	No. of Children.	No physical signs.	Suspected.	Diagnosed.	Diagnosed.	Suspected.
New Cases	256	189	15	4	38	10
Cases from previous years ..	83	36	3	12	32	..

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, 20 were found to be suffering from ringworm of the scalp. In addition, 100 cases were notified by the teachers, although these were not usually based on medical opinion.

Eye Defects.—These include defective vision, squint, and external eye defects. Leaflets dealing with squint and myopia are issued for the use of teachers, parents, school nurses and health visitors. One of these is a special leaflet dealing with children the condition of whose eyes is such that they have been recommended for oral teaching only.

There were 562 children with defective eyesight or squint requiring treatment, and 169 with lesser degrees of defect that needed to be kept under observation. Of the children requiring treatment, 477 belonged to the code groups, and 85 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 8.4.

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

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

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. Seventy-one routine cases and 22 special cases were referred for treatment either on account of deafness or otorrhoea, or both. The figures for the previous year were, 64 routine cases and 18 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 Examined.	Average No. of decayed teeth per child.	Percentage of children free from caries.	No. of children Examined.	Average No. of decayed teeth per child.	Percentage of children free from caries.	No. of children Examined.	Average No. of decayed teeth per child.	Percentage of children free from caries.
Dr. Blake	504	5.2	18	691	4.2	12	495	2.1	26
Dr. Evans	297	3.0	32	439	2.0	32	334	2.0	36
Dr. Priestley	333	4.6	19	462	3.2	14	359	1.4	39
Dr. Weston	424	3.7	21	606	3.7	15	430	1.9	30
Dr. Harris	394	2.6	37	482	2.3	27	388	1.1	43
Dr. Nicol	397	3.5	20	417	2.7	23	386	1.5	36
	2349	3.8	24	3097	3.1	20	2392	1.6	35
Dental Officers		3.4	23		2.7	17		1.9	25

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

Age	Under 5	**5**	6	7	**8**	9	10	11	**12**	13	14
Average number of teeth decayed ..	3.0	**3.4**	3.2	3.0	**2.7**	2.4	2.1	1.9	**1.9**	1.8	2.4
Percentage of children free from caries ..	37	**23**	18	17	**17**	20	19	22	**25**	27	21

In these tables extracted and filled teeth are counted as decayed teeth. The actual 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 may have been put into an absolutely healthy and satisfactory condition by means of extractions and fillings, yet each of these would, for statistical purposes, count as a tooth showing dental caries.

Average number of decayed teeth per child found by the Medical Inspectors in the years 1919—1931 :—

Year	*Age* 5.	*Age* 8.	*Age* 12.
1919 ..	2.1	3.6	2.1
1920 ..	2.16	3.8	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

Crippling Defects.

The numbers of these defects found at the routine medical inspections were :—rickets 50, spinal curvature 85, other forms 309. 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 figures given above for rickets are distinctly misleading, in that they represent the actual number of children suffering from deformities due to this condition so pronounced as to necessitate treatment. Fortunately the number of such children is comparatively small, but the fact remains that a very much larger number of children, probably well over 50 per cent. of those entering school, show at the age of 5 years evidence of slight bony deformities which can only be attributed to faulty calcification of the bones, and therefore to rickets. The importance of this is that, as rickets is a disease of defective nutrition, these children must, during the early

years of life, have suffered from a serious lack of those constituents of the diet upon which health and sound body construction depend. Recent work has shown that, in the absence of the proper amount of mineral constituents from the diet, the addition of it to those substances rich in the calcifying vitamin have little or no effect. In the presence of rickets it is advisable to trust less to those substances, such as cod liver oil, believed to be rich in intangible vitamines, and to trust more to those foods, such as milk and green vegetables, which are rich in the much more material minerals.

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

26	cases or	28.0	per cent. were due to	Tuberculosis.
19	,,	20.4	,, ,,	Nerve Diseases and Injuries.
7	,,	7.5	,, ,,	Osteomyelitis.
7	,,	7.5	,, ,,	Spinal Curvature—Non-tubercular.
7	,,	7.5	,, ,,	Claw Foot.
5	,,	5.4	,, ,,	Arthritis (Septic and Rheumatoid).
5	,,	5.4	,, ,,	Congenital Deformities.
4	,,	4.3	,, ,,	Fractures and Dislocations.
4	,,	4.3	,, ,,	Flat Foot.
4	,,	4.3	,, ,,	Club Foot.
3	,,	3.2	,, ,,	Conditions due to faulty footwear.
1	,,	1.1	,, ,,	Torticollis.
1	,,	1.1	,, ,,	Injuries to feet.

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, and systematic inquiry into these cases would well repay the trouble.

Goitre.—In Shropshire, as the following figures show, 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.			Total.
	Entrants.	Inter.	Leavers.	Entrants.	Inter.	Leavers.	
No. of children ..	1679	1803	1290	1634	1765	1162	9333
Cases of goitre ..	1	10	17	3	16	32	79

Dull and Backward Children.—During the year there were 402 new cases of retardation amongst the school children, the degree of retardation varying from one to five years. The following analysis of the causes of retardation is of interest in that it shows the relative importance of the various factors commonly found to account for backwardness in school children. Little can be done when the backwardness is due to mental deficiency, suspected mental deficiency and probably also innate dullness ; but out of 402 backward children, in 52 the retardation was found to be due to definitely remediable causes, such as insufficiency of education and physical defects.

Causes of Retardation.	No. of children.	Degrees of retardation expressed in years.					
		1 year	2 years	3 years	4 years	5 years	Not stated.
Innate dullness	292	17	177	85	13	..	..
Insufficiency of Education	32	2	18	6	1	..	5
Physical Defects	20	3	15	1	..	..	1
Suspected Mental Deficiency	17	..	4	7	4	1	1
Mental Deficiency	16	..	1	5	7	2	1
Bad Home Conditions ..	15	4	7	1	..	..	3
No Diagnosis	10	1	6	2	1	..	..
	402	27	228	107	26	3	11

In addition, 1,082 children, diagnosed as dull and backward in previous years, were re-examined, the findings in connection with whom were as follows :—

Backward, but not improving	523
Backward, but improving	410
Doubtful cases of mental deficiency	83
Mentally defective	50
Now normal	16

The examination of these backward children takes up a very considerable amount of time of the Assistant School Medical Officers.

INFECTIOUS DISEASES.

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

Measles	1674	Scarlet Fever	166
Influenza	1104	German Measles	148
Coughs and Colds	788	Ringworm	100
Chicken-pox	720	Bronchitis	33
Mumps	571	Scabies	22
Whooping Cough	529	Tonsilitis	12
Diphtheria	351	Pneumonia	7
Impetigo	254	Infectious Jaundice ..	2
Sore Throat	241	Other Diseases	44

Certificates of Exclusion.—Under Article 20 (*b*), 1,436 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 :—

Impetigo	171	Bronchial Catarrh	24
Suspected Diphtheria	103	Rheumatism	24
Contacts with Diphtheria	103	Suspected Phthisis	21
Coughs and Colds	95	Whooping Cough	16
Sore Throat	78	Measles	16
Tonsilitis	77	Otorrhoea	15
Debility	70	Chorea	13
Bronchitis	63	Mumps	12
Scabies	49	Tubercular Peritonitis	11
Influenza	40	Chicken-pox	7
Tuberculous Glands	49	Anaemia	7
Heart Conditions	31	Diagnosed Phthisis	5
Ringworm of Body	29	Diphtheria	4
Ringworm of Scalp	28	Various Conditions	275

Closure of Schools.—During the year 43 schools were closed by the Education Authority to prevent the spread of infectious diseases. It is difficult to get the teachers to realise that, from the public health point of view, there is no justification for closing a school unless the spread of infection is thereby going to be prevented ; and that 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 seems little justification for keeping the school open. Below are given particulars of the closure of schools on account of outbreaks of infectious disease :—

Measles	24
Diphtheria	16
Scarlet Fever	3

In twenty-four 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 16 instances no further cases occurred. Closure in these cases must therefore be considered to have been without effect and, therefore, unnecessary.

In 3 instances cases occurred during closure, and further cases developed on re-opening. Closure again proved to be without effect.

In 5 instances one or more 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.

It must be recognised that all the schools closed to prevent the spread of measles were very carefully selected, in that they were in sparsely populated country districts in which most of the homes of the children were widely separated ; yet in only five did the result justify the step. In numerous other schools no attempt was made to prevent the spread of infection by closure, as it was apparent from the commencement that its effect must be to prolong and possibly intensify the severity of the outbreak.

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 :—

	No. of cases.	No. not visited.	Total visits.
District Nurses (89)	2745	273	6080
Nurses working on their own account (2) ..	303	55	622
Whole-time School Nurses (2)..	703	22	2613
Whole-time Health Visitors (10)	1195	92	2477
Total	4946	442	11792

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 ; Worcester Eye Hospital.

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

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

Orthopaedic Conditions—Shropshire 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 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 and Newport.

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 804 children treated at the County Council School Clinics, particulars of which are given on p. 19, four cases were sent to Birmingham for X-Ray treatment for ringworm.

Tuberculosis.—Seven school children suffering from phthisis were admitted to the Shirlett Sanatorium during the year, and three to Prees Heath Sanatorium. Particulars of other forms of tuberculosis dealt with at the Shropshire Orthopaedic Hospital are given below.

Crippling Defects and Orthopaedics.—The following is a summary of cases treated at the Shropshire Orthopaedic Hospital during 1931, 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 ..	8	26‡	37	71
Diseases and Injuries of the Nerves ..	4	19	..	23
Fractures and Dislocations	2	4	..	6
Flat Foot	..	4	..	4
Osteomyelitis	..	7	..	7
Spinal Curvature—Non-tubercular ..	..	7	..	7
Claw Foot	..	7	..	7
Torticollis	..	1	..	1
Arthritis (Septic and Rheumatoid) ..	1	5	..	6
Club Foot	2	4	..	6
Rickets	1	..	..	1
Congenital Deformities..	3	5	..	8
Conditions due to faulty footwear ..	..	3	..	3
Injuries to Feet	..	1	..	1
Periostitis	1	..	..	1
Total for 1931 ..	22	93	37	152
Total for 1930 ..	30	105	42	177

‡ Includes 3 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 it would be more correct to describe these centres as Orthopaedic Clinics. 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, and there are consequently in the County of Salop very few people suffering from serious and irremediable crippling defects.

NUMBER OF PATIENTS TREATED AT SHROPSHIRE AFTER-CARE CENTRES DURING THE YEAR 1931.

Diagnosis.	Total treated.			Cured.			Improved.			Refused treatment.			Left District.			Treated elsewhere.			No improvement.			Died.			Number on Books. 31/12/31.		
	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+
1. Arthritis	2	7	85	..	1	3	1	1	10	..	1	8	..	..	1	..	1	..	..	..	..	..	..	..	1	3	63
2. Con. Deformities	45	46	3	3	..	..	..	1	..	5	3	..	..	..	..	1	2	..	..	..	..	..	..	..	36	40	3
3. Claw Foot	..	23	20	..	2	..	..	..	2	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	19	17
4. Erb's Palsy	6	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	3	..
5. Flat Foot	42	141	112	..	11	5	1	1	12	6	16	9	1	7	3	..	2	2	..	..	..	..	..	..	34	104	81
6. Hallux Rigidus	..	5	2	..	3	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..
7. Hallux Valgus	..	..	17	..	..	1	..	..	3	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
8. Injuries	13	66	100	2	26	15	3	5	11	1	3	2	..	..	1	..	1	1	..	1	1	..	..	1	7	30	68
9. Knock-knees	48	79	2	..	8	..	..	2	..	8	15	1	2	3	..	2	1	..	..	..	..	..	..	..	36	50	1
10. Osteomyelitis	3	17	18	1	..	..	1	4	2	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	1	13	13
11. Poliomyelitis	8	56	27	1	..	..	..	1	1	..	..	..	..	2	1	..	..	..	..	..	..	..	..	2	7	53	23
12. Rickets	59	13	..	5	2	..	..	..	..	6	..	..	1	..	..	1	..	..	..	..	..	1	..	..	45	11	..
13. Round Back	1	30	9	..	3	1	..	1	..	..	5	2	..	1	..	..	..	..	..	..	..	..	..	..	1	20	6
14. Scoliosis	2	28	15	..	3	..	..	1	2	..	2	..	..	1	1	..	..	..	..	..	..	..	..	..	2	21	12
15. Spastic Diplegia	1	4	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	1	3	..
16. Spastic Hemiplegia	2	18	10	..	..	..	..	..	..	..	1	2	..	1	1	..	..	..	..	..	..	..	..	..	2	16	7
17. Spastic Monoplegia	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1
18. Spastic Paraplegia	5	10	5	..	..	..	..	..	2	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	5	8	2
19. Surgical T.B.	6	52	91	1	..	1	..	..	2	..	..	2	1	1	3	1	2	2	..	..	..	..	1	..	3	48	81
20. Torticollis	1	8	..	..	..	..	..	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	6	..
? T.B.	..	6	14	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	5	12
Others	20	54	87	2	4	7	..	4	5	3	2	8	..	1	6	..	2	2	1	..	..	..	..	3	14	41	56
Totals	264	669	619	15	63	34	7	22	53	30	53	41	5	19	17	5	12	10	1	1	1	1	1	7	200	498	456
	1552			112			82			124			41			27			3			9			1154		

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

PREVENTIVE CASES.

Diagnosis.	Total treated.			Cured.			Improved.			Refused treatment.			Left District.			Treated elsewhere.			No improvement.			Died.			On Books 31/12/1931.		
	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+	—5	5—16	16+
1. Claw Foot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2. Flat Foot	15	102	2	..	9	..	..	5	..	1	27	1	1	1	..	..	1	..	..	..	..	..	..	..	13	59	1
3. Knock-knees	26	87	1	..	11	..	..	2	1	5	17	..	..	..	..	..	1	..	..	..	..	..	..	..	21	56	..
4. Rickets	26	1	..	5	1	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	18	..	..
5. Round Back	..	28	1	..	10	..	..	..	1	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	..
6. Others	3	8	..	..	1	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	5	..
Totals	70	226	4	5	32	..	1	7	2	9	52	1	2	1	..	..	2	..	..	..	..	..	..	..	53	132	1
	300			37			10			62			3			2			0			0			186		

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 1931 :—

No. of attendances	11,835*
No. of patients treated..	1,832
No. on the books on 1st January	1,130
No. on the books on 31st December	1,340
No. of new cases	722
No. of cases discharged	512

* 2,240 under five years ; 5,876 five to sixteen years ; 2,449 over sixteen years, and 1,270 tubercular cases—all ages.

Eye Defects.—Seventeen children received hospital treatment for external eye defects, and the following table gives details of the treatment of children suffering from defects of vision :—

Hospital or Clinic.	Number of Children seen.	Glasses prescribed	Glasses obtained.	No change of Glasses ordered.	Other treatment.	Visit to Salop Hospital advised.	No Glasses or treatment necessary.
Salop Eye, Ear and Throat Hospital	658	464	464	107	38	..	49
Worcester Eye Hospital ..	1	1	1	..	..	..	..
Ludlow Eye Clinic	213	152	150	35	9	1	16
Oswestry Eye Clinic	77	75	75	1	..	..	1
Market Drayton Eye Clinic ..	43	24	24	6	2	..	11
Assistant School Medical Officer at Whitchurch Eye Clinic ..	67	54	54	9	..	2	2
Bridgnorth do. ..	57	45	45	8	..	1	3
Bishop's Castle do. ..	16	12	12	3	..	1	..
Highley do. ..	24	21	21	1	..	..	2
Ellesmere do. ..	34	24	24	7	..	..	3
Shifnal do. ..	18	12	12	3	..	..	3
Ironbridge do. ..	35	27	24	5	..	..	3
Cleobury Mortimer do. ..	10	8	5	1	..	..	1
Totals for 1931 ..	1253	919	911	186	49	5	94
Totals for 1930 ..	1309	981	976	178	64	2	84

Ear Disease and Hearing.

Hospital.	Number of Children seen.	Received Treatment.				No Treatment necessary.
		Remedied.	Improved.	Not improved.	Not known.	
Salop Eye, Ear and Throat Hospital ..	55	22	27	5	..	1
Totals for 1930 ..	59	18	34	5	1	1
,, 1929 ..	55	15	29	8	..	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.—Eleven children suffering from purely nasal conditions were seen at the Salop Eye, Ear and Throat Hospital, and 9 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.
Salop Eye, Ear and Throat Hospital ..	213	213	..
Broseley and Wenlock Hospitals ..	148	148	..
Oswestry Cottage Hospital	82	82	..
Ellesmere Cottage Hospital	22	22	..
Kidderminster Hospital	30	30	..
Wellington Cottage Hospital	304	304	..
Chirk Cottage Hospital	15	15	..
Shifnal Cottage Hospital	16	16	..
Whitchurch Cottage Hospital	3	3	..
Totals for 1931 ..	833	833	..
Totals for 1930 ..	792	790	2

In addition to the above, 83 cases have been operated on under private arrangements, making a total for the year 1931, of 916 operations.

Reports received from the Medical Officers on 615 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 the tonsils and adenoids had not been completely removed. Below is given in tabular form a brief summary of these reports :—

No. with Tonsils and Adenoids.	No. with Tonsils only.	No. with Adenoids only.	Total No. of cases.	No. of cases completely dealt with.	No. of cases not completely dealt with.		
					Tonsils.	Adenoids.	Tonsils and Adenoids
589	22	4	615	571	38	4	2

EFFECTS OF OPERATION UPON HEALTH.

	Cured.	*Improved.*	*Not improved.*
General Health	..	600	8
Mouth Breathing	490	82	10
Otorrhoea	9	5	1
Deafness	8	3	1
Nasal Discharge	8	17	..
Enlarged Glands	164	29	12
Minor Deformities	15	6	1
Rheumatism	3	..	..
Intelligence	..	17	..
Speech	..	3	..
Bronchitis	3	2	..
Chest Expansion	..	4	1

School Clinics for Minor Ailments.

Table showing conditions for which treatment was received.

Defect or Illness.	Children referred at S.M.I.	Other Children.	Examinations by M.O.	Attendances.	Results of Treatment.		
					Remedied.	Improved.	Unaltered.
Skin :—							
Ringworm—head	4	43	107	610	39	9	..
Ringworm—body	..	32	41	183	26	1	..
Scabies	2	39	71	139	43	..	..
Impetigo	6	432	931	4193	420	9	4
Minor Injuries	5	870	1496	7407	851	14	7
Other skin diseases	2	244	328	2261	230	16	..
Ear Disease	29	221	404	1664	177	63	5
Eye disease (external and other)	32	237	369	1311	200	49	7
Verminous conditions	..	50	6	172	50	..	..
Other conditions	157	1676	2564	5751	1460	235	83
Total for 1931 ..	237	3844	6317	23691	3496	396	106
Total for 1930 ..	311	3498	5844	24338	3133	454	153

Table showing attendances at each Clinic.

Clinic.	Children referred at S.M.I.	Other Children.	Examinations by M.O.	Attendances.	Results of Treatment.		
					Remedied.	Improved.	Unaltered.
Bridgnorth	..	315	417	2648	311	4	..
Dawley	26	487	854	2572	477	26	10
Ludlow	20	459	421	3647	436	35	8
Ironbridge	36	245	509	622	193	72	16
Market Drayton	48	421	1077	3878	402	17	50
Newport	31	210	322	1595	241	3	..
Oakengates	8	593	1087	3075	440	156	5
Oswestry	32	478	474	2071	393	42	..
Wellington	31	437	459	869	440	25	3
Whitchurch	5	199	697	2714	163	16	14
Totals	237	3844	6317	23691	3496	396	106
Total for all Clinics, 1922 ..	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

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. In small country schools inspection and treatment are carried out at the same time ; and in all other schools arrangements are made for treatment either at the school or at a clinic some three weeks after inspection. Children of all ages in the schools have been dealt with since October, 1923.

Not only are all ages dealt with, but the schools are now being visited on an average about once in seven 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.

All the schools were inspected, and with the exception of two departments, treated during the year.

111 schools were treated twice during the year, and

9 schools were inspected twice, but the second treatment was not given until 1932.

The number of unsaveable permanent teeth is a measure of the imperfection of the dental scheme. A tooth becomes unsaveable when the decay has reached the pulp cavity, or very close to the pulp cavity. It is very satisfactory that in 34,819 examinations of children, only 2,560 unsaveable permanent teeth were found, and 2,068 of these were due to refusal of treatment at the previous inspection. Only 492 can therefore be legitimately attributed to any shortcomings of the scheme. Of this number, 244 were due to lack of opportunity to complete the treatment of the mouth on the previous occasion, 70 were due to an unusually long inter-inspection period, and only 178 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, where treatment is carried out principally in clinics, and where there is probably more opportunity for treating those children who could not for some reason be dealt with on the day arranged, the total number of unsaveable teeth, apart from refusals, was only 20.

The difference between the number referred for treatment, including 1,444 cases brought forward from 1930, and the number treated was 6,343. The details are given in the following statement :—

	Refusals.	Absent on day of Treatment	Left School.	To be treated in 1932.	Treatment deferred.
East of County (Mr. Birch)	1124	193	24	837	..
South of County (Mr. Keenan) ..	1196	172	19	..	76
North of County (Mr. Catchpole) ..	2269*	254	22	147	10
Totals	4589	619	65	984	86

It will be noted that there were 4,589 refusals of treatment. This is, however, very considerably less than for the year 1930, when there was no fewer than 5,604 refusals, and must to that extent be considered very encouraging, showing as it does that the value of the work of the School Dental Officers is becoming more fully appreciated by the parents, and as a consequence leading to a more ready acceptance of the advice offered and the facilities for treatment placed at their disposal. The following table shows the schools in which the percentage of consents was very high, and those in which it was very low. In 1930, 36 schools had over 90 per cent. of " consents," and there were 38 with not more than 50 per cent. In 1931, there were 49 schools with over 90 per cent. of consents and 22 schools with less than 50 per cent.

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

‡Sutton Maddock	100
†Buildwas	100
*Kynnersley	100
†Woodcote	100
*Ryton	100
**Adderley	100
†Dudleston	100
Aston Cl.	100
Quatford	100
*Donington	98
†Stanton-on-Hine-Heath	98
†Quatt	98
**Loughton	95
Madeley C.E. Boys	94
†Wrockwardine Wood Cl. Boys	94
Little Wenlock	94
*Fitz	94
Bishop's Castle Girls	94
Middleton Priors	94
Cainham	94
Longdon-on-Tern	93
†Cardington	93
†Astley Abbots	93
†Acton Burnell	93
Malinslee C.E. Mixed	92
Madeley Wesleyan Mixed	92
Frankton	92
Tuck Hill	92
Diddlebury	92
Hopesay	92
**Wroxeter	92
†Richards Castle	92
Norbury Cl.	92
Newport R.C.	91
†Wombridge C.E. Boys	91
Wellington R.C.	91
**Lee Brockhurst	91
†Bucknell	91
Atcham	91
†Bicton	91
Dawley C.E. Mixed	90
Langley Cl. Girls	90
Ketley Cl. Mixed	90
**Leighton	90
Smethcott	90
Upton Magna	90
†Cleeton	90
Westbury	90
Westbury Forest	90

‡ Sutton Maddock has returned 100 per cent. consents for the last five years.
** Over 90 per cent. consents received for the last four years
* ,, ,, ,, ,, ,, ,, ,, three ,,
† ,, ,, ,, ,, in 1930

SCHOOLS WITH NOT MORE THAN 50 PER CENT.

Selattyn	50
Whixall C.E.	50
Neen Savage	50
West Felton	49
Coreley	49
Ifton Heath	48
Whitchurch Boys' C.E.	47
Clee St. Margaret	47
Market Drayton Infants	45
Cockshutt	45
Oswestry Cl. Senior Boys	44
Whitchurch Wesleyan Mixed	44
Newtown	44
Stoke-upon-Tern	42
Plowden	42
Middleton	41
Neen Sollars	41
Prees Lower Heath	40
Button Oak	39
Kinlet	38
Knockin	38
Maesbury	35

OPEN AIR EDUCATION.

Playground Classes are encouraged, but although they are increasing, they are held only in a comparatively small number of schools. In a climate such as we have in this country, 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 these 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.

One child, who was occupying a bed at the commencement of the year, died in February as a result of heart disease. But nine other children who were discharged during the year showed marked improvement in their general health as a result of their residence in the open-air school in the Isle of Wight. In certain cases the improvement was very marked indeed, and one child who was very poorly nourished put on twenty-one pounds in weight in three months.

The benefits which these children derive from this special treatment are unmistakeable, and must result in avoiding at a later date a great deal of invalidity and probably permanent ill-health. With the exception of the child who died—and it was in an effort to give her a chance that she was sent away—there was not one child whose general physical condition did not show marked improvement.

For reasons of economy 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 benefit 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.

PHYSICAL TRAINING.

The work of the Organiser of Physical Training, which is developing along satisfactory lines, is undoubtedly bringing about a gradual improvement in the general condition of the school population, evidence of which is to be seen in the better posture of the children ; and notwithstanding the unfortunate condition of a large number of the playgrounds, good progress is being made.

Report of the Organiser of Physical Training.

During the year, classes for Teachers were held at Shrewsbury, Market Drayton and Whitchurch.

The class at Market Drayton was held at Little Drayton Council School, and the one at Whitchurch, at the High School for Girls. The lessons were taken in the playground or on the playing fields whenever possible—enabling the Organiser to take games suitable for " organised games periods," which is impossible when classes are taken indoors.

At Shrewsbury, a class was held for County Teachers in the schools near Shrewsbury on alternate Saturday mornings. Demonstrations were given by the Organiser at the classes, children from the schools in the Borough acting as pupils. Thanks are due to the Borough Teachers and children for their co-operation.

A swimming class of an informal nature was taken one evening a week during the summer term for the Shrewsbury Teachers, and was open to any County Teacher who was able to attend.

The continual wet weather of 1931 sadly interfered with the progress of Physical Training, it being frequently impossible to take lessons out of doors. The teachers are instructed to take some form of Physical Training in the class-rooms, but little real agility work can be attempted. It is unfortunate that so few schools in Shropshire have halls, and even with the opportunity offered when new schools were built, no adequate provision for Physical Training lessons indoors was made.

As the work desirable in a Senior School includes the use of apparatus, gymnastics mat, etc., it is feared that the schemes of work in such schools in the County will, of necessity, be somewhat restricted owing to the lack of halls.

Organised Games.—The increased opportunity for good play on suitable ground is resulting in a definite improvement in the physique of the children. It is especially noted how netball helps in the development of the girls.

Rounders, stoolball, cricket, etc., did not make as much headway as one would have liked in 1931 owing to the persistant rain and cold during the summer term. However, many of the Leagues, including those for football and netball, completed their programmes of matches, and enthusiasm, on the whole, was as keen as ever.

Swimming.—Encouraging progress was seen in this branch of Physical Training. Many of the Teachers were somewhat amazed at the poor results of the teaching as shown by the registers of attendance and progress, which were kept for the first time in the previous year. They realized that more definite teaching must be given, and their efforts to procure better results were very commendable.

This year the results are considerably and encouragingly better, though leaving room for much improvement yet. A stimulus was provided by the Organisers' offer of Certificates of Proficiency to those who attained the requisite standard.

Grants for Holiday Courses.—The usual six grants of £5 each were offered to help teachers to attend the course at Scarborough held during the summer holidays. Those selected this year were :—the Head Teachers of the following schools : St. Leonard's Boys', Bridgnorth ; Worfield ; Morda and Oxon ; and the Assistant Woman Teachers specialising in Physical Training at the Senior Girls' School, Ludlow, and the Lancasterian School, Shrewsbury.

General.—There is a gradual levelling up of the standard of work in most schools. Teachers are developing a wider view with regard to the variety and possibilities of modern methods of Physical Training. It is obvious to most people that the results of good training in alertness, brisk, accurate movements and healthy rivalry brought about by physical education, must react on the children's studies and character. The physical condition of the child is the basis upon which all mental training must be founded.

One realises that progress is slow. In a large rural County such as Shropshire, where there are many outlying schools, a great deal of time is involved in travelling from school to school. The supervision which is desirable requires more than one organiser. With men and women teachers to supervise, classes to organise and instruct, swimming to supervise, arrangements to make for the provision of fields and for organised games, apportion the necessary equipment for each school and reserve one day a week for schools in Shrewsbury, it is impossible for one person to visit the schools often enough to make the advice and help given as effective as one could desire.

K. W. DAVEY,
Organiser of Physical Training.

Proper food, fresh air and exercise are the primary factors which govern growth and health, and by attention to these matters we strike at the root of disease. Measures directed to the early treatment of disease, or to the prevention of particular diseases, although important, can never yield the same result, and consequently it is essential that we should concentrate our energies more especially on these general measures which are essential for the full growth and vitality of the great mass of school children. Of these measures, a good scheme of physical instruction is one of the most important.

In addition to attending to the physical development of all the school children, which is of course the most important matter, the question of remedial exercises for children requiring them has received considerable attention. Those children whose deformities are serious are dealt with by admission for a period to the Orthopaedic Hospital. For the continuation of treatment in these cases, and for the treatment of slighter cases, provision is made at the Orthopaedic After-care Centres, and the School Nurses are encouraged to work in close co-operation with the Orthopaedic Staff in order to ensure the carrying out of such daily exercises as are necessary.

The acquisition of playing fields is slowly proceeding in various parts of the County, but it has again to be reported that the provision in Oswestry, Whitchurch and Ellesmere is still inadequate.

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.

The following are particulars of the courses of instruction given to teachers during the year.

Dates.	Centre.	No. of Sessions.	Duration of each session.	No. of teachers.	Percentage of attendance
17th Jan.—28th Mar. ..	Shrewsbury	6	1½ hrs.	46	86.7
29th April—22nd June	Market Drayton ..	8	1½ hrs.	35	84
7th May—16th July ..	Whitchurch	8	1½ hrs.	39	90

SCHOOL BATHS.—Arrangements have been made in Whitchurch, Oswestry, Wellington, Ellesmere and Bridgnorth whereby the older Elementary School Children in these areas are sent for swimming instruction once weekly, and the Organiser of Physical Training is giving special consideration to the utilisation of natural waters in country districts for teaching swimming.

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 routine help at medical inspection described in the earlier reports, the teachers are asked to pay special attention to the attitude of the children in school in order to correct false positions, to see that the children wear spectacles when prescribed, to see that children with visual and aural defects get the special school treatment indicated, to note abnormalities and call the attention of the Medical Officers to them, to exclude cases of suspected infections in accordance with directions, to report exclusions, and to distribute directions with regard to infectious disease to parents on certain occasions.

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. They are supposed to keep a strict lookout on children absent on account of verminous or skin conditions in order to see that the treatment prescribed is not neglected. 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. They are also required to report on children excluded by the Medical Inspector whose parents are not carrying out the treatment prescribed.

VOLUNTARY BODIES AND VOLUNTARY HELPERS.

Much of the routine work formerly undertaken by voluntary helpers is now done by the school nurses, and where the school nursing is done by the District Nurse the Secretary of the Local Nursing Association is very frequently most helpful.

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 numbers of exceptional children *examined 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	43†	12*	43
Epileptic	..	..	1
Blind	..	..	..
Deaf and Dumb	1	..	..
Physically Defective ..	79	..	1

* 9 Imbeciles and 3 Idiots.

† Mentally defective children admitted to Special Schools in 1931 2
No. not admitted 41
43

Reasons for non-admission :—Parents' refusal 24
Too old 11
Awaiting vacancies 1
Found unsuitable 4
Left County 1

The number of exceptional children admitted to special schools during 1931, *whether examined during that year or previously*, was—Blind 1, Deaf and Dumb 2, Epileptic 0, Mentally Defective 4, Physically Defective 77.

During the year 1931, 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.

Orthopaedic Hospital and Special School.—The more serious orthopaedic cases are admitted to the Hospital 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.

Schools for the Blind and Schools for the Deaf.—In both these classes of schools accommodation is always found if the parents are willing for removal. Every effort is made to get these cases under early treatment.

Mentally Defectives.—The accommodation 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 15 children in Sandlebridge Special School from this County.

NURSERY SCHOOLS.

There are none of these schools in this 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 one of these employed children is not in a fit state of health to be employed outside 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 18 of the 20 Secondary Schools in the County. Five of the Secondary Schools are Aided Schools; and of these Aided Schools three undergo medical inspection. As three of the Secondary Schools, namely, Bishop's Castle, Cleobury Mortimer and the Bridgnorth 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 during the year all the schools were visited each term, with three exceptions, where, owing to the small number of scholars due for examination in one term only two inspections were held. The number of children in attendance in Secondary Schools in the County in September, 1931, was 3,205, and the number of children on the registers of those secondary schools which undergo medical inspection was, on that date, 2,770.

No general arrangements have been made by the Local Education Authority for providing treatment for children 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 undertakes 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.

While it is true that, amongst Secondary School children, treatment for defects of the grosser type is more readily obtained by the parents than amongst Elementary School children, at the same time, 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.

A.— ROUTINE MEDICAL INSPECTIONS.

Age	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Total.
Boys	..	2	4	5	6	16	47	123	128	29	40	153	27	13	13	5	..	611
Girls	1	6	5	5	13	13	54	142	225	31	70	202	21	21	21	3	..	833
Totals ..	1	8	9	10	19	29	101	265	353	60	110	355	48	34	34	8	..	1444

	RE-EXAMINATIONS.	SPECIAL EXAMINATIONS.	TOTAL.
Boys	465	8	473
Girls	714	28	742
	1179	36	1215

Defects Found and Treatment Received.

On pages — and — at the end of the report 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.

	Defective Eyesight.	Tonsils & Adenoids.	Ear Conditions.	Skin Disease.	Orthopaedic Defects.	Other Conditions.	Total.
Defects discovered	129	50	12	10	66	51	318
Defects treated ..	111	18	11	3	58	6	207

Dental Inspection and Treatment.

During the year 1930, a commencement was made with a scheme for the provision of dental treatment for children in attendance at Secondary Schools. The scheme is virtually the same as that under which dental inspection and treatment is provided in Elementary Schools. 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. Inspection and treatment were carried out once during the year in twelve of the schools and twice in the remaining six schools, and 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.

Under ..	7	8	9	10	11	12	13	14	15	16	17	18	Total
Free-placers				2.2	1.7	1.8	2.0	2.6	3.0	2.9	3.1	4.0	2.4
Fee-paying	3.5	2.7	3.2	2.6	2.0	2.0	2.4	2.7	3.4	4.3	4.1	5.0	2.9
Elementary		2.7	2.4	2.1	1.9	1.9	1.8	2.4					2.5

PERCENTAGE FREE FROM CARIES.

	Under ..	7	8	9	10	11	12	13	14	15	16	17	18	Total
Free-placers					33	19	23	27	25	15	16	11	11	21
Fee-paying		15	21	13	11	25	18	21	18	16	11	8	7	17
Elementary			17	20	19	22	25	27	21					21

The method of compiling the statistics for the above tables is the same as that which has been employed in the Elementary Schools ever since the commencement of the school dental scheme, and it must be recognised that, while it gives an exact representation of the prevalence of dental caries, it does not give a true representation of the benefits and advantages and influence on health of the dental scheme as carried out in elementary schools. In calculating the average number of decayed teeth per child, not only is every decayed tooth actually present in the mouth of a child counted, but also every permanent tooth which has ever been extracted or filled. The same facts must be borne in mind when considering the percentage free from caries. It may well be and very often is true that, as a result of extractions and fillings, the mouth of a child has been put into a perfectly clean and healthy condition, but for the purposes of these statistics such a child would still be counted as having a certain number of carious teeth. Even so, it will be seen that, while there is an average of 2.9 decayed teeth amongst the fee-paying children, there are only 2.4 amongst the free-placers, many of whom have quite healthy mouths ; or, in other words, that dental caries amongst fee-paying children, as compared with this condition in free-placers, is 21 per cent. more prevalent.

On page 38 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 :—

	Fee-paying.	Free-placers.
Total No. of inspections	1776	1463
No. of children referred for treatment	816	647
No. of children actually treated		437

STATISTICAL TABLES—ELEMENTARY SCHOOLS.

TABLE I.—A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections—	
Entrants	3313
Intermediates	3568
Leavers	2452
Total	9333
Number of other Routine Inspections ..	—

B.—OTHER INSPECTIONS.

Number of Special Inspections	4898
Number of re-inspections	14475
Total	19373

TABLE II.—A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDING 31ST DECEMBER, 1931.

Defect or Disease.		Routine Inspections. No. of Defects.		Special Inspections. No. of Defects.	
		Requiring treatment.	Requiring to be kept under observation, but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation, but not requiring treatment.
(1)		(2)	(3)	(4)	(5)
Malnutrition		..	795	..	12
Uncleanliness		749	..	8	..
Skin	Ringworm—Scalp	16	..	4	..
	Ringworm—Body	8	..	..	..
	Scabies	4	..	1	..
	Impetigo	36	..	5	..
	Other Diseases (non-tubercular)	20	2	..	..
§Eye	Blepharitis	62	27	4	1
	Conjunctivitis	12	..	2	..
	Keratitis	..	..	..	..
	Corneal Opacities	6	1	..	..
	Defective Vision (excluding Squint)	403	152	73	5
	Squint	74	14	12	..
	Other Conditions	8	3	2	..
Ear	Defective Hearing	26	5	14	..
	Otitis media	45	2	8	..
	Other ear diseases	1	..	..	..
Nose and Throat	Enlarged tonsils only	523	1016	84	56
	Adenoids only	60	49	13	2
	Enlarged tonsils and adenoids	370	96	69	6
	Other conditions	7	1	7	2
Enlarged Cervical Glands (non-tubercular)		4	479	3	34
Defective speech		..	44	1	9
*Teeth, Dental Diseases		501	..	62	..
Heart and Circulation.	Heart Disease—Organic	6	116	1	10
	Heart Disease—Functional	1	121	..	4
	Anaemia	20	28	1	5
Lungs	Bronchitis	15	77	1	5
	Other non-tuberculous diseases	6	10	2	..
Tuberculosis	Pulmonary—Definite	2	..	..	..
	Pulmonary—Suspected	..	..	2	..
	Non-pulmonary—Glands	7	..	1	..
	Non-pulmonary—Spine	3	..	..	..
	Non-pulmonary—Hip	3	2	..	..
	Non-pulmonary—Other bones and joints	1	..	1	..
	Non-pulmonary—Skin	..	..	..	..
	Non-pulmonary—Other forms	4	..	1	..
Nervous System	Epilepsy	2	3	..	1
	Chorea	2	4	..	1
	Other conditions	1	..	..	..
Deformities	Rickets	21	29	3	10
	Spinal Curvature	48	37	3	2
	Other forms	194	115	25	3
Other defects and diseases		95	805†	20	114‡

§ In addition there were 159 " Routine " and 8 " 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 Dentist.

† Includes 597 Dull and Backward Children.

‡ Includes 70 Dull and Backward Children.

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

Group. (1)	Number of Children.		Percentage of children found to require treatment. (4)
	Inspected. (2)	Found to require treatment. (3)	
Code Groups :—			
Entrants	3313	668	20.0
Intermediates and other Routine inspections	3568	790	22.1
Leavers	2452	488	19.9
Total (Code Groups)	9333	1946	20.9

TABLE III.—NUMERICAL RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA ON DECEMBER 31ST, 1931.

			Boys.	Girls.	Total.
Children suffering from the following types of Multiple Defect, *i.e.*, any combination of Total Blindness (see note (*b*) (1)), Total Deafness (see note (*d*) (1)), Mental Defect Epilepsy, Active Tuberculosis, Crippling (as defined in penultimate category of the Table), or Heart Disease..			8	6	14
Blind (including partially blind).	(*i.*) Suitable for training in a School for the totally blind.	At Certified Schools for the Blind	5	2	7
		At Public Elementary Schools ..	..	..	..
		At other Institutions	..	..	..
		At no School or Institution ..	..	..	..
	(*ii.*) Suitable for training in a School for the partially blind.	At Certified Schools for the Blind or Partially Blind	3	1	4
		At Public Elementary Schools ..	7	4	11
		At other Institutions	..	..	..
		At no School or Institution ..	3	..	3
Deaf (including deaf and dumb and partially deaf).	(*i.*) Suitable for training in a School for the totally deaf or deaf and dumb.	At Certified Schools for the Deaf	9	6	15
		At Public Elementary Schools ..	1	..	1
		At other Institutions	..	..	..
		At no School or Institution ..	..	..	..
	(*ii.*) Suitable for training in a School for the partially deaf.	At Certified Schools for the Deaf or Partially Deaf	1	1	2
		At Public Elementary Schools ..	2	2	4
		At other Institutions	..	..	..
		At no School or Institution ..	..	..	..
Mentally Defective.	Feebleminded.	At Certified Schools for Mentally Defective Children	8	7	15
		At Public Elementary Schools ..	50	34	84
		At other Institutions	2	2	4
		At no School or Institution ..	40	20	60
Epileptics.	Suffering from severe epilepsy.	At Certified Schools for Epileptics	..	2	2
		At Certified Residential Open Air Schools	..	..	..
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	..	..	..
		At other Institutions	..	..	..
		At no School or Institution ..	4	2	6
	Suffering from epilepsy which is not severe.	At Public Elementary Schools ..	15	13	28
		At no School or Institution. ..	4	1	5
Physically Defective.	Active pulmonary tuberculosis (including pleura and intra-thoracic glands).	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	5	7	12
		At Certified Residential Open Air Schools	..	..	..
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	..	..	..
		At other Institutions	..	..	..
		At no School or Institution ..	5	1	6
	Quiescent or arrested pulmonary tuberculosis (including pleura and intra-thoracic glands).	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	..	..	..
		At Certified Residential Open Air Schools	..	1	1
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	7	6	13
		At other Institutions	..	..	..
		At no School or Institution ..	5	10	15

TABLE III.—*continued*.

			Boys.	Girls.	Total.
Physically Defective (continued).	Tuberculosis of the peripheral glands.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	..	..	..
		At Certified Residential Open Air Schools	..	..	..
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	22	28	50
		At other Institutions	1	1	2
		At no School or Institution ..	20	17	37
	Abdominal tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	..	..	..
		At Certified Residential Open Air Schools	..	..	..
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	5	3	8
		At other Institutions	..	1	1
		At no School or Institution ..	6	4	10
	Tuberculosis of bones and joints (not including deformities due to old tuberculosis).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	7	2	9
		At Public Elementary Schools ..	10	9	19
		At other Institutions	..	..	..
		At no School or Institution ..	12	8	20
	Tuberculosis of other organs (skin, etc.).	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	..	..	..
		At Public Elementary Schools ..	1	1	2
		At other Institutions	..	..	..
		At no School or Institution ..	2	2	4
	Delicate children, *i.e.*, all children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School	At Certified Residential Cripple Schools	..	..	..
		At Certified Day Cripple Schools	..	..	..
		At Certified Residential Open Air Schools	3	..	3
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	57	46	103
		At other Institutions	..	..	..
		At no School or Institution ..	16	25	41
	*Crippled children (other than those with active tuberculous disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life.	At Certified Hospital Schools ..	2	3	5
		At Certified Residential Cripple Schools	..	..	..
		At Certified Day Cripple Schools	..	..	..
		At Certified Residential Open Air Schools	..	1	1
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	73(1)	59	132(1)
		At other Institutions	..	1	1
		At no School or Institution ..	32(6)	34(5)	66(11)
	Children with heart disease, *i.e.*, children whose defect is so severe as to necessitate the provision of educational facilities other than those of the public elementary school.	At Certified Hospital Schools ..	..	..	..
		At Certified Residential Cripple Schools	..	..	..
		At Certified Day Cripple Schools ..	..	..	..
		At Certified Residential Open Air Schools	..	..	..
		At Certified Day Open Air Schools	..	..	..
		At Public Elementary Schools ..	27	38	65
		At other Institutions	..	..	..
		At no School or Institution ..	8	7	15

*The figures in brackets indicate the number of those children who should be receiving Special School Edueation.

TABLE IV.—RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31ST DECEMBER, 1931.

TREATMENT TABLE.

GROUP I.—MINOR AILMENTS.

Defect or Disease. (1)	Number of defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm—Scalp	60	11	71
Ringworm—Body	34	1	35
Scabies	41	1	42
Impetigo	435	3	438
Other Skin Diseases	251	11	262
Minor Eye Defects— (External and other, but excluding cases falling in Group II.)	279	34	313
Minor Ear Defects	289	28	317
Miscellaneous (*e.g.*, Minor injuries, bruises, sores, chilblains etc.)	2473	10	2483
Total	3862	99	3961

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

Defect or Disease. (1)	Number of defects dealt with.			
	Under the Authority's Scheme. (2)	Submitted to refraction by private practitioner or at Hospital apart from the Authority's Scheme. (3)	Otherwise. (4)	Total. (5)
Errors of refraction (including Squint)	1279	49	25	1353
Other defect or disease of the Eye excluding those recorded in Group I.)	12	..	5	17
Total	1291	49	30	1370

Total number of children for whom spectacles were prescribed :—

(*a*) Under the Authority's Scheme 973

(*b*) Otherwise 70

Total number of children who obtained or received spectacles :—

(*a*) Under the Authority's Scheme 963

(*b*) Otherwise 70

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

Number of Defects.				
Received Operative Treatment.				
Under the Authority's Scheme, in Clinic or Hospital. (1)	By Private Practitioner or Hospital, apart from the Authority's Scheme. (2)	Total. (3)	Received other forms of Treatment. (4)	Total number Treated. (5)
829	83	912	26	938

GROUP IV. DENTAL DEFECTS.

NUMBER OF CHILDREN DEALT WITH.

	Age Groups Inspected.											Specials.	Total.
Age ..	Under 5	5	6	7	8	9	10	11	12	13	14		
East of County .. .. .. (Mr. Birch)	361	892	1015	1132	1181	1282	1312	1097	847	693	99	81	9992
South of County .. .. .. (Mr. Keenan)	213	779	1136	1187	1314	1478	1517	1379	980	858	167	9	11017
North of County .. .. .. (Mr. Catchpole)	237	1092	1407	1567	1626	1776	1818	1717	1275	1090	181	24	13810
Total	811	2763	3558	3886	4121	4536	4647	4193	3102	2641	447	114	34819

	No. of Children referred for Treatment.											Specials.	Total.
Age ..	Under 5	5	6	7	8	9	10	11	12	13	14		
East of County	149	500	601	685	701	750	743	545	440	350	46	81	5591
South of County	48	301	576	647	722	813	794	692	470	368	74	8	5513
North of County	47	418	567	710	754	793	769	752	541	418	84	24	5877
Total	244	1219	1744	2042	2177	2356	2306	1989	1451	1136	204	113	16981

(*b*)	Referred for Treatment	16981
(*c*)	Actually treated	12082

NUMBER OF TEMPORARY TEETH DECAYED.

	Saveable.											Unsaveable.										
Age ..	Under5	5	6	7	8	9	10	11	12	13	14	Under5	5	6	7	8	9	10	11	12	13	14
ast of County ..	1426	4027	4061	3916	3348	2749	1955	887	330	112	28	239	1069	1285	1239	1116	1039	843	464	248	102	16
outh of County ..	285	1434	2100	1986	1693	1368	837	369	134	36	2	54	429	884	924	934	990	807	447	194	78	8
orth of County ..	186	927	979	610	464	315	209	127	35	19	1	213	1470	1971	1996	1746	1406	911	516	169	70	4
Total ..	1897	6388	7140	6512	5505	4432	3001	1383	499	167	31	506	2968	4140	4159	3796	3435	2561	1427	611	250	28

NUMBER OF PERMANENT TEETH DECAYED.

	Saveable.											Unsaveable.										
Age	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	15	104	288	367	453	557	528	689	476	72	0	0	0	1	7	12	50	68	70	88	13	
South of County	5	8	88	185	266	335	440	375	329	78	2	0	1	6	37	49	127	191	134	121	44	
North of County	17	118	325	525	617	685	636	497	403	102	0	2	1	37	91	158	249	312	316	294	75	
Total	37	230	701	1077	1336	1577	1604	1561	1208	252	2	2	2	44	135	219	426	571	520	503	132	

PARTICULARS OF TIME GIVEN AND OPERATIONS UNDERTAKEN.

No. of Half-days devoted to Inspection.	No. of Half-days devoted to Treatment.	Total No. of Attendances made by the Children at the Clinics and Schools.	No. of Permanent Teeth		No. of Temporary Teeth.		Total No. of Fillings.	No. of Administrations of General Anaesthetics.	No. of other Operations.	
			Extracted.	Filled.	Extracted.	Filled.			Permanent Teeth.	Temporary Teeth
East of County. 92	340	4028	135	2417	3286	343	2860	—	1820	657
South of County. 79	336	4641	429	1271	3990	471	1752	—	1028	707
North of County. 120	293	3661	506	1843	3887	81	2178	16	1489	33
Total 291	969	12330	1070	5531	11163	895	6790	16	4337	1397

Group V.—Uncleanliness and Verminous Conditions.

(1) Average number of visits per school made during the year by the School Nurses .. 8.3

(2) Total number of examinations of children in the schools by the School Nurses .. 101,431

(3) Number of individual children found unclean .. .. 3,138 approx.

(4) Number of children cleaned under arrangements made by the Local Education Authority 0

(5) Number of cases in which legal proceedings were taken :—

(*a*) Under the Education Act, 1921 0

(*b*) Under School Attendance Bye-laws 14

RETURN OF DEFECTS (SECONDARY SCHOOLS).

Defect or Disease. (1)		Routine Inspections. No. of Defects. Requiring treatment. (2)	Routine Inspections. No. of Defects. Requiring to be kept under observation, but not requiring treatment. (3)	Special Inspections. No. of Defects. Requiring treatment. (4)	Special Inspections. No. of Defects. Requiring to be kept under observation, but not requiring treatment. (5)
Malnutrition		..	78	..	..
Uncleanliness		9	..	..	..
Skin	Ringworm—Scalp	..	..	..	..
	Ringworm—Body	1	..	..	..
	Scabies	..	..	..	..
	Impetigo	..	..	..	..
	Other diseases (non-tuberculous)	9	..	..	..
Teeth	Dental Diseases	142	..	..	..
Nose and Throat	Enlarged Tonsils only	36	80	1	1
	Adenoids only	2	1	..	..
	Enlarged Tonsils and Adenoids	7	..	..	..
	Other conditions	4	..	..	1
Enlarged Cervical Glands (non-tuberculous)		..	8	..	..
Goitre		3	5	..	..
Eye	External Eye Disease	3	1	..	..
	Defective Vision (including squint)	120	128	9	4
Ear	Defective Hearing	3	1	2	..
	Otitis media	6	..	1	..
	Other Ear Diseases	..	..	..	..
Defective Speech		..	7	..	..
Intelligence (backward)		..	8	..	..
Heart and Circulation		2	21	..	1
Anaemia		1	6	..	..
Tuberculosis	Pulmonary—Definite	..	..	..	..
	Pulmonary—Suspected	..	..	..	..
	Non-pulmonary—Glands	4	1	1	..
	Non-pulmonary—Spine	..	..	..	..
	Non-pulmonary—Hip	..	..	..	..
	Non-pulmonary—Other Bones and Joints	..	..	..	..
	Non-pulmonary—Skin	..	..	..	..
	Non-pulmonary—Other forms	..	..	..	..
Lungs	Bronchitis	3	1	..	..
	Other non-tuberculous diseases	..	1	..	..
Nervous System	Headache	..	..	..	..
	Signs of Overstrain	..	1	..	1
	Chorea	..	1	..	..
Rheumatism		2	8	..	..
Digestion		..	4	..	..
Deformities	Spinal Curvature	19	36	..	1
	Flat Foot	35	71	1	2
	Other Deformity	11	3	..	1
Other Defects		19	14	3	..
Remedial Exercises advised		83		1	
Number of individual children found at Routine Inspection to require treatment		264		—	

DENTAL INSPECTION OF SECONDARY SCHOOL CHILDREN.

	Age Groups Inspected.												
Age	7 and under.	8	9	10	11	12	13	14	15	16	17	18 and over	Total.
Fee-paying	59	42	70	105	200	238	281	303	230	158	63	27	1776
Free-place	1	..	..	33	185	254	241	239	236	146	91	37	1463
Total	60	42	70	138	385	492	522	542	466	304	154	64	3239

	No. of Scholars referred for treatment.												
Age	7 and under.	8	9	10	11	12	13	14	15	16	17	18 and over	Total.
Fee-paying	25	19	34	48	74	113	137	146	105	77	29	9	816
Free-place	..	..	..	7	78	114	96	105	125	69	37	16	647*
Total	25	19	34	55	152	227	233	251	230	146	66	25	1463

*Actually treated (Free-place) 437

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

No. of Half-days devoted to Inspection.	No. of Half-days devoted to Treatment.	Total No. of Attendances made by the Children at the Clinics and Schools.	No. of Permanent Teeth		No. of Temporary Teeth		Total No. of Fillings.	No. of Administrations of General Anaesthetics.	No. of other Operations.	
			Extracted.	Filled.	Extracted.	Filled.			Permanent Teeth.	Temporary Teeth
Total 34	54	487	151	439	81	1	452	3	387	0