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SEVENTH

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

TO

The Education Committee

OF THE

SALOP COUNTY COUNCIL,

1914.

JAMES WHEATLEY, M.D., D.P.H.



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JAMES WHEATLEY, M.D., D.P.H.

Medical Staff.

School Medical Officer:

JAMES WHEATLEY, M.D., D.P.H.

Medical Inspectors:

AUGUSTE BOYES, M.B., Ch. B.

MARGARET LOGAN KIRKWOOD, M.B., Ch. B.

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To the Chairman and Members of the Salop Education Committee.

LADIES AND GENTLEMEN,

I beg to present my seventh Annual Report as Medical Officer to the Salop Local Education Authority in accordance with Circular 576 of the Board of Education, which sets out that "every School Medical Officer should make an annual report to the Local Education Authority on the schools and children under his superintendence, which should be printed for facility of reference and in order that a supply of copies may be available for distribution among the members of the Authority and other persons interested. The Authority should send two copies of the report to the Board of Education as soon as possible after the end of the year under review."

Twelve copies of this report have now to be sent to the Board of Education.

For the last four years the annual reports have been sent to the head teachers of each school and have in many instances been much appreciated. The fact that the report is widely read by school teachers throughout the County, adds considerably to its value, and justifies the inclusion of information that is particularly likely to be interesting and useful to them. For the same reason it is felt that many important matters relating to the health of the children may be repeated with advantage.

The principal matters that need attention in order to make the medical inspection more efficient are :—

- (1) The completion of the scheme of school nursing already adopted.
- (2) Increased facilities for medical inspection and particularly for the inspection of children at an intermediate age, and for the visiting of schools at shorter intervals.
- (3) Provision for the X-ray treatment of ringworm.
- (4) Improved facilities for treatment—including dental treatment.
- (5) The commencement of a definite effort, along with the Sanitary Authorities to reduce the amount of dental caries.

No. 2 depends upon the appointment of a third inspector ; Nos. 3 and 4 are at present under the consideration of the Education Committee, except the question of dental treatment.

No. 5 has been the subject of communications with Sanitary Authorities, and efforts are being made in various directions.

It cannot, however, be too clearly borne in mind that the greatest effort should be towards bringing the *ordinary child* up to the highest pitch of physical fitness possible, by removing what may broadly be spoken of as unphysiological modes of living.

This preventive work should consist of (1) improvement of school premises ; (2) provision of proper playgrounds or playing fields ; (3) the efficient carrying out of physical exercises ; (4) the teaching and training of the children in matters pertaining to health ; (5) co-operation with Sanitary Authorities so that the children's health shall not be irretrievably damaged before school age.

The co-operation with Sanitary Authorities in attending to the health of the children below school age is provided for by the Maternity and Child Welfare scheme of the Local Government Board.

It has been found desirable to deal separately with the inspection of the children in the Borough of Wenlock and in the rest of the County, on account of the different method of inspection and the different standard of defects that has evidently been adopted. The conditions found in the Borough of Wenlock are stated at the end of the report.

I take this opportunity of again expressing my opinion of the excellence of the work done by the Medical Inspectors, and also of thanking the Teachers, the Voluntary Helpers, and many of the Clergy for their most cordial co-operation.

I am, Ladies and Gentlemen,
Your obedient Servant,

JAMES WHEATLEY,

County Buildings,
1915.

County Medical Officer of Health,
and School Medical Officer.

Area covered by the Salop Local Education Authority, Number of Schools, Departments, and Children on Register.

The area covered by the Salop Education Authority comprises 858,277 acres, and had a population at the 1911 census of 201,673. It is co-terminous with the Administrative County with the exception that the Borough of Shrewsbury is not included. The number of schools is 294, comprising 359 departments. The number of children on the registers necessarily varies from time to time to some extent. On November 27th, 1914, it was 35,217.

Hygienic Condition of Schools.

In the report for 1910 a fairly complete analysis of the schools was made with respect to—

- (1) ventilation,
- (2) means of flushing with fresh air,
- (3) methods of cleansing,
- (4) sanitary accommodation,
- (5) lavatory accommodation, and
- (6) cloak rooms.

Since then the Medical Inspectors have reported on the condition of the schools at each visit. The School Medical Officer reports all matters that require remedial action, and these reports are forwarded to the Managers of the Schools for their information and consideration.

In my report for 1913 I said :—The amount of work carried out to remedy the defects found cannot be considered altogether satisfactory. For example, of the schools or departments with defective ventilation reported in 1910 or earlier, about 60 per cent., are still undealt with. The improvements made in the remainder were often of a very partial character and not such as could be considered a final solution.

Investigation into the spread of outbreaks of infectious diseases proves conclusively that schools are the principal means of introduction of infectious disease into households. This applies more particularly to measles, whooping cough, and diphtheria, and it applies with greater force to country than to town schools. There is much reason to think that school infection is also one of the factors in the production of adenoids. The influence of insanitary school conditions in causing phthisis, not so much by direct infection, as by lowering the body resistance and by favouring predisposing infections should not be lost sight of.

When all these matters are borne in mind the importance of a strenuous effort to improve the condition of the schools and particularly of the ventilation and cleanliness is obvious. It is hoped that it will be found practicable to accelerate this work in the future.

Dr. Kirkwood reports that she has noticed on many occasions a stuffiness of the atmosphere of rooms after the morning and afternoon playtimes and after lunch hour. She points out that this is particularly so in the afternoon in those schools where a large number of children lunch in the school. This matter requires the careful attention of head teachers, who should in all cases see that the school rooms are well flushed with air at playtime and immediately after school sessions. The rooms should also be flushed just before the children re-assemble.

One new school has been completed and plans for three others have been prepared during the year. One important feature of the new plans, is the provision of really good cross ventilation in every school room. The improvement in the means of ventilation must have a markedly beneficial effect upon the health of the children, if intelligently used. The following short directions have been drawn up for the use of the teachers. Although they are meant to apply particularly to schools with cross ventilation and with hoppers in connection with sash windows, the directions in some respects may be applied with advantage in the majority of schools.

The windows are provided on two opposite sides of each room in order that there shall always be a movement of air across the room. This is most important for the health of the children attending the school.

In order to use to the best advantage the means of ventilation provided, it is necessary to observe carefully the **force** and **direction** of the wind.

The following points should be carefully observed :—

- 1.—In warm summer weather (and always during the interval for play) the top parts of all the windows should be fully open. In other weather the top windows should be open to some extent if this can be done without unpleasant draughts.
- 2.—Generally it is necessary to depend upon the hoppers for ventilating the room. These hoppers are constructed so as to give an upward direction to the air and so prevent harmful draughts.
- 3.—**All the hoppers on both sides of the room should always be open to some extent.** The amount will depend upon the **force** and **direction** of the wind.
- 4.—The stronger the wind, the less the extent to which it is necessary to open the hoppers. With a very strong wind a very small opening will suffice.
- 5.—The hoppers on the side away from the wind should be open much more freely than those on the side facing the wind.

It is most important for the health and for the mental alertness of the children that the means of ventilation should be fully utilised at all times, and it is necessary therefore, in cold weather, to see that the heating apparatus is in good working order. Proper ventilation is impossible without sufficient heating.

A complaint of draught by any individual child should, if possible, be met by moving that child to another position rather than by decreasing the ventilation.

The ventilation of the school rooms should be made an object lesson for teaching the child the value and methods of ventilation and how this can be carried out in their homes. For this purpose the older children should in turn be made responsible for the ventilation of their rooms.

Arrangements made for Medical Inspection.

The general arrangements described in my report for 1909 have continued throughout the year.

EMPLOYMENT OF SCHOOL NURSES.—The whole question of school nursing, health visiting and tuberculosis inspection was considered during the year by a conjoint Medical Inspection and Public Health Committee.

A scheme for the employment of thirteen whole-time nurse-inspectors or their equivalent in part-time nurses was adopted.

An arrangement was made through the Shropshire Nursing Federation with most of the Nursing Associations in the County, for the employment of the Association nurses to carry out the work of school nursing, and the payment for this work was fixed at 6d. per child per annum.

Owing to the outbreak of the war, the appointment of the whole-time nurse-inspectors was postponed.

Speaking generally, the part-time nurses commenced their work immediately after the summer holidays, in other words, they were employed during the third term of the year.

The total number of nurses undertaking school nursing in the County, including the Borough of Wenlock, is 67, and the number of schools attended is 133. Of these nurses, 60 are employed by associations affiliated with the Shropshire Nursing Federation, 3 by other associations, and 4 by the Borough of Wenlock.

It was evidently a matter of great importance that the work should be commenced on right lines, and in order to ensure this the School Medical Officer made a point of seeing the nurses, almost without exception, and personally explaining to them fully what was required.

A memorandum was issued for the guidance of the nurses.

Books for reporting on defective children were forwarded to them and books and forms for dealing with verminous children were sent to the schools.

On the whole the scheme is working satisfactorily. Some of the nurses have carried out their work with tact and energy, whilst in other districts owing either to want of time or for some other reason the results have not yet been so satisfactory.

VOLUNTARY HELPERS.—In connection with most of the schools, helpers have been nominated by the Managers for the purpose of following up the children found defective and attempting to get the conditions remedied.

The working of the scheme was detailed in the report for last year. It has been slightly modified with regard to those schools where there are school nurses. In these cases, lists of children are not left with the teachers, nor are lists sent afterwards to the voluntary helpers. The position of the voluntary helpers at these schools is set out in the following paragraph of Instructions to Nurses:—

“Where there are “Voluntary Helpers” in connection with a school, the nurse will work in close co-operation with them. In many districts, it will be desirable for the nurse to bring to the notice of the Helpers all the children found defective, and to consult as to the best method of procedure. In others, the nurse will only refer to the “Helpers” when she has failed to get proper treatment. The cases in which the nurse has failed to bring about treatment *must* be referred to the “Helpers” for advice.”

Many of the helpers have carried on the work with much energy and at considerable sacrifice, and the public are greatly indebted to them. It must, however, be acknowledged, that without the help of nurses to do the routine work and supply the necessary technical knowledge, the work is often too heavy for the helpers and is not productive of the best results.

The following schools are without helpers, although in a number of these the Vicar or Rector of the Parish has helped in many instances to get treatment:—

Alberbury.	Ketley Bank.	Preston-on-the-Wildmoors.
Asterley.	Kinlet.	Priors Lee.
Aston.	Kinnersley.	Richard's Castle.
Bettws-y-Crwyn.	Knowbury.	Ryton.
Buildwas.	Langley.	St. Martin's.
Button Oak.	Lawley.	Shelve.
Chirk Bank.	Lea Cross.	Shifnal.
Church Preen.	Leighton.	Smethcott.
Cleeton.	Lilleshall.	Stanton-upon-Hine-Heath.
Clunbury.	Loppington.	Stiperstones (Worthen).
Clunton.	Ludlow C.E.	Stirchley.
Crudgington.	Maesbury Undenominational.	Stoke St. Milborough.
Deuxhill.	Mainstone.	Stottesdon.
Diddlebury.	Malins Lee.	Tilstock.
Donnington Wood.	Malins Lee Institute.	Uffington, Sundorne.
Ellerdine.	Minsterley.	Wellington, Constitution Hill.
Eyton-on-the-Wildmoors.	Morda.	Wellington, Wrekin Road.
Farlow.	More.	Wem Undenominational.
Frankton.	Moreton.	Wentnor (Stiperstones).
Gobowen.	Neen Sollars.	Westbury Forest.
Great Wollaston.	Newport R.C.	Weston Rhyn.
Hadley.	Newtown.	Whitchurch Wesleyan.
Hadnall.	Oswestry, Castle Fields.	Woodcote.
Harley.	Oswestry C.E.	Woodseaves.
High Ercall.	Pant.	Worfield Endowed.
Highley.	Pant Glas.	Wrockwardine.
Hope.	Pitchford.	Wrockwardine Wood C.E.
Hopesay.	Pool Hill.	Wrockwardine Wood Council.
Ifton Heath.	Pontesbury.	Wroxeter.

It is most desirable that helpers should be obtained for these schools.

TEACHERS.—The teachers undoubtedly have a most important position in the work of medical inspection, and upon the energy and intelligence with which they carry out their work depends much of its success. Their part of the work consists of (1) weighing and measuring the children before inspection; (2) making a preliminary examination of the eyesight of children between the ages of 7 and 8, and referring those apparently defective to the medical inspector; (3) entering on the cards various particulars with respect to the previous history and present condition of the children; (4) informing the parents of the date of inspection, getting information from them and persuading them to attend the inspection; (5) selection of special children for examination who appear to be more or less defective; (6) transmission of instructions to parents in certain instances; (7) inquiring into the cases of children found defective and forwarding to the School Medical Officer the reports as to the treatment of these children; (8) persuasion of parents to obtain treatment in these cases; (9) applying physical exercises to suit defective children, *e.g.*, breathing exercises in cases of adenoids; (10) placing children defective with regard to eyesight or hearing in suitable positions in school; (11) notification to the School Medical Officer of all cases of infectious disease in the school as they occur.

It often depends to a considerable extent upon the teacher, as to whether or not the children receive the full benefit of medical treatment. For example, when a child has been examined for defective eyesight and glasses obtained, it rests with the teacher to see that they are worn continuously at least during school hours. This should be *insisted* upon, and advice given as to wearing them at home. After operation for adenoids, the teacher can do much to break the child of the habit of mouth breathing.

The work done by many of the teachers is by no means confined to these matters, but extends into many other details of personal hygiene.

Considering the important place that the teacher should occupy in this work, it is gratifying to be able to report that they have, with few exceptions, helped most loyally and enthusiastically.

ATTENDANCE OFFICERS.—The work of attendance officers in connection with medical inspection has been almost entirely up to the present confined to the investigation of cases excluded from school. In these cases and particularly in the infectious skin conditions (ringworm, scabies, and impetigo), the attendance officers visit and impress upon the parents the necessity for obtaining medical advice or for carrying out the routine treatment prescribed from this department. Such visits have proved to be of much use, but the absence of any knowledge of disease or treatment to some extent limits their usefulness in this respect.

The full utilisation of attendance officers in connection with the discovery and treatment of infectious and defective children, and the utilisation of nurses in bringing about a better attendance, are matters that will well repay careful consideration.

It must be remembered that probably 90 per cent. of the absences from school are on medical grounds and therefore it is obvious, that it is a great advantage, if persons acting in the capacity of attendance officers have had some medical or nursing training. Probably the ideal scheme would be the employment of a number of trained nurse-inspectors who would carry out the whole work of the County Council of this character. The work would include inspection under the Tuberculosis Scheme, the Notification of Births Act and School Nursing, including the visiting of all absentees not properly accounted for. A small number of male attendance officers would be required for dealing with those cases of absence not depending on medical defects and in which entirely different methods would be necessary.

In such a scheme there would be no overlapping of work, the districts would be small, there would be comparatively little travelling, and the nurse-inspector would get a thorough knowledge of her district.

The scheme of health visiting, school nursing and tuberculosis inspection already adopted, but not yet put into force, can be gradually developed on these lines as opportunities allow.

PRESENCE OF PARENTS AT INSPECTIONS AND THEIR CO-OPERATION IN THE TREATMENT OF DEFECTS.—From the commencement of medical inspection in this County, it has been recognised that the presence of parents at the inspection is of paramount importance, and every effort has been made to obtain their attendance.

It is gratifying to find that their attendance is being well maintained.

In considering the advantage of medical inspection it should not be lost sight of, that some 4,000 parents are interviewed every year by the Medical Inspectors and advised so far as time permits with regard to the health of their children. With more time available this might be made an extremely valuable part of the work.

It should be recognised that here we have both a "children's clinic" and a "school for mothers." Its limitations are due to the fact that the time at the disposal of the Inspectors is short, and that the inspections are infrequent; and as regards the school for mothers, it does not deal with infant hygiene. On the other hand it has the great advantage of a very large attendance, and there can be no doubt it should be utilised to the fullest extent.

There is a disposition for the parents to think that it is unnecessary to attend at the inspection of the older children, and particularly at that of the older boys. It is most desirable that parents of the older children should attend and take the opportunity of asking advice on points that will arise on leaving school, and particularly as to the physical fitness of their children for the occupations they are intended for.

With regard to individual schools the following may be taken as examples where the attendance of parents was poor:—

Edstaston	20.8	Burwarton	15.7
*Westbury Forest	20.0	Bridgnorth Blue Coat	15.3
Oswestry C.E. Boys	20.0	Church Stretton	14.0
Hodnet Boys' Council	20.0	Clee St. Margaret	12.5
Whitton and Greete	20.0	Newport R.C.	12.5
Wellington Princes Street	19.5	Prees, Lower Heath	12.0
Kinlet	18.1	Loppington	11.8
Middleton Priors	16.6	Newcastle	10.5
Hayton	16.6	Dudleston	10.0
Eardington	16.6	*Neenton	.0
Rodington	15.7		

and the following Schools where the attendance was good:—

Clungunford	100.0	Llanymynech	86.4
More	100.0	Harmer Hill	85.7
Quatford	100.0	Preston-on-the-Wildmoors	84.6
Monkhopton	100.0	*Leaton	83.3
Holdgate	100.0	*Rhydygroesau	83.3
Weston and Wixhill	100.0	Clun	82.8
Buildwas	92.8	St. Martin's	82.1
Lea Cross	91.7	Hope	81.8
Stiperstones (Worthen)	91.7	Pant	81.8
Leighton	90.9	Pontesbury Infants	81.8
Llanyblodwell	88.9	Ashford Carbonell	81.2
Cressage	88.2	Stanton Lacy	80.9
Halford	88.2	Quatt	80.0
Westhope	87.5	Kenley	80.0

* Numbers very small.

INTERFERENCE WITH ROUTINE SCHOOL WORK BY MEDICAL INSPECTION.—In the case of small one-roomed schools the examination usually occupied half a day, and those children who were not due for examination were allowed to spend the morning or afternoon in the playground, or were sent home if the weather was wet.

In larger schools the extent of the interference depended greatly upon the teaching arrangements, as the head teacher, with few exceptions, was present at the inspections.

In some of the larger schools all the available accommodation was in constant use. In such cases, groups of children were in turn sent out to play or were sent home.

It cannot be said that the interference with school work was on the whole at all serious.

There is another aspect of this question, viz. :—the suitability of the accommodation provided for medical inspection. It must be admitted that the accommodation in many instances leaves much to be desired, and that the efficiency of the inspection is sometimes impaired in consequence. In the designing of new schools, this matter should be taken into consideration. It will be possible, as a rule, to see that one of the rooms not continuously occupied shall fulfil the necessary conditions.

The important points are :—

- (1) The room should be well warmed and lighted, and over 20 feet in length.
- (2) The quietness of the room is a matter of importance. This should be considered both with regard to school noise, during school time and play, and outside noise.
- (3) There should be a small room conveniently situated where the parents can wait.

The possibility that the room may be used as an eye clinic or as a clinic for minor ailments should not be lost sight of.

GENERAL DESCRIPTION OF THE ARRANGEMENTS THAT HAVE BEEN MADE FOR THE CORRELATION OF THE SCHOOL MEDICAL SERVICE WITH THE PUBLIC HEALTH SERVICE.—These arrangements were fully described in the report for 1909. The means for dealing with infectious disease, including the arrangements for notification of the disease to the School Medical Officer and the local Medical Officers of Health, school closure, etc., have worked satisfactorily during the year. Whenever there is reason to suppose that the home conditions of any school children are such as to need the attention of the Sanitary Authority, a communication is sent to the District Medical Officer of Health or, by arrangement, the Sanitary Inspector.

There is close co-operation between the Medical Officers of Health and the School Medical Officer in all matters relating to the prevention of infectious disease.

In those schools where there is school nursing this co-operation for the control of infectious disease has been rendered more effective, particularly with regard to the prevention of diphtheria.

EDUCATION COUNTY EXCLUSIVE OF BOROUGH OF WENLOCK.

Extent and Scope of the Medical Inspection carried out in the year 1914.

Besides the two routine medical inspections carried out in accordance with the Education (Administrative Provisions) Act, 1907, section 13, and the instructions of the Board of Education, the Medical Inspectors have examined all children brought under their notice by the teachers or parents on account of supposed defects; they have also re-examined all those children found defective at previous inspections; they have reported on the sanitary condition of the school premises, and they have, when time has allowed, observed and reported on the methods of conducting physical exercises, and the manner in which hygiene is taught.

The systematic examinations of the children were made at the ages 5 and 12. Along with the children age 5, any older children who had been admitted to school for the first time during the year were examined.

In order to meet statutory requirements, it has also been necessary to examine more or less superficially a number of children under 5 years of age.

It is not possible with the present staff to examine children of an intermediate age in accordance with the prefatory memorandum of the 1909 Code; nor is it possible to examine the schools more than once a year.

The Board of Education have indicated that they do not regard the inspection of schools once a year as satisfactory.

The total number of visits to the schools was 433.

TABLE I.—NUMBER OF CHILDREN INSPECTED IN 1914.

	Entrants.	Leavers.	Special Cases.	Re-examinations (number of children re-examined.)
Boys	1913	1764	1619	4196
Girls	1897	1811		
Totals	3810	3575	1619	4196

The special cases include 691 children under 5 years superficially examined, and 928 brought to the notice of the Medical Inspector by the teachers.

A large amount of time, somewhat difficult to estimate, has been taken up with the most important work of re-examination of those children found defective at previous inspections. It is quite obvious that this work is greater in proportion to the insufficiency of the means for following up the cases and providing treatment. It must increase also directly in proportion to the length of time that medical inspection has been in force, until finally, practically all defective children, whose defects have not been satisfactorily remedied, or who for any reason require frequent supervision, are seen by the Medical Inspector at each visit to the school.

Although systematic inspection of the children is necessary to discover defects and for other reasons, it is undoubtedly this frequent inspection of the defective children that leads to the most practical results. During the year 4196 children were re-examined on account of defects previously discovered, and in estimating the amount of inspection done during the year this must be borne in mind. The corresponding number re-examined in 1913 was 4038, in 1912 was 3,750, and in 1911 was 2,835.

The total number of children inspected during the year was 13,200, details of which are shown in table 1

The number of days in which the Inspectors were engaged in *systematic* inspection was 364.

The number of hours available for inspection is about $4\frac{1}{2}$ *, of which roughly one-and-a-half hours are taken up with the extra cases, etc., leaving about three hours a day for routine inspection. Calculated on this basis the average time occupied by each routine examination was 8.9 minutes.

The average number of children examined in the routine examination each day was 20.2, and including the extra cases and re-examinations, was 36.2.

* Although this is the time strictly available, it is usually exceeded.

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN INSPECTED.

CONDITION.	Inspection age 5.				Inspection age 12.				Total.				Special Cases.
	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	
Total Inspected	1913	1897	3810	..	1764	1811	3575	..	3677	3708	7385	..	1619
<i>Clothing :—</i>													
Satisfactory	1674	1720	3394	89.0	1522	1574	3096	86.6	3196	3294	6490	87.8	..
Unsatisfactory	239	177	416	10.9	242	237	479	13.4	481	414	895	12.1	1
<i>Footgear :—</i>													
Satisfactory	1730	1718	3448	90.5	1535	1590	3125	87.4	3265	3308	6573	89.0	..
Unsatisfactory	183	179	362	9.5	229	221	450	12.6	412	400	812	10.9	1
<i>Cleanliness of Head :—</i>													
Clean (i.e., no nits or pediculi) ..	1786	1323	3109	81.6	1690	1178	2868	80.2	3476	2501	5977	80.9	..
Nits only	105	503	608	15.9	65	583	648	18.1	170	1086	1256	17.0	114
Pediculi	22	71	93	2.4	9	50	59	1.6	31	121	152	2.0	47
<i>Cleanliness of Body :—</i>													
Clean	1725	1714	3439	90.3	1604	1654	3258	91.1	3329	3368	6697	90.6	..
Dirty	180	175	355	9.3	145	151	296	8.3	325	326	651	8.8	16
Pediculi present	8	8	16	.42	15	6	21	.58	23	14	37	.5	19
<i>Nutrition :—</i>													
Excellent	133	112	245	6.4	94	141	235	6.5	227	253	480	6.4	..
Normal	1597	1577	3174	83.3	1484	1480	2964	82.9	3081	3057	6138	83.1	..
Below normal	179	206	385	10.1	184	190	374	10.5	363	396	759	10.2	27
Bad	4	2	6	.16	2	..	2	.05	6	2	8	.1	2
<i>Nose and Throat :—</i>													
No defect	1081	1093	2174	57.1	1156	1191	2347	65.1	2237	2284	4521	61.2	3
Mouth breathers	209	145	354	9.3	110	89	199	5.5	319	234	553	7.5	57
Tonsils : slightly enlarged	567	552	1119	29.4	437	456	893	24.9	1004	1008	2012	27.2	140
Tonsils : much enlarged	95	87	182	4.8	68	91	159	4.4	163	178	341	4.6	30
Adenoids : slight	255	265	520	13.6	135	125	260	7.3	390	390	780	10.5	76
Adenoids : marked	64	44	108	2.8	30	30	60	1.7	94	74	168	2.3	28
<i>Enlarged Cervical Glands :—</i>													
Slight	612	592	1204	31.6	259	229	488	13.6	871	821	1692	22.9	39
Bad	8	21	29	.76	4	9	13	.36	12	30	42	.6	9
<i>External Eye Disease :—</i>													
No disease	1863	1837	3700	97.1	1683	1730	3413	95.5	3546	3567	7113	96.3	..
Blepharitis	32	31	63	1.7	43	48	91	2.5	75	79	154	2.1	23
Conjunctivitis	2	5	7	.18	4	5	9	.25	6	10	16	.2	5
Corneal opacities	5	5	10	.26	10	13	23	.64	15	18	33	.4	7
Other disease	13	24	37	.97	26	18	44	1.2	39	42	81	1.1	12
<i>Ear Disease :—</i>													
No Disease.. .. .	1867	1840	3707	97.3	1726	1776	3502	97.9	3593	3616	7209	97.6	..
Obstruction : R.	12	14	26	.68	7	6	13	.36	19	20	39	.5	5
Obstruction : L.	11	15	26	.68	7	6	13	.36	18	21	39	.5	8
Otorrhoea : R.	19	28	47	1.2	14	16	30	.83	33	44	77	1.0	13
Otorrhoea : L.	19	21	40	1.0	23	21	44	1.2	42	42	84	1.1	10
Other disease	..	..	..	..	..	..	..	..	..	..	..	..	1

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN
INSPECTED—continued.

CONDITION.	Inspection age 5.				Inspection age 12.				Total.				Special Cases.
	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Total.
<i>Teeth :—</i>													
Sound	95	101	196	5.2	66	48	114	3.2	161	149	310	4.2	..
Less than four decayed	354	355	709	18.6	523	590	1113	30.8	877	945	1822	24.8	1
Four to six inclusive decayed	469	492	961	25.2	724	756	1480	41.4	1193	1248	2441	33.2	2
Over six decayed	995	948	1943	50.9	451	417	868	24.3	1446	1365	2811	38.2	13
Sepsis	37	31	68	1.8	17	40	57	1.6	54	71	125	1.7	3
<i>Goitre :—</i>													
Slight	45	34	79	2.1	153	322	475	13.3	198	356	554	7.5	7
Bad	2	2	4	.10	12	64	76	2.1	14	66	80	1.0	3
<i>Evidence of Rheumatism</i>	6	7	13	.34	45	65	110	3.8	51	72	123	1.7	6
<i>Heart and Circulation :—</i>													
No disease	1817	1828	3645	95.7	1664	1666	3330	93.1	3481	3494	6975	94.4	..
Organic disease	18	16	34	.89	20	18	38	1.06	38	34	72	1.0	4
Functional disease	42	22	64	1.7	39	57	96	2.7	81	79	160	2.2	14
Anaemia	39	32	71	1.9	43	75	118	3.3	82	107	189	2.6	25
Other defect	1	..	1	.02	..	1	1	.03	1	1	2	.03	..
<i>Lungs :—</i>													
No disease	1776	1755	3531	92.7	1691	1760	3451	96.5	3467	3515	6982	94.5	..
Chronic bronchitis and bronchial catarrh	116	124	240	6.3	19	12	31	.86	135	136	271	3.7	11
Tuberculosis	1	..	1	..	4	1	5	.14	5	1	6	.08	1
Tuberculosis suspected	19	16	35	.91	47	38	85	2.4	66	54	120	1.6	21
Other disease	1	2	3	.07	3	..	3	.08	4	2	6	.08	1
<i>Nervous System :—</i>													
No disease	1903	1885	3788	99.4	1747	1799	3546	99.2	3650	3684	7334	99.3	..
Epilepsy (major or minor)	4	10	14	.36	9	8	17	.47	13	18	31	.42	7
Chorea	5	..	5	.13	3	3	6	.16	8	3	11	.15	4
Other disease	1	3	4	.10	5	1	6	.16	6	4	10	.14	2
<i>Skin :—</i>													
No disease	1803	1789	3592	94.2	1720	1753	3473	97.1	3523	3542	7065	96.0	1
Ringworm: body	5	3	8	.21	2	1	3	.08	7	4	11	.15	7
Ringworm: head	23	28	51	1.1	7	16	23	.54	30	44	74	1.0	57
Impetigo	32	26	58	1.5	12	14	26	.73	44	40	84	1.1	38
Scabies	10	10	20	.52	3	1	4	.11	13	11	24	.32	15
Other disease	42	36	78	2.0	20	26	46	1.3	62	62	124	1.7	42
<i>Rickets :—</i>													
No disease	1891	1887	3778	99.7	1760	1806	3566	99.7	3651	3693	7344	99.4	..
Slight	9	7	16	.42	4	4	8	.22	13	11	24	.32	1
Marked	3	3	6	.15	..	1	1	.03	3	4	7	.09	1
<i>Deformities :—</i>													
No deformity	1811	1818	3629	95.2	1638	1681	3319	92.8	3449	3499	6948	94.1	..
High Palate	61	64	125	3.2	80	104	184	5.1	141	168	309	4.2	7
Scoliosis	5	4	9	.23	15	4	19	.53	20	8	28	.38	4
Deformity from Infantile Paralysis	3	1	4	.10	3	7	10	.28	6	8	14	.2	3
Other deformities	35	10	45	1.2	31	20	51	1.4	66	30	96	1.3	3

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN INSPECTED—continued.

CONDITION.	Inspection age 5.				Inspection age 12.				Total.				Special Cases.		
	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Total.		
<i>Tuberculosis, non-pulmonary</i> ..															
No disease	1908	1894	3802	99.7	1757	1809	3566	99.7	3665	3703	7368	99.8	..		
Glandular	2	1	3	.08	2	2	4	.11	4	3	7	.09	4		
Bones and Joints	3	2	5	.13	4	..	4	.11	7	2	9	.13	..		
Other forms	..	..	..	..	2	..	2	.06	2	..	2	.03	..		
<i>Speech :—</i>															
Not defective	1759	1781	3540	92.9	1718	1783	3501	97.9	3477	3564	7041	95.3	..		
Defective articulation	132	112	244	6.4	22	18	40	1.1	154	130	284	3.8	26		
Stammering	12	4	16	.41	24	10	34	.95	36	14	50	.7	4		
<i>Mental Condition :—</i>															
Normal	1880	1876	3756	98.6	1677	1753	3430	95.9	3557	3629	7186	97.3	..		
Dull or backward.. .. .	33	17	50	1.3	82	56	138	3.9	115	73	188	2.5	4		
Mentally defective (all grades)	..	4	4	.10	5	2	7	.20	5	6	11	.15	7		
<i>Other defective conditions :—</i>															
Slight	169	183	352	9.2	153	144	297	8.3	322	327	649	8.8	66		
Bad	20	21	41	1.07	25	12	37	1.0	45	33	78	1.1	36		
<i>Vision :—</i>															
6/6 each eye (normal vision) ..	57	82	139	..	1107	950	2057	57.6	1164	1032	2196	..	67		
6/6 R.	13	10	23	..	156	172	328	9.1	169	182	351	..	27		
L.	12	10	22	..	106	95	201	5.6	118	105	223	..	12		
6/9 R.	40	46	86	..	335	457	792	22.2	375	503	878	..	140		
L.	39	43	82	..	411	519	930	26.0	450	562	1012	..	150		
6/12 R.	5	7	12	..	40	71	111	3.1	45	78	123	..	67		
L.	7	9	16	..	35	70	105	2.9	42	79	121	..	66		
6/18 R.	5	4	9	..	52	55	107	3.0	57	59	116	..	58		
L.	3	7	10	..	41	79	120	3.4	44	86	130	..	59		
6/24 R.	1	5	6	..	26	43	69	1.9	27	48	75	..	33		
L.	3	3	6	..	16	42	58	1.6	19	45	64	..	34		
6/36 R.	..	1	1	..	17	38	55	1.5	17	39	56	..	33		
L.	1	1	2	..	17	31	48	1.3	18	32	50	..	30		
6/60 R.	..	..	..	..	8	12	20	.6	8	12	20	..	16		
L.	..	1	1	..	12	5	17	.5	12	6	18	..	24		
6/0 R.	2	1	3	..	14	12	26	.7	16	13	29	..	23		
L.	1	..	1	..	10	19	29	.8	11	19	30	..	22		
<i>Children with Defective Eyesight requiring Treatment</i>	14	26	40	..	263	431	694	19.4	277	457	734	..	318		
<i>Squint :—</i>															
Slight	25	36	61	..	4	11	15	.4	29	47	76	..	14		
Bad {	Convergent	{ R. ..	6	8	14	..	12	8	20	.6	18	16	34	..	7
		{ L. ..	10	18	28	..	11	13	24	.7	21	31	52	..	6
		{ Alt. ..	11	3	14	..	4	3	7	.2	15	6	21	..	2
		{ R. ..	1	3	4	..	6	2	8	.2	7	5	12	..	1
Divergent	{	{ R. ..	..	..	..	..	..	..	..	..	..	..	..	..	..
		{ L. ..	4	3	7	..	1	2	3	.08	5	5	10	..	8

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN
INSPECTED—continued.

CONDITION.	Inspection age 5.				Inspection age 12.				Total.				Special Cases.
	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Total.
aring (whisper) :—													
0 feet each ear (normal hearing)	1814	1822	3636	..	1724	1788	3512	98.2	3538	3610	7148	..	9
0 feet R.	23	19	42	..	18	12	30	.8	41	31	72	..	3
L.	9	16	25	..	11	4	15	.4	20	20	40	..	2
0 feet R.	30	36	66	..	16	6	22	.6	46	42	88	..	5
L.	44	44	88	..	22	13	35	1.0	66	57	123	..	8
5 feet R.	13	13	26	..	3	2	5	.1	16	15	31	..	5
L.	15	9	24	..	4	4	8	.2	19	13	32	..	2
less than 5 feet R.	5	7	12	..	3	2	5	.1	8	9	17	..	3
L.	3	6	9	..	3	1	4	.1	6	7	13	..	4
Children with deafness requiring treatment	6	8	14	..	4	3	7	.2	10	11	21	..	3

The number of children examined, the condition of the children as regards nutrition, cleanliness, clothing, etc., and the defects found are stated in the tables.

These tables are those prescribed by the Board of Education with some additional columns. The additions to Table II. refer to (1) enlarged cervical glands, (2) goitre, (3) evidence of rheumatism, (4) high palate, scoliosis and deformity from infantile paralysis, (5) other defective conditions.

The table does not show as in previous reports the conditions with regard to each attendance district. Statistics relating to each attendance district and individual schools are, however, kept in the office for reference and for the purpose of investigations.

Amongst the 7,385 children who were completely examined, 1,395 or 18.9 per cent., were found to be suffering from defects of a sufficiently serious nature to require medical attention. This percentage is slightly less than that of the previous year. Some of these children were suffering from several defects, so that the total defects requiring attention were considerably in excess of this number.

Besides these, there were a large number of children with more or less slight deviations from the normal, which, although not sufficiently serious to call for medical attention, may, under unfavourable conditions, develop into grave defects.

Amongst 691 children under 5 years of age that were examined more or less superficially, 37 were found to require medical attention.

Amongst the children who were brought to the notice of the inspectors because the teacher thought they were in some respects abnormal, no less than 465 were found to be suffering from defects requiring medical attention. These cases will be spoken of in later parts of the report as extra cases.

In all the cases requiring medical attention, instructions were given to the parent, either verbally or in writing, and generally to the teacher. In minor defects, instructions were given where necessary.

In those schools where nurses were present at the inspection, the Medical Inspector gave detailed instructions directly to the nurse.

These figures do not include defects of teeth. The teeth of the children were found, as at previous inspections, to be in a deplorable condition.

Condition of Children with regard to previous Infectious Disease :—Percentage of Children who have had the various diseases

	Town Schools.				Country Schools.				Total.			
	Males age 5.		Females age 5.		Males age 5.		Females age 5.		Males age 5.		Females age 5.	
	Males age 12 and over		Females age 12 and over		Males age 12 and over		Females age 12 and over		Males age 12 and over		Females age 12 and over	
Measles ..	53.7	56.5	77.5	88.0	36.5	39.2	75.3	74.1	40.7	44.0	76.0	78.4
Whooping Cough ..	39.0	39.2	36.8	44.5	33.0	36.8	45.7	49.3	39.4	37.4	43.2	48.0
Chicken-pox	14.9	17.1	25.0	28.2	14.6	15.3	20.6	23.1	15.0	16.0	22.0	24.3
Diphtheria ..	2.8	2.2	4.1	2.6	1.0	.7	3.3	3.0	1.4	1.1	3.5	2.0
Scarlet Fever	3.0	4.4	9.2	10.7	4.6	4.3	10.0	9.7	4.3	4.3	9.8	9.9

The foregoing table is compiled from the replies obtained from the parents immediately before the medical inspection takes place. The figures have an important bearing upon the spread of infectious disease in schools. Although they cannot be considered as strictly accurate, yet it may be inferred from their general correspondence from year to year and their general correspondence with the number of cases of infectious disease notified from the schools, that they are sufficiently accurate to serve as an indication of the amount of infectious disease contracted during school life and the amount contracted under school age.

Percentage of children reported by parents as having had various infectious diseases for years 1909—1914 :—

MEASLES.

			Age 5.		Age 12.	
			Males.	Females.	Males.	Females.
1909	..	..	48.2	49.8	78.2	81.9
1910	..	..	47.5	49.7	77.0	79.7
1911	..	..	50.4	50.6	77.1	79.8
1912	..	..	54.5	54.7	70.5	72.5
1913	..	..	39.7	43.5	75.7	77.5
1914	..	..	40.7	44.0	76.0	78.4

WHOOPIING COUGH.

			Age 5.		Age 12.	
			Males.	Females.	Males.	Females.
1909	..	..	36.6	41.2	39.5	45.1
1910	..	..	34.1	37.6	40.0	44.7
1911	..	..	34.0	34.5	42.3	44.7
1912	..	..	35.0	36.9	40.0	43.1
1913	..	..	32.4	37.9	39.1	46.4
1914	..	..	39.4	37.4	43.2	48.0

DIPHTHERIA.

			Age 5.		Age 12.	
			Males.	Females.	Males.	Females.
1909	..	..	1.0	1.7	2.4	2.7
1910	..	..	1.6	1.5	2.5	3.3
1911	..	..	1.7	1.6	2.7	2.9
1912	..	..	1.5	1.5	2.5	2.9
1913	..	..	.9	.8	2.5	3.9
1914	..	..	1.4	1.1	3.5	2.0

SCARLET FEVER.

			Age 5.		Age 12.	
			Males.	Females.	Males.	Females.
1909	..	..	3.8	3.9	10.2	11.2
1910	..	..	5.2	4.2	10.7	9.5
1911	..	..	4.6	5.7	8.7	11.3
1912	..	..	5.7	5.3	8.4	9.5
1913	..	..	3.7	3.9	9.4	11.8
1914	..	..	4.3	4.3	9.8	9.9

The figures appear to show that roughly about 47 per cent. of the children have measles before the age of 5, and that 30 per cent. are affected between the ages of 5 and 12, which includes most of the school life. The great majority of the children found to have had measles at the age of 5 have no doubt been infected before school life. With regard to whooping cough, about 36 per cent. have suffered by the age of 5, and only an additional 7 per cent. are infected between the ages of 5 and 12. About 1.3 per cent. of the children at the age of 5 have had diphtheria, and another 1.5 per cent. are infected between 5 and 12. About 5 per cent. of the children at the age of 5 have had scarlet fever, and about 5 per cent. are infected between 5 and 12 years of age.

The figures for 1914 on the whole correspond closely with those of previous years. If the percentages for the six years, 1909—1914, be averaged, they show an excess at the age of 12 over those at the age of 5 for—

Measles	..	29.3	per cent.	or	4.2	per cent.	for each year of life.
Whooping Cough	..	6.6	..	or	.94	..	..
Diphtheria	..	1.5	..	or	.21	..	..
Scarlet Fever	..	5.5	..	or	.79	..	..

These percentages have been applied to the number of children on the registers, and the results are given in column (1) below, and are compared with the average of the annual number of notifications received from the schools during the five years 1910—1914 (column 2).

The results are :—

	Column (1)	Column (2)
Measles	1479	1139
Whooping Cough	331	756
Scarlet Fever	278	222
Diphtheria	73	86

Except with regard to whooping cough there is quite a close correspondence between the figures, considering that they do not refer exactly to the same period. They seem to indicate that the previous history of the child given by the parent is fairly accurate, and that the notification from the schools is fairly complete.

EYESIGHT.—This is the second year that the eye defects have been analysed in the full manner shown on Table II.

It is only at the age of 12 that the children are systematically examined for eyesight. At this age it will be observed that 57.6 per cent. have normal vision and that a further 14.7 per cent. have normal vision in one eye, giving a total of 72.3 per cent. who have normal vision in at least one eye. The remaining 27.7 per cent. have defect of vision of both eyes, but of these a considerable proportion have only the slight defect represented by $\frac{1}{2}$ vision.

The special cases examined were largely in excess of any previous year, this being due to the preliminary examination made by the teachers at the age 7—8. By means of this examination a large number of children with defective eyesight were brought under the notice of the Medical Inspectors. Instructions to the teachers with respect to this examination were published in the last year's report. The result of the examination must be considered as very satisfactory, in the absence of an intermediate medical inspection.

Of the children age 12, 694 or 19.4 per cent. were found to be suffering from defective vision requiring medical treatment, and 823 were found to have minor defects not at present calling for treatment.

The children age 5 were not systematically inspected, but 40 were found to have defective vision requiring treatment.

Amongst the cases brought to the notice of the Inspectors by the teachers, there were no less than 318 with serious defective vision.

Of the total children systematically examined, 205 were suffering from squint and 272 from external eye disease.

Amongst the extra cases and children under 5 years of age there were 38 with squint and 47 with external eye disease.

The percentages of children at the inspection age of 12 found with serious defects of vision are as follows :—

Year	..	..	..	1908	1909	1910	1911	1912	1913	1914
Percentage defects	..	..	..	15.5	14.7	13.3	11.8	14.5	18.2	19.4

The figures for 1912 to 1914 include all serious defects even if remedied by glasses ; figures relating to previous years do not.

The excess of defects amongst girls again shows itself.

Year	..	..	..	1908	1909	1910	1911	1912	1913	1914
Excess of defects of eyesight in girls over boys ex- pressed as a percentage..				36	64	35	20	53	46	60

When a systematic examination is made of the eyesight of children at the age of 7, it will be most interesting to see if the same excess exists at that age or whether it is an excess that is being produced during school life.

Defective eyesight amongst children systematically examined, arranged in town and country schools :—

	Town Schools.			Country Schools.			Total.		
	Children exam- ined.	Children with defects re- quiring treat- ment.	Per- centage of Children with defects	Children exam- ined.	Children with defects re- quiring treat- ment.	Per- centage of Children with defects	Children exam- ined.	Children with defects re- quiring treat- ment.	Per- centage of Children with defects
Age 12 or over									
Boys ..	506	72	14.2	1258	191	15.2	1764	263	14.9
Girls ..	490	120	24.5	1320	311	23.6	1810	431	23.8
Total ..	996	192	19.3	2578	502	19.5	3574	694	19.4

For the first time since the commencement of medical inspection, defective vision was slightly more prevalent amongst the children inspected in the country schools than amongst those of the town schools.

	1908	1909	1910	1911	1912	1913	1914
Town Schools	24.6	18.4	20.6	15.7	18.3	22.6	19.3
Country Schools	12.5	13.4	10.6	10.5	13.1	16.6	19.5
Percentage excess of Town Schools over Country Schools	98	37	94	34	40	36	—

In my report for 1912 reference was made to the report of the British Association for the Advancement of Science, on the "Influence of School Books upon Eyesight," and I made the following recommendations:—

- (1) The total abolition of books for the teaching of reading amongst school children under 6 years of age, and the substitution of black-boards, wall charts, etc.
- (2) The adoption of the standard of the British Association as regards all new books.
- (3) The substitution of books conforming to this standard for old ones as quickly as practicable.
- (4) The prevention of needlework or any work requiring eye-strain, under 8 years of age.
- (5) The discouragement of very fine needlework in school.

These matters have been under the consideration of the Committee on several occasions, and action has been taken in certain directions.

DEFECTS OF NOSE AND THROAT.—The defects of the nose and throat were almost entirely obstructive conditions due to adenoids and enlarged tonsils. Of 7,385 children examined 168 or 2.3 per cent. were suffering from adenoids and 341 or 4.6 per cent. from enlarged tonsils, sufficiently bad to require medical treatment. Amongst the "extra cases" there were 23 cases of adenoids and 10 cases of enlarged tonsils requiring treatment. Amongst the children under 5 years of age there were 5 cases of adenoids and 20 of enlarged tonsils. In all, there were therefore 196 cases of adenoids and 371 cases of enlarged tonsils requiring treatment. In addition there were a large number of children who were suffering from these defects in a minor degree (see table), and to whom instructions were given particularly with regard to breathing exercises.

ADENOIDS.

	TOWN SCHOOLS.					COUNTRY SCHOOLS.					TOTAL.				
	Children ex- amined.	Children with Adenoids		Per- centage of Children with Adenoids.		Children ex- amined.	Children with Adenoids		Per- centage of Children with Adenoids.		Children ex- amined.	Children with Adenoids		Per- centage of Children with Adenoids.	
		Slight	Bad	Slight	Bad		Slight	Bad	Slight	Bad		Slight	Bad	Slight	Bad
Age 12 or over															
Boys ..	506	44	12	8.7	2.4	1258	91	18	7.2	1.4	1764	135	30	7.7	1.7
Girls ..	493	36	9	7.3	1.8	1318	89	21	6.7	1.6	1811	125	30	6.9	1.7
Age 5—															
Boys ..	425	54	20	12.7	4.7	1488	201	44	13.5	3.0	1913	255	64	13.3	3.3
Girls ..	501	60	19	12.0	3.8	1396	205	25	14.7	1.8	1897	265	44	14.0	2.3
Both ages and sexes ..	1925	194	60	10.1	3.1	5460	586	108	10.7	2.0	7385	780	168	10.6	2.3

ENLARGED TONSILS.

	TOWN SCHOOLS.					COUNTRY SCHOOLS.					TOTAL.				
	Children ex- amined.	Children with enlarged Tonsils.		Per- centage of Children with enlarged Tonsils.		Children ex- amined.	Children with enlarged Tonsils.		Per- centage of Children with enlarged Tonsils.		Children ex- amined.	Children with enlarged Tonsils.		Per- centage of Children with enlarged Tonsils.	
		Slight	Bad	Slight	Bad		Slight	Bad	Slight	Bad		Slight	Bad	Slight	Bad
Age 12 or over															
Boys ..	506	134	21	26.5	4.1	1258	303	47	24.1	3.7	1764	437	68	24.8	3.9
Girls ..	493	131	24	26.6	4.9	1318	325	67	24.7	5.1	1811	456	91	25.2	5.0
Age 5—															
Boys ..	425	141	25	33.2	5.9	1488	426	70	28.6	4.7	1913	567	95	29.6	5.0
Girls ..	501	150	26	29.9	5.2	1396	402	61	28.8	4.4	1897	552	87	29.1	4.6
Both ages and sexes ..	1925	556	96	28.9	5.0	5460	1456	245	26.7	4.5	7385	2012	341	27.2	4.6

The percentages of children suffering from adenoids sufficiently serious to require medical treatment amongst those coming up for medical examination during the last six years were :—

Year.	Age 5.	Age 12.
1909	6.1	5.5
1910	4.9	4.3
1911	5.2	4.1
1912	3.2	3.9
1913	3.2	2.3
1914	2.8	1.7

The decrease of the cases of adenoids and enlarged tonsils noticed in previous years, has continued. Although it would be rash to assert positively that there has been a real decrease, the evidence each year becomes stronger.

There is a considerable difference of opinion as to the essential cause or causes of adenoids. Investigation should be directed in every possible way to solving the problem. One part of the investigation might with great profit be undertaken by the Medical Research Committee appointed under the Insurance Act. In the meantime it is of the utmost importance that we should utilise what knowledge we already possess for the prevention of this condition, and in particular, it is important that the teachers should realise what they can do, for it is mostly through them, that preventive measures have to be put into force.

There are some grounds for assuming that the following conditions predispose to adenoids :—

- (1) Very frequent infection of the nose and throat with the organisms responsible for "common colds."
- (2) Insufficient attention to keeping the nasal passages clear by the proper use of the handkerchief.
- (3) Bad habits of breathing through the mouth, and in particular the habit of sleeping with the mouth open. Mouth breathing is probably not only one of the principal symptoms of adenoids but also a predisposing cause.

The preventive measures that should be taken follow as a matter of course.

Breathing exercises should be carried out at school with regard to all children frequently and efficiently, and special attention should be paid to mouth breathers.

If it is true as most observers think, that slight cases of adenoids can be cured by properly conducted breathing exercises, it seems reasonable to suppose that many cases can be absolutely prevented by similar exercises.

Sir George Newman, in his Annual Report for 1913, lays great stress upon the curative effect of breathing exercises in mild cases and for the purpose of establishing nasal breathing after operation in more serious cases. He says :—

"The need for systematic arrangements for breathing exercises in children who have been subjected to operation, or in mild cases, is generally accepted as an essential part of the treatment, and is receiving a large amount of attention from Medical Officers concerned with this treatment. It is evident that in a considerable number of areas the results of operative treatment have been found disappointing, owing to the neglect to "follow-up" and educate the children in this respect. These children require the most careful supervision, often over a prolonged period, until they have thoroughly acquired the habit of nasal breathing. Not only is it necessary to give clear and categorical instructions in regard to breathing exercises, but the School Medical Officer should assure himself that these are being properly carried out."

Sir George Newman also points out the importance of determining before performing an operation that the condition is not a temporary one or one due to some removable cause. Having determined on operation he insists upon the importance of five points :—

" (1) The proper preliminary preparation of the child (including antiseptic treatment of mouth and pharynx).

" (2) Skill and practice in the performance of the operation.

" (3) Suitable and complete arrangements for the thorough recovery of the child, both from local haemorrhage and from the effects of the anaesthetic.

" (4) The primary subsequent treatment of the child in order to protect it from chill, dust, or infection.

" (5) The secondary subsequent treatment, consisting partly of medical and nursing supervision during the days immediately following the operation (dietary, fresh air, rest), and partly of after-care treatment, including remedial and breathing exercises."

It is obvious that the operation and subsequent supervision need considerable care, if the patient is to derive the maximum benefit.

DEAFNESS.—Routine testing for deafness by means of the whisper test has been carried out throughout the year. The results are stated on Table II. It has added considerably to the length of time occupied by each inspection, particularly in the case of infants, and in some schools it has been rendered more difficult from the lack of suitable accommodation or owing to the noisy surroundings.

TEETH.—As in the last two reports, the statistics with regard to decay of teeth have been got out in three forms—

(1) The children are classified in four groups according to the number of decayed teeth;

(2) The average number of decayed teeth per child is given for each attendance district, the figures being further sub-divided for town and country schools and age and sex ;

(3) The children are classified in 20 groups, the number of the group indicating the number of decayed teeth of each child in the group ; the figures in this table are further sub-divided for attendance districts and age periods.

	TOWN SCHOOLS.				COUNTRY SCHOOLS.				TOTAL.			
	Percentage of children with sound teeth.	Percentage of children with 1 to 3 (inclusive) teeth decayed.	Percentage of children with 4 to 6 (inclusive) teeth decayed.	Percentage of children with 7 or more teeth decayed.	Percentage of children with sound teeth.	Percentage of children with 1 to 3 (inclusive) teeth decayed.	Percentage of children with 4 to 6 (inclusive) teeth decayed.	Percentage of children with 7 or more teeth decayed.	Percentage of children with sound teeth.	Percentage of children with 1 to 3 (inclusive) teeth decayed.	Percentage of children with 4 to 6 (inclusive) teeth decayed.	Percentage of children with 7 or more teeth decayed.
Boys, 12 years of age and over ..	4.7	31.4	35.0	28.9	3.3	28.9	43.5	24.2	3.8	29.7	41.0	25.6
Girls, 12 years of age and over ..	2.7	35.1	37.1	25.0	2.6	31.6	43.5	22.3	2.7	32.6	41.8	23.0
Boys, 5 years of age ..	4.0	18.1	23.8	54.1	5.3	18.6	24.7	51.4	5.0	18.5	24.5	52.0
Girls, 5 years of age ..	6.0	20.2	23.4	50.5	5.1	18.2	26.9	49.8	5.3	18.7	25.9	50.0
Total ..	4.4	26.5	30.0	39.0	4.1	24.0	34.1	37.7	4.2	24.6	33.4	38.0

Average number of decayed teeth per child in Attendance Districts:—

Attendance Districts.	COUNTRY SCHOOLS.				TOWN SCHOOLS.				TOTAL.				Age 5. Boys&Girls	Age 12 and over. Boys & Girls
	Age 5.		Age 12 and over.		Age 5.		Age 12 and over.		Age 5.		Age 12 and over.			
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls		
Albrighton ..	6.7	7.2	5.0	4.8	..	..	..	..	6.7	7.2	5.0	4.8	6.9	4.8
Bishop's Castle ..	6.6	6.9	5.8	5.7	..	..	..	..	6.6	6.9	5.8	5.7	6.7	5.7
Bridgnorth ..	6.5	7.1	4.0	3.6	7.8	8.1	4.9	4.9	6.8	7.4	4.2	4.0	7.1	4.0
Church Stretton ..	6.7	7.0	5.1	5.6	..	..	..	..	6.7	7.0	5.1	5.6	6.8	5.6
Cleobury Mortimer ..	6.7	6.7	5.4	5.8	..	..	..	..	6.7	6.7	5.4	5.8	6.7	5.8
Condover ..	5.8	7.0	4.5	4.2	..	..	..	..	5.8	7.0	4.5	4.2	6.3	4.2
Drayton ..	6.6	6.9	5.2	4.9	8.5	7.3	5.8	5.7	7.3	7.1	5.5	5.2	7.2	5.2
Ellesmere ..	7.8	6.2	4.8	5.1	9.6	9.0	5.8	7.2	8.0	6.7	5.0	5.6	7.3	5.6
Ludlow ..	6.4	6.5	5.3	5.5	6.8	6.9	5.5	5.9	6.5	6.7	5.4	5.7	6.6	5.7
Newport ..	6.6	6.3	5.1	4.6	7.2	5.7	5.7	5.4	6.8	6.1	5.2	4.7	6.4	4.7
Oswestry ..	7.6	7.6	5.5	5.2	8.8	8.4	6.4	5.5	8.1	7.9	5.9	5.2	8.0	5.2
Pontesbury..	7.9	7.5	5.4	5.4	..	..	..	..	7.9	7.5	5.4	5.4	7.7	5.4
Shifnal ..	7.9	7.9	5.0	4.3	7.6	4.8	4.0	5.7	7.8	7.1	4.8	4.7	7.5	4.7
Wellington ..	5.6	5.4	4.0	3.9	5.2	5.1	3.3	3.2	5.5	5.3	3.7	3.6	5.4	3.6
Wem ..	7.2	7.2	5.0	4.6	7.9	8.0	5.8	5.8	7.4	7.5	5.3	5.1	7.5	5.1
Whitchurch ..	7.7	6.6	4.6	4.8	9.7	8.0	5.6	5.1	8.0	6.9	5.1	4.9	7.5	5.1
Total ..	6.8	6.8	4.9	5.8	7.3	6.8	4.9	4.7	6.9	6.8	4.9	4.8	6.8	4.8

Children classified in Groups according to number of Decayed Teeth.

AGE 5.

Number of Decayed Teeth.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Attendance Districts.																				
Albrighton ..	8	7	7	7	4	11	8	8	15	8	11	7	7	3	1	2	1	1	1	..
Bishop's Castle ..	12	4	17	10	10	11	17	24	16	12	12	8	13	6	4	1	1	..	..	..
Bridgnorth ..	14	19	22	19	22	33	26	36	24	21	22	19	21	17	10	5	3	2	1	2
Church Stretton ..	4	3	5	5	6	11	5	13	8	5	8	5	4	4	..	1	..	..	..	..
Cleobury Mortimer ..	7	4	8	12	12	24	14	18	21	12	10	5	5	6	1	3	1	..	1	..
Condover ..	10	11	10	15	19	24	21	16	29	22	11	11	5	7	2	1	..	1	1	1
Drayton ..	6	..	8	13	22	16	11	15	13	20	13	15	6	5	5	3	5	3	..	..
Ellesmere ..	6	9	15	15	13	17	20	15	20	21	13	16	10	7	8	5	..	1	2	1
Ludlow ..	16	8	26	26	23	30	34	28	24	22	23	19	20	9	1	3	2	1	..	..
Newport ..	16	15	18	16	18	10	26	16	17	14	10	14	13	8	2	4	1	3	1	..
Oswestry ..	10	12	29	20	30	28	42	39	49	28	33	22	32	16	17	14	15	1	3	3
Pontesbury ..	4	6	8	6	11	9	16	18	12	6	12	13	15	9	6	1	1	..	1	..
Shifnal ..	6	13	20	12	13	20	21	17	14	16	19	12	15	12	13	6	1	..	2	1
Wellington ..	63	49	72	56	68	58	63	56	43	33	26	28	17	20	6	2	1	2	3	..
Wem ..	6	6	7	8	11	11	11	8	11	8	13	9	8	6	3	3	4	1	1	..
Whitchurch ..	3	9	8	5	8	11	14	11	10	11	6	7	9	4	6	3	3	1	1	..
Total Children ..	191	175	280	245	290	324	349	338	326	259	242	210	200	135	85	57	39	17	18	8
Percentage of Children in each Group ..	5.0	4.5	7.4	6.4	7.7	8.4	9.2	8.9	8.6	6.8	6.3	5.5	5.2	3.5	2.2	1.4	1.0	.4	.5	.2

AGE 12.

Brighton	2	3	14	11	14	13	14	6	13	5	2	..	..	..	..	..	..	..	..	..
Shop's Castle ..	1	2	6	18	23	33	20	16	16	6	6	1	1	1	..	2	..	..	1	..
Midgorth	2	28	53	47	51	37	24	9	14	2	5	3	1	3	..	..	..	..	1	..
Church Stretton ..	1	3	4	7	7	14	8	5	10	5	..	1	..	..	..	..	..	..	..	..
Leobury Mortimer ..	3	3	4	16	16	21	14	12	13	5	4	2	..	1	1	1	..	..	..	..
Wendover	9	7	18	24	21	20	24	16	8	2	..	1	..	2	..	..	..	..	..	..
Rayton	2	8	15	25	33	27	26	17	18	11	11	3	..	..	..	..	1	..	..	..
Walsmere	3	13	15	33	35	30	30	22	15	6	6	5	2	3	4	..	1	..	..	..
Widlow	6	2	22	31	33	58	39	22	27	19	7	7	1	1	..	..	1	..	..	..
Weymouth	2	9	19	34	26	40	23	15	10	16	8	..	1	..	..	..	..	..	..	..
Widwestry	3	14	27	62	69	48	44	37	45	14	20	9	8	4	2	2	..	..	..	..
Wootton Bassett ..	..	11	10	13	28	23	26	17	11	5	3	2	3	2	1	..	..	..	1	..
Widford	3	18	26	42	40	28	28	16	12	4	7	4	5	3	..	..	..	..	..	1
Wellington	66	71	111	124	109	68	64	35	16	5	11	6	5	1	2	..	..	..	..	..
Widem	3	8	8	18	18	23	13	18	13	4	4	2	3	..	..	..	..	..	..	..
Widchurch	5	11	18	24	33	29	18	16	7	14	8	2	1	1	..	1	..	..	..	..
Total Children ..	111	211	370	529	556	512	415	279	248	123	102	48	31	22	10	6	2	1	3	..
Percentage of Children in each Group ..	3.1	5.8	10.3	14.7	15.5	14.3	11.6	7.8	6.9	3.4	2.8	1.3	.9	.6	.2	.2	.06	.03	.08	..

It has been thought desirable to continue this full analysis of the figures relating to dental caries for a third year. The figures have been in such close agreement each year, that it appears certain that they may be taken as an accurate description of the amount of dental caries amongst the elementary school children of the County.

The striking points are :—

- (1) That only 3 per cent. of the children at age 12, and 5 per cent. at age 5, were free from caries.
- (2) That the average number of decayed teeth at the age of 5 was 6.8, and at the age of 12 was 4.8.
- (3) That out of 3,794 children examined at the age of 5, no less than 1,017 had 10 or more decayed teeth; and out of 3,580 children at age 12, 876 had 7 or more decayed teeth.

The table giving the amount of caries in each attendance district shows that although there is more caries in some districts than in others, every part of the County is heavily affected. The Wellington district, which contains the mining and manufacturing areas of Oakengates and Dawley, has been for the last four years almost without exception, the district least affected and during the same period with one negligible exception, Oswestry has been the district most affected. A satisfactory investigation into these variations would be a most laborious process, and without such investigation only vague conjectures can be formed.

Caries of Teeth and Artificial Feeding of Infants.—Investigation into this subject was commenced in October, 1910, and has been continued up to the present time.

The results for 1914 are given in the following tables :—

BOYS AND GIRLS AGE 5—6.

Months when breastfeeding or bottle feeding ceased.	Breast-fed Children.					Bottle-fed Children.				
	Up to 9	10—12	13—18	19 and upwards	All Breast-fed Children	Up to 9	10—12	13—18	19 and upwards	All Breast-fed Children
Number of Children examined	164	468	447	241	1320	127	318	274	130	849
Number of decayed teeth per child	6.6	6.6	7.3	7.9	7.1	7.1	6.9	7.3	8.0	7.3

AGE 12—13.

Number of children examined	116	341	337	167	961	66	191	183	90	530
Number of decayed teeth per child	4.8	5.0	4.3	4.6	4.8	5.0	4.8	5.4	4.8	5.1

Amount of dental caries amongst children who have been (1) breast-fed, and (2) bottle-fed, subdivided into town and country schools :—

	TOWN SCHOOLS.				COUNTRY SCHOOLS.			
	Age 5.		Age 12.		Age 5.		Age 12.	
	Breast-fed.	Bottle-fed.	Breast-fed.	Bottle-fed.	Breast-fed.	Bottle-fed.	Breast-fed.	Bottle-fed.
Number of decayed teeth per child ..	7.2	7.6	5.0	5.2	7.0	7.2	4.7	5.1

The results of the investigation for the five years may be summarised thus :—
BOYS AND GIRLS.

		Breast-fed Children.		Bottle-fed Children.	
Year.		Number of Children examined.	Number of decayed teeth per child.	Number of Children examined.	Number of decayed teeth per child.
		AGE 5—6			
1910	..	352	6.2	243	7.0
1911	..	1248	6.12	771	6.83
1912	..	1403	7.0	814	7.2
1913	..	1384	6.8	698	7.2
1914	..	1320	7.1	849	7.3
Total	..	5707	6.7	3375	7.1
		AGE 12—13.			
1910	..	128	4.5	72	4.9
1911	..	736	4.65	382	4.82
1912	..	904	4.9	513	5.0
1913	..	842	4.5	403	5.3
1914	..	961	4.8	530	5.1
Total	..	3571	4.7	1900	5.0

Eating of " Sweets " as a cause of Dental Caries.—This inquiry was continued through 1914. The term " sweets " is used with the popular meaning, and does not include sugary foods taken at meal times. The classification adopted was :—

- Class 1. Large quantities of sweets eaten—almost every day.
- Class 2. Considerable quantities eaten—several times a week.
- Class 3. Few sweets eaten—about once a week.
- Class 4. No sweets at all eaten.

The classification is necessarily somewhat vague and is not one that can be applied with exactness. Many individual errors will no doubt have occurred, but in the aggregate the classifications are probably sufficiently correct.

Inquiries were made with regard to 5,856 children in all, and included inquiries both from the children and from the parents when present.

The results are stated in tabular form. The number of children is given in each case, so that the value to be attached to the figures can be estimated.

Average number of Carious Teeth per Child.

	Class	1	2	3	4
		Large	Considerable	Few	None
<i>Age 5.</i>					
Number of children		247	595	1431	158
Average number of carious teeth per child ..		8.1	7.2	6.5	5.9
<i>Age 12.</i>					
Number of children		159	997	2074	195
Average number of carious teeth per child ..		5.1	5.1	4.6	4.6

Number and Percentage of Children free from Caries.

	Class	1	2	3	4
<i>Age 5.</i>					
Number		8	22	65	15
Percentage		3.2	3.7	4.5	9.5
<i>Age 12.</i>					
Number		10	49	138	27
Percentage		6.3	4.9	6.6	13.8

Number and Percentage of Children free from Caries or with less than 3 Decayed Teeth.

	Class	1	2	3	4
<i>Age 5.</i>					
Number		32	70	269	36
Percentage		12.9	11.8	18.8	22.8
<i>Age 12.</i>					
Number		23	167	454	45
Percentage		14.4	16.7	21.9	23.0

This inquiry has been going on for four years, and the numbers are now sufficiently large to justify one in drawing conclusions.

In each year there has been a large preponderance of dental caries amongst the children eating sweets in quantity. This preponderance was not so marked in 1914 as in previous years.

The following conclusions previously drawn are confirmed by this year's figures:—

1. That eating of sweets is a potent factor in the production of caries.
2. That there are other potent factors which on the one hand will cause caries of teeth in children who do not eat sweets, and on the other hand will render the eating of sweets comparatively harmless.

CAUSATION AND PREVENTION OF DENTAL CARIES.—This subject has been dealt with fully in previous reports. In my report for the year 1910, I said:—“*In my opinion more improvement in public health can be obtained by efforts to abolish these conditions (dental caries and oral sepsis) than in any other line of action.* It is a matter affecting not only Education Authorities but all bodies responsible in any way for the public health, and should be looked upon as such.”

“The object we should strive after, is to arrest this development of caries in the present generation so far as possible, and to see that the children of the next generation are brought up in such a way that caries will only develop as an exceptional and abnormal condition.”

A further four years' study of this question has convinced me that the above statement contains no exaggeration, but rather errs in not putting the matter sufficiently forcibly.

The measures of prevention that have been taken so far are :—

- (1) Instruction of teachers and parents by the Medical Inspectors.
- (2) Lectures on the subject to all school teachers in the County to enable them to give simple teaching and training to the school children.
- (3) Lectures to, and instruction of, the nurses of the County to enable them to forward this work as school nurses and health visitors.
- (4) Lectures to the public.
- (5) Instruction of midwives by the Inspector of Midwives.
- (6) Circulation of the leaflet (see below) amongst school children and through them to their parents.
- (7) Communications addressed to the Sanitary Authorities of the County pointing out the importance of this work and the responsibility of Sanitary Authorities.

It is felt however that the principal work must be done by means of health visitors teaching in the homes of the people, For this purpose it is essential that the scheme already approved should be put into operation.

SALOP COUNTY COUNCIL.

ELEMENTARY EDUCATION DEPARTMENT.

PREVENTION OF DECAY OF TEETH.

Food often sticks about the teeth after eating. It then decomposes and acts upon the teeth, causing them to decay. **If food can be prevented from sticking to the teeth there will be no decay.**

It is only the starchy and sugary foods (see below) that cause decay, when they stick to the teeth.

To prevent decay you should observe the following rules :—

(1) As soon as an infant needs food other than milk (8—9 months) give it in a solid hard form requiring mastication, such as crusty bread, twice baked bread, or crisp toast. In this way good teeth are likely to grow and good habits of mastication will be formed. **Never give bread soaked in milk, or flour added to milk, or other soft starchy foods** (such as most patent foods).

(2) As the child grows up you should still give most of the food in a hard form, compelling mastication. Food should rarely be taken in a liquid form, or soaked in liquid or minced. Bread should not be eaten new, and it should have plenty of good firm crust.

(3) Drinking between each mouthful is very injurious. Liquids should be taken at the end of a meal, or between meals.

(4) **Sweets should never be taken between meals, nor the last food in a meal ;** but only along with food requiring mastication. Sweets or milk given last thing at night are particularly dangerous to the teeth.

(5) **A meal should always be finished with a cleansing food** (see below). It is very desirable that fresh fruit should be eaten freely, particularly at the end of a meal. This is most important with regard to the last meal of the day.

(6) Mouth breathing in children should always be corrected, and if obstinate, medical advice should be obtained.

EXAMPLES OF FOOD.

Starchy Foods.

Bread, Biscuits, &c.
*Potatoes.
Rice, Tapioca, Sago, etc.
Oatmeal porridge, and
similar foods.
Patent foods.

Sugary Foods.

All foods to which sugar is
added.
Sweets of all kinds.
Honey.
Milk.
Jams.
Marmalades.

Cleansing Foods.

Fresh fruits—particularly
apple—nuts.
Raw vegetables—celery,
radishes, lettuce, onions,
carrots, etc.
† Crusts of bread, crisp toast,
twice-baked bread.
Meat, fish, bacon.

* Potatoes are a much better food if cooked and eaten with their skins.

† The coarse whole meal flours are better for this purpose.

JAMES WHEATLEY, M.D.,

County Medical Officer of Health and

School Medical Officer.

COUNTY BUILDINGS,
SHREWSBURY, 1913.

CONSERVATIVE DENTISTRY.—Sir George Newman, in his report for 1913, said :—

"In addition to any instruction provided for parents or children with reference to the means of the care of the teeth and the prevention of dental decay, it is necessary that consideration should also be given to devising schemes for the conservative treatment of dental disease by Local Education Authorities."

He also laid down the conditions that should govern any scheme for dental treatment. They may be briefly summarised thus :—

- (1) The arrangements should be under the control of the School Medical Officer.
- (2) The inspection should be undertaken by the dentist carrying out the treatment.
- (3) Treatment should be confined in the first instance to the children of the age group 6—8 years.
- (4) Accurate records should be kept.
- (5) Treatment should be conservative and preventive in character.
- (6) A nurse should be present.
- (7) Re-examinations should be made at intervals of not more than one year.

Other points dealt with are the co-ordination of the scheme with the whole scheme of school treatment, the provision for giving anæsthetics and the accommodation required.

No schemes for dental treatment have so far been undertaken by the Local Education Authority. Suggestions have been made that dental clinics should be started voluntarily in various districts. If such action were taken and the work carried out in accordance with the conditions just quoted, fifty per cent. of any contribution made by the Local Education Authority would be repaid to the County Council by the Board of Education.

TUBERCULOSIS. *Phthisis*.—Out of 7,385 children examined, only 6 or .08 per cent. were diagnosed as suffering from phthisis. In addition there were 120 or 1.6 per cent. who showed signs or symptoms pointing to phthisis in an early stage, but the symptoms were not sufficiently definite to allow of a diagnosis being made. Amongst the extra cases and the children under 5 years of age, there was one definitely diagnosed and 21 suspected.

Two hundred and four children were referred to the Tuberculosis Officer for examination. 4 of these were definitely diagnosed as phthisis; 43 as suspicious of phthisis; 4 as suffering from tuberculosis of bones or glands; 62 were reported as showing no signs of tuberculosis; and 91 were not seen during the year.

The Medical Inspectors are now supplied with lists of children from phthisis houses. Under this arrangement 137 children were referred for examination. Of these, 26 had left school or were absent at the inspection, 21 were below school age, and 7 are at schools that have not since been inspected. Eighty-three children were examined; 3 were diagnosed as consumptive; 16 as suspicious of consumption, and in 64 there were no physical signs.

The extension of Shirlet Sanatorium is now complete. Fifteen children of school age, belonging to the Education County, were treated in this Institution during the year.

Other Forms of Tuberculosis.—Only 17 cases were found amongst the children systematically examined and 4 amongst the extra cases. These numbers give little indication of the amount of tuberculous disease, as serious tuberculous disease of the bones and joints usually prevents the attendance of children at school.

Three children of school age belonging to this County, suffering from tuberculosis other than phthisis, were treated during the year in the Salop Convalescent and Surgical Home, Baschurch. This does not include cases from the Borough of Shrewsbury.

The question of open-air schools has not yet been considered.

ANAEMIA.—One hundred and eighty-nine or 2.6 per cent. of the children were noted as suffering from anaemia sufficiently serious to call for medical attention and unexplained by some other definite condition.

DISEASES OF HEART AND RHEUMATISM.—Amongst the children systematically examined 72 were found to have organic disease of the heart, and 160 to be suffering from functional and probably temporary derangements. In 123 children there was evidence of rheumatism.

Amongst the extra cases and children under 5, there were 4 cases of organic disease and 14 with evidence of functional derangement.

The following paragraphs appeared in my report for 1913, but as definite action has not yet been taken, and as the subject is one of great importance to school teachers, they may with advantage be repeated.

So little is known with certainty with respect to the rheumatic poison, its mode of access to the body, the degree of its infectivity and the predisposing conditions of the individual that favour its entry and development, that one has to fall back upon a few well ascertained facts. Of these, the most important is that exposure to damp and cold is apt to bring on an attack in certain individuals. There is undoubtedly a predisposition in certain families, and an attack predisposes to further attacks. The symptoms of rheumatism may be of a very mild and vague character—growing pains, sore throats, movements indicating St. Vitus's dance, headaches, and general ill health.

The prevention of rheumatism, as regards school life, is concerned with—

- (1) provision of satisfactory cloak-rooms where clothes and boots can be dried ; and the provision of slippers ;
- (2) education of teachers to recognise the early symptoms ;
- (3) instruction of the mothers of children affected, by pamphlets and verbal advice ;
- (4) prompt treatment for sore throat and particularly enlarged tonsils.

The provision of cloak-rooms where clothes can be adequately dried, and the provision of slippers for use in wet weather, should be regarded as an essential for healthy school life, particularly in rural districts. It is not desirable that children should be coddled. They may be exposed with great benefit to the action of cold water and cold air under suitable conditions to a much greater extent than usually obtains, but to force children, a certain proportion of whom are delicate, to sit with short interruptions for a period of 2 to 3 hours with cold wet feet must have a deteriorating effect on the majority, and a disastrous effect with regard to some. The wearing of clogs would do much to lessen the evils of wet feet, and should be encouraged.

The amount and kind of exercise that can be safely taken by a person suffering from heart disease is a matter that requires careful consideration in each case. It has to be remembered that exercise, if it is doing no harm, is probably doing much good. The teacher receives directions from the Medical Inspectors in each case, and subject to these directions, probably the safest rule is that an exercise that produces breathlessness is harmful, whereas exercise which does not produce breathlessness or undue fatigue or interfere with the appetite is good, and should be encouraged.

A pamphlet pointing out the early symptoms of rheumatism and the precautions that should be taken is under consideration.

GOITRE.—The cases of goitre are stated as in previous reports. The inferences that can be drawn are not obvious.

The attendance districts are here arranged according to the amount of goitre :—

Attendance Districts.	Percentage of Cases.			Attendance Districts.	Percentage of Cases.		
	Marked	Slight	Total		Marked	Slight	Total
Pontesbury	1.6	12.2	13.8	Albington	1.0	8.1	9.1
Drayton	2.1	11.4	13.5	Bridgnorth	.1	6.5	6.6
Ellesmere	1.3	11.4	12.6	Cleobury Mortimer ..	.7	5.3	6.1
Newport	1.6	11.0	12.6	Condover	1.1	4.8	5.9
Wem	1.9	10.4	12.2	Ludlow	.7	4.8	5.5
Shifnal	1.3	10.6	11.9	Bishop's Castle ..	1.2	4.2	5.4
Whitchurch ..	1.5	9.0	10.6	Wellington	1.0	3.9	4.9
Oswestry	.8	9.3	10.1	Church Stretton ..	.0	3.2	3.2

This table shows that enlargement of the thyroid gland exists amongst school children to a greater or lesser degree all over the County.

CASES OF GOITRE IN TOWN AND COUNTRY SCHOOLS EXPRESSED AS PERCENTAGES.

Attendance Districts.	TOWN SCHOOLS.			COUNTRY SCHOOLS.		
	Marked.	Slight.	Total.	Marked.	Slight.	Total.
Bridgnorth	.0	3.3	3.3	.2	7.9	8.1
Drayton	1.8	9.6	11.4	4.1	23.3	27.5
Ellesmere	1.1	8.1	9.2	1.4	12.1	13.5
Ludlow	.4	4.4	4.8	.7	5.1	5.8
Newport	.9	6.8	7.7	1.9	12.6	14.5
Oswestry	.6	7.0	7.6	.9	10.4	11.2
Shifnal	.8	13.6	14.5	1.4	9.6	11.0
Wellington	.7	4.5	5.1	1.2	3.4	4.6
Wem	1.0	9.0	10.0	2.3	11.2	13.5
Whitchurch	.0	6.5	6.5	2.3	10.3	12.6
These 10 Districts ..	.7	6.4	7.2	1.3	8.7	10.1

The amount of well marked goitre in country schools was again twice that in the town schools.

DEFORMITIES. *Rickets*.—Amongst 7,385 children examined, only 7 were found with marked deformities due to rickets and 24 with slight deformities, or a total of 31 (.4 per cent.) This is an exceedingly small proportion, and indicates that rickets is not at all prevalent in this County.

Lateral Curvature of the Spine was present in 28 children, or .38 per cent. The importance of this condition is due to the nature of its causation and the possibility of prevention. It is frequently due to malpositions at school arising from badly constructed desks, unsuitable lighting of the rooms or bad habits going uncorrected. It is undoubtedly one of those conditions that can be cured or greatly lessened by suitable exercises. The teacher can do much to prevent this deformity by preventing the children assuming bad positions in school.

Cases of scoliosis are being dealt with by Abbott's method in considerable numbers at the Baschurch Home.

Deformities due to Infantile Paralysis.—The total number of these deformities noticed was 14. This is equal to a rate of 7 per annum, and might be considered as representing approximately the number attacked each year with poliomyelitis and recovering with deformities. It will be interesting to see how these figures compare as time goes on with the cases notified.

RINGWORM.—Of the children systematically examined 74 or 1.0 per cent. were found to be suffering from ringworm of the scalp, and the percentages in ages and sexes were :—Boys age 5, 1.3 ; girls age 5, 1.6 ; boys age 12, .4 ; girls age 12, .9. On the assumption that this percentage is applicable to the children as a whole, there would be at any one time about 352 cases of ringworm in the County, including Wenlock.

Amongst the extra cases and those under 5 years there were 57 cases of ringworm.

In addition, 272 cases have been notified by the teachers. These were not usually based on medical opinion.

No less than 563 examinations of hairs for ringworm spores have been made by the medical inspectors. Examinations referring to 272 cases were positive, whilst with the exception of three doubtful cases, the remainder were negative.

To combat this condition, all that is possible with our present machinery, is to exclude all cases found by the medical inspectors at their periodic visits (frequently at intervals of 12 months) and to exclude all cases either suspected by the teachers or certified by a medical man. The parents are urged to get treatment and the attendance officers instructed to keep the cases under their observation. The cases are re-admitted to school on medical certificate, but notwithstanding the arrangements referred to below, usually without any microscopical examination of hairs. In consequence a considerable proportion of the children are re-admitted whilst still infectious.

It is obvious that such a procedure fails in certain most important particulars and can have comparatively little effect in controlling its spread.

Children are often in school for long periods suffering from ringworm without the disease being discovered ; when excluded they frequently do not get medical treatment, and where nurses are not available the treatment prescribed is rarely properly carried out ; and when re-admitted as cured they are frequently found to be still suffering.

Dr. Boyes says :—" Whether ringworm occurring in a school takes an epidemic form and seriously interferes with school attendance for years, or is limited in extent, depends largely on the teacher. If he impresses on the parents the necessity for thorough treatment from the first, and keeps watch on the children after their return to school for signs of recurrence of the disease as well as for new cases, it is not likely to be wide spread. It must be remembered that in many cases the chief anxiety of the parents is to get the child back to school as soon as possible, as they are often not fully convinced of the contagious and obstinate nature of the disease, and the teacher is naturally also apt to be influenced by the same desire."

She also quotes an instance of two strictly comparable schools, into which ringworm was introduced about four years ago. In the school where satisfactory precautions were not taken, the prevalence of ringworm since has been about three times as great as in the other.

For the more efficient control of ringworm three conditions are necessary :—

- (1) More efficient means for discovering the cases. This would be met by the provision of school nurses.
- (2) More efficient means of diagnosis. This has been met by an arrangement with the Birmingham University, by means of which medical practitioners can submit hairs for examination;
- (3) The provision of X-ray treatment.

In order to give medical practitioners facilities for arriving at an accurate diagnosis in doubtful cases, and determining with certainty whether the cases are cured or not, arrangements were made in the year 1913 with Birmingham University by which any practitioner can submit hairs for examination. Hairs were submitted in 145 cases, with 67 positive results and 78 negative results.

The School Medical Officer has been instructed to report upon the provision of X-ray treatment.

If this treatment is undertaken, children under school age as well as those of school age, must be dealt with, otherwise one would be continually getting re-infections at home after cure.

The interference with the education of individual children that is caused by ringworm of an obstinate character is most serious. Below is given a list of children who have suffered from ringworm for more than two years and who were still suffering, when last inspected. It will be noticed that in five of the cases the disease has lasted five years.

RINGWORM CASES.

Initials of Child.	Dates of first and last Examinations.		Duration.	
	First.	Last.	Years.	Months.
E.W.	15th January, 1910.	17th April, 1915.	5	3
G.B.	20th February, 1909.	27th May, 1914.	5	3
H.W.	11th December, 1909.	27th February, 1915.	5	2
G.O.B.	30th December, 1909.	6th February, 1915.	5	1
J.M.M.	14th April, 1909.	15th May, 1914.	5	1
B.H.	3rd March, 1910.	5th December, 1914.	4	9
M.H.	18th June, 1910.	12th December, 1914.	4	5
G.E.W.	19th March, 1910.	30th July, 1914.	4	4
M.I.P.	26th November, 1910.	20th February, 1915.	4	2
R.E.C.	7th May, 1910.	31st July, 1914.	4	2
M.J.	4th May, 1910.	4th July, 1914.	4	2
C.J.	4th May, 1910.	4th July, 1914.	4	2
G.C.	15th January, 1910.	6th April, 1914.	4	2
N.D.	30th March, 1911.	24th April, 1915.	4	0
L.W.	20th April, 1911.	24th April, 1915.	4	0
W.G.	25th February, 1911.	6th March, 1915.	4	0
G.C.	27th March, 1911.	6th March, 1915.	3	11
C.J.	17th December, 1910.	5th December, 1914.	3	11
D.P.	25th March, 1911.	20th February, 1915.	3	10
J.T.W.	15th October, 1910.	30th July, 1914.	3	9

Initials of Child.	Dates of first and last Examination.		Duration.	
	First.	Last.	Years.	Months.
D.C.J. ..	10th October, 1910.	11th July, 1914.	3	9
M.J. ..	10th October, 1910.	11th July, 1914.	3	9
W.B. ..	7th April, 1911.	26th September, 1914.	3	5
J.H. ..	28th December, 1911.	27th February, 1915.	3	2
D.P. ..	22nd July, 1911.	26th September, 1914.	3	2
A.M. ..	23rd February, 1912.	29th March, 1915.	3	1
H.J. ..	24th May, 1911.	11th July, 1914.	3	1
I.P. ..	24th May, 1911.	11th July, 1914.	3	1
N.J. ..	24th May, 1911.	4th July, 1914.	3	1
D.E. ..	28th December, 1911.	21st February, 1914.	3	1
J.P. ..	27th April, 1912.	24th April, 1915.	3	0
K.A. ..	23rd March, 1912.	17th April, 1915.	3	0
E.B. ..	16th March, 1912.	13th March, 1915.	3	0
E.B. ..	11th March, 1912.	9th March, 1915.	3	0
A.M.D. ..	27th May, 1911.	20th June, 1914.	3	0
B.M.S. ..	13th May, 1911.	23rd May, 1914.	3	0
A.E. ..	11th May, 1911.	9th May, 1914.	3	0
M.D. ..	6th May, 1912.	24th April, 1915.	2	11
M.B. ..	11th March, 1912.	6th March, 1915.	2	11
L.B. ..	11th December, 1911.	14th November, 1914.	2	11
W.E. ..	29th July, 1911.	25th July, 1914.	2	11
E.S. ..	6th May, 1912.	1st April, 1915.	2	10
A.D. ..	30th March, 1912.	6th February, 1915.	2	10
G.D. ..	30th March, 1912.	6th February, 1915.	2	10
F.H. ..	19th December, 1911.	14th November, 1914.	2	10
N.J. ..	21st December, 1912.	27th February, 1915.	2	2

The practice of allowing children with ringworm to attend school with certain precautions is now followed in many counties.

The course is probably the proper one, unless the Education Authority is prepared to provide such facilities for X-ray treatment that all parents may avail themselves of it.

IMPETIGO.—Eighty-four cases of impetigo were found amongst the children systematically examined; 7 were found amongst the children under 5 years of age and 31 were brought under the notice of the Inspectors by the teachers. Besides these, 284 cases have been notified to me by the teachers. In these cases the diagnosis is usually on the authority of the teacher.

This condition is very amenable to treatment, and with suitable measures an outbreak should rarely last more than two or three weeks. On the other hand, if neglected, a school may be seriously affected over a long period.

In all cases that come to our knowledge full instructions are given to both parents and teachers.

SCABIES.—Twenty-four cases of scabies were found in the routine examinations, and 15 were brought under the notice of the Medical Inspectors by the teachers. No case was found amongst the children examined under 5 years of age.

It has been found difficult or almost impossible to induce parents to get medical treatment for this condition, and consequently many children were imperfectly treated or went untreated. On this account definite printed instructions are now issued for treatment. It was possible to do so, as the treatment is of a routine character, needing little or no variation. In order to get the full benefit of the treatment, there should be some power enabling Sanitary Authorities to enforce the treatment of other affected members of the family.

VERMINOUS HEADS.—The following table shows the percentages of verminous heads amongst boys and girls at the two inspection ages in the town and country schools :—

PERCENTAGE OF CHILDREN WITH VERMINOUS HEADS.

				Town Schools.	Country Schools.	Total.
Age 12 and over—Boys	..	..		6.5	3.4	4.2
„ „ „ Girls	..	..		36.1	34.5	34.9
Age 5 Boys	..	..		7.7	6.3	6.6
„ Girls	..	..		33.1	29.2	30.2
Total	..	..		21.3	18.3	19.0

These figures do not show any improvement on the previous year, although there is considerable evidence to show that the standard of cleanliness is higher, and that the very bad verminous conditions are rarer.

It will be noticed that the percentage of verminous heads was much higher amongst girls than boys, and somewhat higher amongst the older than the younger girls.

One can only repeat what has been said in previous reports, *that it is quite impossible to deal effectively with this condition without the help of nurses.*

For the last three or four months of the year examinations of the children's heads have been made by the village nurses in schools.

Approximately 11,722 children were examined and 2,512 or 21.4 per cent. were found verminous.

It is impossible to speak with any authority yet of the improvement effected by this inspection. In certain schools, however, there is evidence that a very marked improvement has already been brought about, and there can be no doubt that the inspection will shortly result in a much higher standard of cleanliness.

No prosecutions have so far been taken, but it is felt that the time is arriving when prosecutions will be necessary in the bad cases in order to obtain the full benefit from this work.

The following instructions have been issued to the nurses :—

VERMINOUS HEADS AND BODIES.

The nurse to examine the heads of all the children in a school as soon after the commencement of the School Term as possible.

A list of dirty heads (lice or nits) to be made in the book provided and left in the head teacher's custody. The nurse to give to each child with a dirty head a *white card* containing directions for cleansing; the card to be put into a closed envelope and addressed to the parent.

The nurse to visit the school again at an interval of about a fortnight, to examine the children previously found dirty.

The nurse to advise the teacher to separate the children still found dirty, and to give *blue cards* to these children in closed envelopes as before.

The nurse to visit the school again at an interval of about another week and to examine the children dirty at the last visit.

The nurse to forward to the School Medical Officer on Form I., the names and particulars of children still found verminous.

These children will be excluded from school by the School Medical Officer for a week for the purpose of thorough cleansing, and should be seen by the nurse as soon as possible after their return.

If any child is found verminous on return to school, the nurse to again forward the name and particulars to the School Medical Officer, on Form II.

The number of children examined, the number found verminous, and the names and addresses of those found verminous, with the dates and results of re-inspection, should be entered in the book provided for the purpose. The nurse to enter in each case whether lice or nits are present. (L.—Lice: N.—Nits: at re-inspection, O.—Clean).

Children absent on inspection should be examined at the next inspection.

Where it appears desirable for the purpose of giving special instructions, the homes of the children should be visited. This should be done in most of the obstinate cases.

The Local Education Authority has recommended that the girls' hair should be plaited back, and the nurse should use her influence to bring this about.

Children who appear to be dirty and neglected should be examined for body lice, and where lice are present, should be reported to the head teacher for exclusion until clean. These cases should be kept under observation and instructions given.

MENTALLY DEFECTIVE CHILDREN.—In the routine inspection 11 or .15 per cent. of the children were found to be mentally defective, and the attention of the inspectors was called to 7 other mentally defective children by the teachers.

NUTRITION.

	Children examined.	Excellent.	Normal.	Below Normal.	Bad.
Boys 12 years of age and over ..	1764	94	1484	184	2
Girls 12 years of age and over ..	1811	141	1480	190	—
Boys 5 years of age	1913	133	1597	179	4
Girls 5 years of age	1897	112	1577	206	2
Total	7385	480	6138	759	8

The most important factor to note is that in 759 children, or 10.2 per cent., the nutrition was below normal. In a large proportion of these cases the parents were communicated with and advice given. Where necessary the attention of the Voluntary Helpers was called to them, and if there was evidence of culpable negligence on the part of the parents, information was sent to the Inspectors of the National Society for the Prevention of Cruelty to Children.

In those schools where there are nurses, these cases can be further inquired into, so as to determine to what extent the nutrition is due to insufficient food, and to what extent it is due to improper food or other unsatisfactory home conditions. The former is principally an economic question, whereas the latter arises mostly from ignorance, carelessness or wilful neglect, and must be dealt with in an entirely different manner.

In previous reports the bad effects produced by walking too great distances to school, and by the insufficiency and unsuitability of the mid-day meal, have been discussed.

The first essential, is that a teacher should always be present at these meals. In this way he would get most valuable knowledge with regard to the nutrition of the children, which would be of the greatest use in connection with any remedial measures that might be considered necessary.

The advantages connected with the attendance of a teacher at this meal may be summarised:—

- (1) He would soon get a better knowledge of the average requirements of healthy children.
- (2) He would get a first hand knowledge as to which children were insufficiently or improperly fed.
- (3) He could judiciously advise the parents where food was insufficient or unsuitable.
- (4) He could supply the School Medical Officer with definite information of much value.
- (5) He could supervise the habits and manners of the children during meal times.
- (6) He could see that children did not bolt their food and wash it down with liquid.
- (7) He could see that the food, so far as its character allowed, was so eaten as to leave the mouth and teeth clean.
- (8) He could discourage the habit of drinking during meal times ; and the habit of drinking tea or alcoholic drinks.

It is quite obvious that supervision by an intelligent teacher, who is willing to give this matter some thought, if followed up in the manner suggested, would have a very beneficial effect.

It would of necessity add somewhat to the work of the teacher, but on the other hand it is educational work of the first importance. It does not admit of doubt that children of ages from 5—13 should not be permitted to have their principal meal without any supervision. At present, in a large proportion of the schools, the meal is eaten under most unsatisfactory conditions.

TABLE IV.—TREATMENT OF DEFECTS OF CHILDREN DURING 1914.

CONDITION.	No. of defects found for which Treatment was considered necessary.			No. of defects for which no report is available	No. of defects treated.	Results of Treatment.			Doctor consulted, but result not known.	No. of defects not treated.	Percentage of defects treated
	From previous year.	New.	Total.			Re-medied.	Im-proved.	Un-changed			
Clothing	..	895	895	895	..	..	..	..	..	..	..
Footgear	..	812	812	812	..	..	..	..	..	..	..
*Cleanliness of Head ..	..	3920	3920	2261	1659	1361	182	116	..	..	..
Cleanliness of Body ..	..	688	688	688	..	..	..	..	..	..	..
Nutrition	..	8	8	8	..	..	..	..	..	..	..
Nose and Throat ..	585	440	1025	103	316	64	53	49	150	606	30.8
External Eye Disease ..	13	8	21	3	10	6	3	..	1	8	47.6
Ear Disease	62	56	118	13	58	10	22	5	21	47	49.0
Teeth	44	76	120	23	36	11	10	5	10	61	3.0
Heart and Circulation ..	22	35	57	10	34	..	13	2	19	13	54.3
Lungs	14	11	25	3	14	..	5	6	3	8	56.0
Nervous System	..	..	..	..	..	..	..	..	..	..	..
Skin	185	124	309	55	209	119	17	11	62	45	67.6
Rickets	..	..	..	..	..	..	..	..	..	..	..
Deformities	6	11	17	1	5	3	..	..	2	11	29.4
Tuberculosis—Non-pulmonary ..	7	4	11	1	8	1	1	1	5	2	72.7
Speech	..	..	..	..	..	..	..	..	..	..	..
Mental Condition	..	..	..	..	..	..	..	..	..	..	..
Vision and Squint ..	755	1002	1757	182	678	47	93	49	489	897	38.5
Hearing	11	12	23	10	9	4	1	1	3	4	39.1
Miscellaneous	64	124	188	21	101	24	34	8	35	66	53.7
Total	1768	1903	3671	425	1478	289	252	137	800	1768	40.3

* These figures are only approximate.

The County Council subscribed last year to the Eye, Ear and Throat Hospital for Shropshire and North Wales, for 232 letters of recommendation, the sum of £55.

With this exception, the Education Authority did not help financially in the treatment of school children.

The cost of medical treatment including railway fares, spectacles, etc., has been defrayed—

- (1) by the parents,
- (2) by local charitable persons or out of local funds available, or
- (3) by Boards of Guardians.

In cases where the parents are unable to afford treatment and cannot get charitable help, one is compelled to suggest application to the Guardians. It cannot be considered that this is satisfactory from any point of view. Parents, who have never had Poor-law relief, do not care to apply to the Guardians for the treatment of defects in their children, particularly if the defects appear to them to be trivial. The result in many cases is, that the parents deny that any defect exists and refuse to do anything. Nor have the Boards of Guardians any special facilities for the provision of treatment for the defects of eye, ear and throat, which form the large majority of the defects amongst school children requiring treatment.

Where there are no nurses the system of following up cases in order to obtain treatment is now as follows :—

The parents of defective children, if present, are informed of the defect at the time of inspection, and they are given instructions with regard to obtaining medical treatment and other matters. If they are not present they receive written instructions within a few days.

A list of all defective children is left with the head teacher, who endeavours to obtain treatment, and reports the result within two months to the School Medical Officer.

The names of those children who have not obtained treatment are then forwarded to the Voluntary Helpers in connection with the school. The Voluntary Helpers endeavour to obtain treatment, and in many cases give very material assistance. In due course they report to the School Medical Officer.

These particulars are entered on special treatment cards, and given to the Medical Inspectors when they next visit the school. The cards are not 'closed' until the children have received adequate medical treatment or have recovered so as not to require treatment or have left school. Until this stage is arrived at, the children are seen at every visit of the Medical Inspectors.

Infectious skin conditions such as impetigo, scabies, and ringworm, are reported to the Attendance Officers so that they may insist upon proper treatment. In the case of impetigo and scabies, printed instructions are given for treatment.

In those schools where there are nurses, this procedure is to some extent modified. The nurse receives details of all the defective children. If the parent is not present a written notice is sent from the school and the nurse visits the home and explains the case to the parent as soon after as possible. The nurse visits the homes of all the children found defective and keeps the children under supervision until they have had satisfactory medical treatment. In doing this, she works in co-operation with the Voluntary Helpers.

A complete statement of the results of the nursing scheme in bringing about medical treatment cannot yet be made, but the effect in certain schools has undoubtedly been excellent.

The School Medical Officer has been instructed to report upon the establishment of treatment centres at Oswestry, Market Drayton, Bridgnorth, and Ludlow. The establishment of centres at these and other similar small towns in the County would undoubtedly largely increase the proportion of children treated. In last year's report the advantages of such an arrangement were briefly stated :—

(1) It would save the expense and loss of time of a journey to Shrewsbury—in most cases a double journey—of the patient and person in charge.

(2) In those cases where several attendances are desirable, it would make this possible without the present prohibitive expense.

(3) One of the parents could attend personally in almost every instance and receive direct instructions.

(4) The nurse responsible for following up the case could attend, note exactly the conditions found and the further treatment necessary. It would be part of her duty to see that this was satisfactorily carried out.

(5) It would be possible with this arrangement to get a very much larger proportion of the defective children dealt with, and dealt with in a much more satisfactory manner.

AMOUNT OF TREATMENT.—In accordance with the suggestions contained in the report of the Chief Medical Officer of the Board of Education, the statement with regard to the treatment obtained during the year has been completely re-modelled.

In previous years the analysis showed to what extent the defects found in each year since the commencement of Medical Inspection, had received treatment.

The present statement deals with the treatment obtained in the year and has no reference to the year in which the defect was discovered.

Information available from last year's inspection does not permit of a complete statement with regard to all the matters mentioned in the table, but steps are being taken to obtain the information for the next year's report.

It is obvious that where the schools are only inspected once a year, no accurate report can be made as to the result of the treatment of the "new" cases. Where there are no nurses, no report can be made, and only in a portion of the cases can the report of the nurse be accepted as showing the result of treatment.

In a large number of the cases, it has consequently been necessary to report the *result* of treatment as "unknown," although one knows that the best available treatment has been obtained. For example, out of the 489 cases of defect of vision classed "result of treatment unknown," no less than 333 had been examined by an oculist, and glasses obtained.

Treatment received at the Eye, Ear and Throat Hospital for Shropshire and Wales, Shrewsbury, during the year 1914, on Recommendations supplied by the County Council.—Two hundred and thirty-two letters of recommendation were supplied. Before a recommendation was supplied the School Medical Officer certified that the case was a suitable one for treatment at the hospital, and the Managers of the School, that the patients were unable to afford treatment.

Two hundred and twenty-four of the 232 letters of recommendation were used.

The results of treatment, so far as re-inspection has gone, are very satisfactory.

Of the 224 children who have had treatment, 166 were for eye defects, 52 for throat defects, 4 for ear defects, and 2 for defects of eyes and throat.

Eye Defects.—Sixty-nine of the 166 children have been re-inspected :—

- 64 have obtained glasses with satisfactory results.
- 5 had treatment—glasses not required.

Ninety-seven have not yet been re-inspected, but information shows that :—

- 65 have obtained glasses.
- 16 have had glasses prescribed but we have no further information.
- 2 other treatment than glasses prescribed.
- 14 no information received,

Throat Defects.—Eighteen of the 52 children have been re-inspected. All of these have been operated on with satisfactory results. Of the 34 not yet re-inspected, information from other sources shows that 33 have been operated on.

The four children with ear defects have all received treatment, in three cases with improvement.

The two children with defects of eyes and throat have been operated on, and glasses have been obtained.

TREATMENT OF DEFECTS OF TEETH.—As with very few exceptions all the children inspected required treatment for their teeth, and as there is at present no provision for such treatment, it was only practicable to suggest treatment in a few of the more urgent cases.

Action taken to detect and prevent Infectious Diseases including Reference to Action under Articles 45 (b), 53 (b), and 57 of the Code of 1909.

The scheme for the notification of infectious disease by the head teachers to the District Medical Officers of Health and the School Medical Officer has been in operation throughout the year, and has worked most satisfactorily.

Arrangements have been made so that all Sanitary Authorities now notify the schools on the outbreak of any notifiable infectious disease, and also notify when the house has been disinfected.

Where it appears that infectious disease, particularly scarlet fever and diphtheria, is spread by means of school agency, and where arrangements will allow, an investigation is made with the object of discovering the cause, and limiting the infection. Several investigations of this kind were made with regard to diphtheria, and numerous swabs taken.

In the case of diphtheria the children are not re-admitted to school until their throats have been declared free from diphtheria bacilli.

With an adequate system of school nursing it will be possible to take more efficient measures with regard to the prevention of the spread of infectious disease in schools. Particularly in respect of diphtheria, investigation can be made and precautions taken with a completeness that is quite impossible without nurses.

Some of the nurses have already been used for the purpose of these investigations.

Special measures are taken with regard to diphtheria and measles.

If there is diphtheria in a school, cases of sore throat, however slight, are excluded, and the following letter is sent to the mother :—

If there is diphtheria in the School, this letter is to be sent to all homes where there are children excluded on account of sore throat; the letter may be given to the child excluded.

MADAM,

Name of Child _____

SORE THROAT.

Your child is excluded on account of sore throat, and as there has been diphtheria in the school it is most important that you should keep the child by itself and **call in a doctor without delay.**

If any of the other children have a sore throat, a croupy cough, swelling in the neck, or discharge from the nose, they should be kept by themselves and a doctor should see them also.

Very slight cases of sore throat often prove to be diphtheria and cause large outbreaks before they are detected. By acting on this advice you will be doing what you can to prevent such an occurrence.

Yours sincerely,

JAMES WHEATLEY,
*School Medical Officer and County Medical
Officer of Health.*

N.B.—Please show this letter to your doctor.

If the school is closed on account of diphtheria, the following letter is sent to each household :—

To be given to one child in each household whenever a school is closed on account of diphtheria.

MADAM,

The School has been closed on account of an outbreak of diphtheria.

Diphtheria is a very dangerous infectious disease to which children especially are liable. It is spread entirely by discharges from the throat and nose. It is mostly spread by slight cases attending school. These cases may have little or no soreness of the throat and may not feel ill, but yet they are dangerously infectious. Usually there is a redness of the inside of the throat, and often dirty white spots or patches.

If any of your children get a sore throat, a croupy cough, a heavy cold with discharge from the nose, or swollen glands under the jaws, they should be put by themselves and a doctor sent for at once. Do not delay until the child is seriously ill.

Early treatment with Diphtheria Antitoxin is of the utmost importance and will almost always prevent a fatal result.

No member of your household should visit a house where there is diphtheria, nor should any of your children play with children from such a house.

The house should be kept strictly clean, the drains kept well flushed and no accumulations of refuse allowed.

Nuisances should be reported to the Sanitary Inspector.

Yours sincerely,

JAMES WHEATLEY,
*School Medical Officer and County
Medical Officer of Health.*

By these means one hopes to get earlier diagnosis and treatment and better isolation in the early stages.

When measles breaks out in a school the following letter is sent to the affected house or houses :—

MEASLES CARD A.

MADAM,

Your child has been reported to me as suffering from measles.

This disease is often fatal to young children unless they are carefully looked after, and it is always better to call in a doctor.

The child should be kept **in bed** and away from other children until all symptoms have completely disappeared, and should be kept inside the house in a well ventilated room but away from draughts for at least a week after getting up. Exposure to cold or draughts is very liable to cause bronchitis or inflammation of the lungs.

Yours sincerely,

JAMES WHEATLEY, M.D.,
School Medical Officer.

If a school is closed on account of measles, the following letter is sent to each household from which children attend the school :—

MEASLES CARD B.

MADAM,

The school has been closed on account of an outbreak of measles.

It is probable that a considerable number of fresh cases of measles will occur amongst the school children during the next 12 days.

If your child should show any signs of running from the eyes or nose, it should be kept at home and away from other children until quite well.

Measles is often fatal to young children unless they are carefully looked after, and it is always better to call in a doctor.

A child suffering from measles should be kept **in bed** and away from other children until all symptoms have completely disappeared, and should be kept inside the house in a well ventilated room but away from draughts for at least a week after getting up. Exposure to cold or draughts is very liable to cause bronchitis or inflammation of the lungs.

Yours sincerely,

JAMES WHEATLEY, M.D.,
School Medical Officer.

By calling attention to the serious character of the disease and the necessity for care, particularly in the early stages, it is hoped that complications will be lessened. It is possible, moreover, that a certain amount of infection may be prevented.

It is particularly important that information of this description should be given to the parents just at the time that it may be applied. By the method here described, this object appears to be attained.

The two following paragraphs appeared in the report for 1913. No action on these lines is possible at present.

"It appears probable that the greatest means in the prevention of the spread of the ordinary infectious diseases, will in the future be by immediate treatment of every sore throat by means of disinfecting applications without waiting for the characteristic symptoms of the disease to develop, and by a similar treatment applied to contacts in certain instances. Such a means of prevention of spread of disease could only be carried out where there is a good staff of nurses and when it is recognised that such a course comes within the legitimate scope of preventive medicine.

" Its success would depend upon the correctness of certain suppositions (1) that most of the common infectious diseases commence in the throat and in the initial stages are localised there ; (2) that most of these diseases are infectious in the early stages before an absolute diagnosis can be made ; (3) that by treatment at this stage not only can the danger of infection be lessened but probably the gravity of the case also ; (4) that at the time of infection and for a varying period afterwards, the infective organism can be completely destroyed and the disease prevented. The practicability of such a scheme would depend upon the ease or otherwise with which infective matter deposited on the throat could be rendered innocuous. The presumption is that such matter is usually deposited in an exposed position, where it could be easily reached by a disinfecting solution, and not deep in a recess."

Under Article 53 (b) 626 children have been excluded from school for infectious disease :—

127	on account of	impetigo.
265	"	ringworm of scalp.
13	"	ringworm of body.
43	"	scabies.
92	"	verminous conditions.
4	"	pulmonary tuberculosis.
2	"	measles.
16	"	chicken-pox.
3	"	mumps.
7	"	anaemia.
3	"	tonsillitis.
51	"	various causes.

The following is a summary of the cases of infectious disease notified by the head teachers during the years 1910, 1911, 1912, 1913, and 1914 :—

	1910	1911	1912	1913	1914		1910	1911	1912	1913	1914
Measles	1025	1331	583	1075	1685	Mumps	477	710	188	1070	720
Whooping Cough	450	782	899	515	1137	Ringworm	549	449	349	356	272
Scarlet Fever	276	214	186	249	187	Impetigo	334	263	255	256	284
Diphtheria	96	82	44	57	156	Scabies	79	29	71	61	45
Chicken-pox	374	358	603	433	655	Other diseases	333	152	402	699	1215

School closure has been effected entirely under Article 45 by the School Medical Officer, either on information obtained direct from the school, or on the advice of the District Medical Officer of Health. Under this Article 143 schools were closed for the following reasons :— 55 for measles, 29 for whooping cough, 13 for scarlet fever, 8 for diphtheria, 8 for chicken-pox, 6 for mumps, 21 for influenza, and 3 for other causes.

**Review of the Methods adopted and the Adequacy of such Methods
for dealing with Blind, Deaf, Mentally or Physically Defective
and Epileptic Children under the Acts of 1893 and 1899.**

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

			Boys.	Girls.	Total.
Blind (including partially blind).		Attending Public Elementary Schools ..	2	3	5
		Attending certified schools for the Blind ..	6	1	7
		Not at school	4	2	6
Deaf and Dumb (including partially Deaf).		Attending Public Elementary Schools ..	10	6	16
		Attending certified schools for the Deaf ..	7	11	18
		Not at school	5	4	9
Mentally Deficient.	Feeble Minded.	Attending Public Elementary Schools ..	55	40	95
		Attending Certified Schools for Mentally Defective Children	5	2	7
		Notified to the Local (Control) Authority during the year	2	1	3
		Not at school	19	21	40
	Imbeciles.	At school	—	—	—
		Not at school	2	1	3
		Idiots.		—	—
Epileptics.		Attending Public Elementary Schools ..	18	10	28
		Attending Certified Schools for Epileptics ..	2	2	4
		Not at school	12	14	26

MENTALLY DEFECTIVE CHILDREN.—During the year 10 mentally defective children have been specially examined by the School Medical Officer, with the result that 4 were found capable of receiving benefit from instruction in a special school; and 6 were found to be defective and incapable of being trained in a special school. Of the four suitable cases, one has been admitted to Sandlebridge, and in the other three cases the parents decline to allow the children to be sent to a special school.

EPILEPTIC CHILDREN.—One case was reported but the parent was not willing to allow the child to go to a special school.

BLIND CHILDREN.—No cases were reported during the year.

DEAF AND DUMB CHILDREN.—One case was reported but the parent was not willing to allow the child to go to a special school.

CRIPPLED CHILDREN.—No cases were reported during the year.

Teaching of Hygiene, Physical Exercises, Open-Air Schools.

INSTRUCTION IN PERSONAL HYGIENE.—THE METHODS AND RESULTS OF INSTRUCTION IN PERSONAL HYGIENE AND TEMPERANCE.—Inquiry by the Medical Inspectors shows that lessons on hygiene and temperance or in the general laws of health, are given in most of the schools to the older scholars, and also practical talks with regard to the prevention of dental caries.

The special difficulty is the lack of training in this matter of many of the teachers, and in consequence the teaching is often apt to develop into formal lessons without any practical bearing upon everyday life. It is hoped that this may be remedied to some extent by means of "health talks" in the schools given by the health visitors, when appointed, and by lectures to the teachers by the Medical Inspectors when the size of the staff allows.

Although occasional talks on health matters by outside persons are of some value, the real practical training of the children must depend upon the teacher. It will well repay teachers therefore if they give the question of health teaching careful consideration.

Cleanliness.—Cleanliness can best be inculcated by a daily inspection of the children—noting the condition of hands, nails, faces, clothing and boots. A few judicious remarks on these matters will often bring about a spirit of emulation with marked improvement. The head should receive careful attention, and a feeling of pride in personal appearance and cleanliness should be created and worked upon. A teacher, by persistent and judicious management, can get the hair of girls tied back in almost every instance.

Fresh Air.—The ordinary routine of school life affords ample opportunity for training the children in methods of ventilation (see memo., page 7), and impressing upon them the importance of fresh air. The teaching should be made to apply to home life, and in particular the children should be impressed with the importance of sleeping with open windows. By frequent questioning on this point and counting the number so sleeping, much good would result.

Food.—Where the teachers understand the values of food and what is necessary for a growing child, much good would result from supervision of the mid-day meal (see page 40).

House Management—Cookery—Care of Infant—are matters that should be taught in every school to the older girls.

Schools for Mothers.—It is hoped that these schools will be started in various parts of the County as soon as the nursing scheme is in order. Unfortunately the complete scheme is not yet in working order, but it is possible that in some districts schools for mothers might be started with the nursing already available.

PHYSICAL EXERCISES.—The Education Committee has made a recommendation that, in all new time tables, fifteen to twenty minutes of each day be set apart for physical exercises.

The principal difficulty is the imperfect training of the majority of the teachers.

The efforts that the County Council are making to remedy this defect by sending teachers for a summer course were detailed in last year's report.

During the winter of 1914—15, three separate classes have been held in Shrewsbury, and also classes at Coalbrookdale, and Bishop's Castle.

The average attendance at these classes was Shrewsbury 18, 25 and 28; Coalbrookdale 48; and Bishop's Castle 10.

It has been decided to send six teachers this summer to the Summer Vacation Course of the Education Handwork Association held at Scarborough.

The primary object in sending these teachers, is to train them, so that they can conduct classes in physical exercises for the teachers of the County. Apart from this, the expense is justified if it enables them to carry out the physical training in their own schools efficiently.

The overwhelming importance of this matter is now universally recognised, and the Committee might profitably consider whether the steps that are being taken are likely to bring about satisfactory training of the teachers within a reasonable length of time, or whether other steps are necessary.

In order to obtain a correct view of the value of physical exercises it is necessary that one should understand (1) how the necessity for special physical training has arisen, and (2) the objects towards which physical training should be directed.

It is probably a fact that in the uncivilised state no special measures are required to produce a good physical development. In the absence of disease or congenital defects, the ordinary activities of life unaccompanied by artificial restraints are sufficient to produce a good physical development and prevent the production of deformities. In civilised communities restricted opportunities for physical activities, the restriction imposed by the early mental education of the young, the growth of indoor occupations, and the use of unsuitable clothing, all tend to the impairment of physical development. The object of the exercises and teaching is to bring about the normal development interfered with by these conditions, and to prevent and cure abnormalities and deformities.

These principles are recognised and acted upon except in one most important particular. It is, I think, safe to say that there is no set of muscles that are, at the present time, so universally under-exercised as the muscles of mastication; and again that the absence of this exercise of the jaws produces directly through interference with the proper development of the jaws and of masticatory muscles and indirectly through the causation of dental caries and oral sepsis, a vast amount of illness and inefficiency.

To what extent this absence of natural exercise of the jaws can be compensated for by physical exercises in schools and the practicability of such a scheme of exercises are matters that may with advantage receive the consideration of the Education Authority. Two definite physiological objections may be raised to any such proposal—(1) that the proper method of giving the requisite exercise to the jaws is by the use of food requiring mastication and (2) that mastication being a means of preparing food for the stomach, and of preparing the stomach for food, should only take place at meal times. These are perfectly valid objections, but they do not, to my mind, outweigh the great advantages that would accrue from masticatory exercises if accompanied by appropriate physiological teaching. In this way it is probable that not only would a considerable improvement be made in the development of the jaws and teeth, but the natural solution of this most serious problem would be accelerated.

OPEN AIR SCHOOLS.—Sir George Newman says that schemes for open air treatment fall into three groups:—

(1) Arrangements for teaching normal or delicate children under open air conditions with little interference with the ordinary curriculum.

(2) Day Open Air Schools—in these the curriculum is modified; a period of mid-day rest is insisted on and efficient feeding arrangements provided.

(3) Residential Open Air Schools of Recovery.

The provision of a residential open air school in connection with the Baschurch Home has been considered, but nothing so far has been done. Day open air schools are not practicable except in connection with towns of a considerable size.

At the Baschurch Home 29 children of school age belonging to the Education County were treated during the year. The children were treated for the following conditions :—

Tuberculous Bones and Joints,	Rickets.	Deformities from Poliomyelitis.
3	4	5
Scoliosis.	Other Deformities.	Other Diseases.
5	4	8

Arrangements for teaching in the open air are quite practicable, and this matter has been taken into consideration in the planning of new schools. Teachers should be encouraged to hold open air classes when the weather permits, where there is a playground suitable for the purpose. A covered playing shed, or the shelter of a spreading tree will frequently provide all the protection that is required. The provision of a suitable shed in connection with the schools, where otherwise open air teaching is impossible, is worth consideration.

It is most important, however, that the ordinary schoolrooms should be so constructed, that in suitable weather by throwing all the windows open they become practically open air classrooms. This is the important aim that should be constantly kept in view.

Remarks with regard to Provision for future Inspection.

In Circular 823 dealing with grants for the year ending 31st March, 1914, the Board of Education says :—

“ In conclusion, I am to say that the Board consider that the time has now come when the work of medical inspection should be consolidated by provision for the routine inspection of an intermediate age-group. They are aware that in a large number of areas provision is already made for the inspection of one or more age-groups other than those specified in Article 58 (b) of the Code. They desire, however, to give ample notice of this extension of the work of medical inspection, in order that as little inconvenience as possible may be caused to Authorities whose provision for medical inspection is at present limited to the two age-groups hitherto prescribed by the Code. Accordingly, they have decided to make no change as regards the year ending on the 31st March, 1915, but for the year beginning on the 1st April, 1915, and subsequent years, it will be required that provision shall be made for the medical inspection of all children between eight and nine years of age, as well as for the group of “ entrants ” and the group of children between 12 and 13 years of age.”

In the previous Circular 792, it is stated “ it is important that arrangements should be made for the Medical Officer to visit the schools as frequently as practicable. The Board are not prepared to take the view that one visit a year is sufficient.”

The appointment of a third inspector was decided upon, but owing to the outbreak of the war it was postponed. The appointment has not yet been made.

In my last year's report I said :—

“ The inclusion of an intermediate age inspection will add about 3,500 to 4,000 to the number of children to be systematically examined. Reference to page 12, shows that this is full work for one inspector in addition to the other duties there mentioned. It is quite obvious, therefore, that an additional inspector's time will be taken up almost entirely with the inspection of the intermediate age group, and it may not be possible to have the schools visited with the frequency that the Board of Education have indicated is necessary.

"The disadvantages of having the medical staff fully occupied with routine work is very great, and cannot fail in the long run to lessen the value of medical inspection. The Medical Inspectors should have time for making investigations into problems of school hygiene and for investigating outbreaks of disease amongst school children. They should be able to give up more time to conferring with the teachers on various problems of school hygiene and in instructing the parents as to the care of their children. It is most desirable too, that the Medical Inspectors should take every opportunity of seeing how physical instruction is carried out in the schools, and of discussing this matter with the teachers.

"The provision of an X-ray apparatus for the treatment of ringworm to be used by one of the Medical Inspectors, who would receive special training for this work, appears most desirable.

"The further examination of eyes, so that spectacles could be prescribed, might with great advantage be undertaken, particularly in out of the way districts, if a sufficient staff were available.

"Taking all these matters into consideration I am of opinion that the question of the appointment of two additional medical inspectors should receive early consideration."

In addition to the matters here enumerated there is the examination of children under the Mental Deficiency Act. The Model Arrangements lay down (sec. 4.) "The Local Education Authority will make arrangements for the examination by a Certifying Officer appointed for the purpose of these Arrangements of any child whose name has been so reported (by head teachers, medical inspectors, and attendance officers), and will also make arrangements for enabling any parent who is of opinion that his child ought to be dealt with under the Elementary Education (Defective and Epileptic Children) Act, 1899, to present such child to a Certifying Officer for examination. The child shall be examined within three months of his attaining the age of seven years, and at such other times as appear to the Local Education Authority to be desirable."

BOROUGH OF WENLOCK.

GENERAL ARRANGEMENTS FOR MEDICAL INSPECTION.—No alteration of importance has been made in the mode of inspection since the Borough was included in the area of the Salop Education Authority.

The inspection is carried out by three local practitioners.

Efficient and cordial assistance has again been given by the teachers in the duties of weighing and measuring the children, also in entering on the cards information as to age, records of attack of infectious disease, sufficiency of cleanliness and clothing, etc. The inspections have worked smoothly and with the minimum possible disturbance of school arrangements. Great assistance is also given by the District Nurses of the Lady Forester Trust, whose services continue to be available by the kind sanction of the Trustees. One or other of the Nurses attends at each inspection, assists in the preparation of the children for examination, and in the clerical work of the cards and summary sheets; also takes note of the children in whom defects are found, with a view to following up the cases at their homes.

The parents receive a printed invitation to be present at the inspection. The attendance was again remarkably good, being :—

79	per cent.	of the parents of boys—entrants.
78	"	girls "
52	"	boys age 12.
54	"	girls age 12.

EXTENT AND SCOPE OF MEDICAL INSPECTION DURING THE YEAR.—With the exception of one school, each school was visited twice during the year for the purpose of systematic inspection of the children.

The following groups of children are inspected :—(1) entrants; (2) children 12 years old; (3) children suspected of defects by the teachers.

The number of children examined in the systematic inspections was :—

145	boys age 12.
133	girls age 12.
147	boys on entry.
148	girls on entry.

In addition, 68 children were examined at the request of the teachers.

CONDITION OF THE CHILDREN.—The number of children examined, the condition of the children as regards nutrition, cleanliness, clothing, etc., and the defects found are stated in Table II.

Amongst the 573 children, 112 or 19.5 per cent., were suffering from defects requiring medical treatment. Of the 68 cases referred by the teachers for examination, 38 required medical treatment.

Amongst the 278 children systematically examined at the age of 12, 28 or 10 per cent., were found to have defective vision requiring treatment, and amongst the extra cases there were 23 with defective vision.

Amongst the 573 children systematically examined at both age periods there were 7 cases of squint and 10 of external eye disease requiring treatment.

Amongst the extra cases there were 2 cases of squint and 4 of external eye disease.

Defects of Nose and Throat.—Fifty-four or 9.4 per cent. of the children were found to have enlarged tonsils, and only 10 or 1.7 per cent. to have adenoids requiring treatment.

There were also 8 cases of enlarged tonsils and 3 of adenoids requiring treatment amongst the extra cases.

Ear Defects.—Seven or 1.2 per cent. were suffering from discharge from the ear, and in 5 or .9 per cent., deafness was noticed. One case of ear discharge and 3 of deafness occurred amongst the extra cases.

Teeth.

	Percentage of children with			
	Sound Teeth.	1 to 3 (inclusive) teeth decayed.	4 to 6 (inclusive) teeth decayed.	7 or more teeth decayed.
Boys, 12 years of age and over	17.9	49.0	26.2	6.9
Girls, 12 years of age and over	20.3	53.4	21.1	5.3
Boys, 5 years of age or entrants.. ..	25.8	40.8	19.7	13.6
Girls, 5 years of age or entrants.. ..	22.3	38.5	20.8	18.2
	21.6	45.2	22.0	11.1

The difference in the amount of dental caries discovered in the Borough and the County, although still very large, is less than in previous years. The difference is shown by the following figures :—

	Percentage of children with	
	All teeth sound.	7 or more decayed teeth.
Borough of Wenlock	21.6	11.1
Remainder of Education County	4.2	38.0

Whether this truly represents the real difference or not, it seems probable that dental caries is much less prevalent in the Borough of Wenlock, particularly in some parts, than in the remainder of the County. In the Ironbridge school for instance, the percentage of children recorded with sound teeth was about 40, and in the Coalbrookdale School about 35.

This comparative immunity will well repay further investigation.

Tuberculosis.—No case was definitely diagnosed as pulmonary tuberculosis, but in one case there was some suspicion. There were no children suffering from other forms of tuberculosis.

Diseases of Heart and Circulation.—Twelve children, or 2.1 per cent., were found to be suffering from organic heart disease; in addition, 3 children were found to be suffering from functional disturbance of the heart.

Rickets.—Nineteen children or 3.3 per cent. were suffering from the effects of rickets. Seventeen of these were amongst the children examined by one inspector (Dr. Edwards).

Infective Skin Conditions.—No cases of ringworm, 3 of impetigo, and 3 of scabies were discovered at the inspections.

Verminous Heads.—The percentage of verminous heads was 20.5. This percentage closely approximates to that for the remainder of the County.

Besides the examination of a very limited number of heads by the Medical Inspectors, the nurses have done a large amount of inspection and are now carrying on the scheme described on page 39. On the first inspection they examined 1,908 heads and found 550 or 28 per cent. verminous. These were in almost all cases followed up and examined two, three or more times as required. The percentage of verminous children found is a very high one, and shows the urgent need of this work.

Clothing and Footgear.—In 15.8 per cent. of the children, the clothing was reported as unsatisfactory; and in 15.7 the footgear was unsatisfactory.

Treatment.—The facilities for treatment are much greater in the Borough of Wenlock than in the rest of the County. This is due to the help very generously given by the Lady Forester Charity Trust, who not only allow their nurses to undertake school nursing but provide for the treatment of defects of eyes, ears, throat and teeth.

The Broseley Hospital has been fitted up with rooms for this work. Defects of eyes, ears, throat and nose are treated by Mr. Russ Wood. The dental work is undertaken by Mr. Mugford, who visits the hospital as required.

The nurses have paid no less than 565 visits to the schools and 1,358 to the homes of the children, partly for the purpose of following up the children requiring medical treatment, but to a greater extent in connection with verminous conditions.

Glasses are obtained by the Trust in all cases where prescribed, and supplied to the parents, who are expected to pay a part or the whole of the cost where they can afford it.

Mr. T. C. Shingler, the Secretary to the Trust, has taken a very active interest in supervising and following up the treatment of the cases, and the Matrons of the Broseley and Wenlock Hospitals and the Nurses have co-operated heartily in this work.

The scheme for dental treatment referred to in my previous reports has not so far been adopted owing to objections on the part of the Charity Commissioners.

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN INSPECTED.

[illegible]

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN
INSPECTED—continued.

CONDITION.	Inspection age 5.				Inspection age 12.				Total.				Special Cases.
	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	Boys.	Girls.	Total.	Per cent.	
<i>Teeth :—</i>													
Sound	38	33	71	24.1	26	27	53	19.0	64	60	124	21.6	58
Less than four decayed	60	57	117	39.6	71	71	142	51.0	131	128	259	45.2	1
Four to six inclusive decayed ..	29	31	60	20.3	38	28	66	23.7	67	59	126	22.0	..
Over six decayed	20	27	47	15.9	10	7	17	6.1	30	34	64	11.1	9
Sepsis	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Mouth :—</i>													
Slight	2	..	2	.67	2	4	6	2.1	4	4	8	1.3	..
Bad	..	..	..	..	2	2	4	1.4	2	2	4	.69	..
<i>Evidence of Rheumatism</i>	..	..	..	..	1	..	..	..	1	..	1	.17	1
<i>Heart and Circulation :—</i>													
No disease	137	146	283	95.9	137	126	263	94.6	274	272	546	95.2	64
Organic disease	4	1	5	1.7	5	2	7	2.5	9	3	12	2.1	3
Functional disease	1	..	1	.33	1	1	2	.71	2	1	3	.52	..
Anaemia	5	1	6	2.0	2	4	6	2.1	7	5	12	2.1	..
Other defect	1	..	1	.33	..	2	2	.71	1	2	3	.52	1
<i>Lungs :—</i>													
No disease	138	144	282	95.6	144	132	276	99.2	282	276	558	97.3	67
Chronic bronchitis and bronchial catarrh	7	2	9	3.0	1	..	1	.36	8	2	10	1.7	..
Tuberculosis	1	1	2	.67	..	..	..	..	1	1	2	.34	..
Tuberculosis suspected	..	..	..	..	..	1	1	.36	..	1	1	.17	1
Other disease	1	1	2	.67	..	..	..	..	1	1	2	.34	..
<i>Nervous System :—</i>													
No disease	146	148	294	99.6	143	133	276	99.2	289	281	570	99.4	67
Epilepsy (major or minor) ..	1	..	1	.33	..	..	..	..	1	..	1	.17	1
Chorea	..	..	..	..	1	..	1	.36	1	..	1	.17	..
Other disease	..	..	..	..	1	..	1	.36	1	..	1	.17	..
<i>Skin :—</i>													
No disease	145	143	288	97.6	144	131	275	98.9	289	274	563	98.2	67
Ringworm: Body	..	..	..	..	..	..	..	..	..	..	..	..	..
Ringworm: Head	..	1	1	.33	..	..	..	..	..	..	..	..	..
Impetigo	1	1	2	.67	..	1	1	.36	1	2	3	.52	..
Scabies	1	1	2	.67	1	..	..	..	2	1	3	.52	..
Other disease	..	2	2	.67	..	1	1	.36	..	3	3	.52	1
<i>Fingers :—</i>													
No disease	138	144	282	95.6	140	132	272	97.8	278	276	554	96.6	68
Slight	9	4	13	4.4	5	1	6	2.1	14	5	19	3.3	..
Marked	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Deformities :—</i>													
No deformity	145	145	290	98.3	140	132	272	97.8	285	277	562	98.0	67
High Palate	..	1	1	.33	1	..	1	.36	1	1	2	.34	..
Scoliosis	1	2	3	1.0	..	1	1	.36	1	3	4	.69	..
Deformity from Infantile Paralysis	..	..	..	..	..	..	..	..	..	..	..	..	1
Other deformities	2	..	2	.67	4	..	4	1.4	6	..	6	1.0	..

TABLE II.—RETURN SHOWING THE PHYSICAL CONDITION OF CHILDREN INSPECTED—continued.

CONDITION.	Inspection age 5.				Inspection age 12.				Total.				Special Cases.
	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Boys.	Girls.	Total.	Per cent	Total.
<i>Tuberculosis, non-pulmonary :—</i>													
No disease	147	148	295	100	145	133	278	100	292	281	573	100	68
Glandular	..	..	..	..	..	..	..	..	..	..	..	..	..
Bones and Joints	..	..	..	..	..	..	..	..	..	..	..	..	..
Other forms	..	..	..	..	..	..	..	..	..	..	..	..	..
<i>Speech :—</i>													
Not defective	146	146	292	99.0	145	132	277	99.6	293	278	571	99.6	67
Defective articulation	1	2	3	1.0	..	..	..	..	1	2	3	.52	1
Stammering	..	..	..	..	..	1	1	.36	..	1	1	.17	..
<i>Mental Condition :—</i>													
Normal	144	144	288	97.6	132	131	263	94.6	276	275	551	95.9	67
Dull or backward	3	3	6	2.0	13	2	15	5.4	16	5	21	3.6	1
Mentally defective (all grades)	..	1	1	.33	..	..	..	..	1	..	1	.17	..
<i>Other Defective Conditions :—</i>													
Slight	6	11	17	5.7	2	7	9	3.2	8	18	26	4.5	2
Bad	4	3	7	2.4	1	1	2	.71	5	4	9	1.5	1
<i>Vision :—</i>													
6/6 each eye (normal vision)	7	2	9	..	103	96	199	71.6	110	98	208	..	1
6/6 R.	1	..	1	..	10	14	24	8.6	11	14	25	..	3
6/6 L.	3	..	3	..	3	6	9	3.2	6	6	12	..	4
6/9 R.	1	..	1	..	19	12	31	11.1	20	12	32	..	7
6/9 L.	1	1	2	..	21	17	38	13.6	22	18	40	..	8
6/12 R.	..	..	..	..	6	2	8	2.8	6	2	8	..	5
6/12 L.	..	..	..	..	10	6	16	5.7	10	6	16	..	2
6/18 R.	..	1	1	..	1	4	5	1.8	1	5	6	..	4
6/18 L.	..	..	..	..	4	4	8	2.8	4	4	8	..	6
6/24 R.	..	..	..	..	1	3	4	1.4	1	3	4	..	2
6/24 L.	..	..	..	..	..	2	2	.71	..	2	2	..	2
6/36 R.	..	..	..	..	1	..	1	.36	1	..	1	..	1
6/36 L.	..	..	..	..	1	1	2	.71	1	1	2	..	1
6/60 R.	..	..	..	..	1	..	1	.36	1	..	1	..	1
6/60 L.	..	..	..	..	1	..	1	.36	1	..	1	..	1
6/0 R.	..	..	..	..	..	1	1	.36	..	1	1	..	1
6/0 L.	..	..	..	..	1	..	1	.36	1	..	1	..	..
<i>Children with Defective Eyesight requiring Treatment</i>	2	..	2	..	15	13	28	10.0	17	13	30	..	23
<i>Squint</i>	2	4	6	2.0	1	..	1	.36	3	4	7	1.2	..
<i>Hearing (whisper) :—</i>													
20 feet each ear (normal hearing)	145	148	293	..	138	131	269	96.7	283	279	562	..	..
Slight Deafness R.	1	..	1	..	2	2	4	1.4	3	2	5	..	1
„ „ L.	2	..	2	..	2	1	3	1.0	4	1	5	..	..
<i>Children with deafness requiring Treatment</i>	..	..	..	..	3	1	4	1.4	3	1	4	..	1

TREATMENT OF DEFECTS OF CHILDREN DURING 1914.

CONDITION.	No. of defects found for which Treatment was considered necessary.			No. of defects for which no report is available	No. of defects treated.	Results of Treatment.			Doctor consulted but result not known.	No. of defects not treated.	Percentage of defects treated.
	From previous year.	New.	Total.			Re-medied.	Im-proved.	Un-changed			
thing	..	91	91	91	..	..	..	..	..	..	..
otgear	..	90	90	90	..	..	..	..	..	..	..
anliness of Head	..	668	668	118	550	..	..	..	..	..	..
anliness of Body	..	57	57	57	..	..	..	..	..	..	..
trition	..	51	51	51	..	..	..	..	..	..	..
se and Throat	22	55	77	5	24	..	..	..	..	48	31.2
ternal Eye Disease	2	9	11	1	9	..	..	..	..	1	81.8
r Disease	7	9	16	..	13	..	..	..	..	3	81.2
eth	107	203	310	14	151	14	118	19	..	145	48.7
art and Circulation	7	14	21	5	14	..	..	..	..	2	66.6
ngs	1	3	4	..	4	..	..	..	..	..	100.0
rvious System	1	1	2	..	2	..	..	..	..	..	100.0
n	1	6	7	1	6	..	..	..	..	..	85.7
ckets	..	..	..	..	..	..	..	..	..	..	..
formities	..	..	..	..	..	..	..	..	..	..	..
berculosis—Non-pulmonary	..	..	1	..	1	..	..	..	..	..	100.0
eech.. ..	..	..	..	..	..	..	..	..	..	..	..
ntal Condition	..	..	..	..	..	..	..	..	..	..	..
sion and Squint	30	49	79	..	56	..	..	..	..	23	70.9
aring	3	5	8	..	6	..	..	..	..	2	75.0
scellaneous	5	7	12	2	7	..	..	..	..	3	58.3
Total	186	361	548	28	293	..	..	..	..	227	53.5

