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CITY OF



CARDIFF.

Education Committee.

ANNUAL REPORT

FOR 1912

OF THE

SCHOOL MEDICAL OFFICER.

EDWARD WALFORD, M.D., D.P.H.,

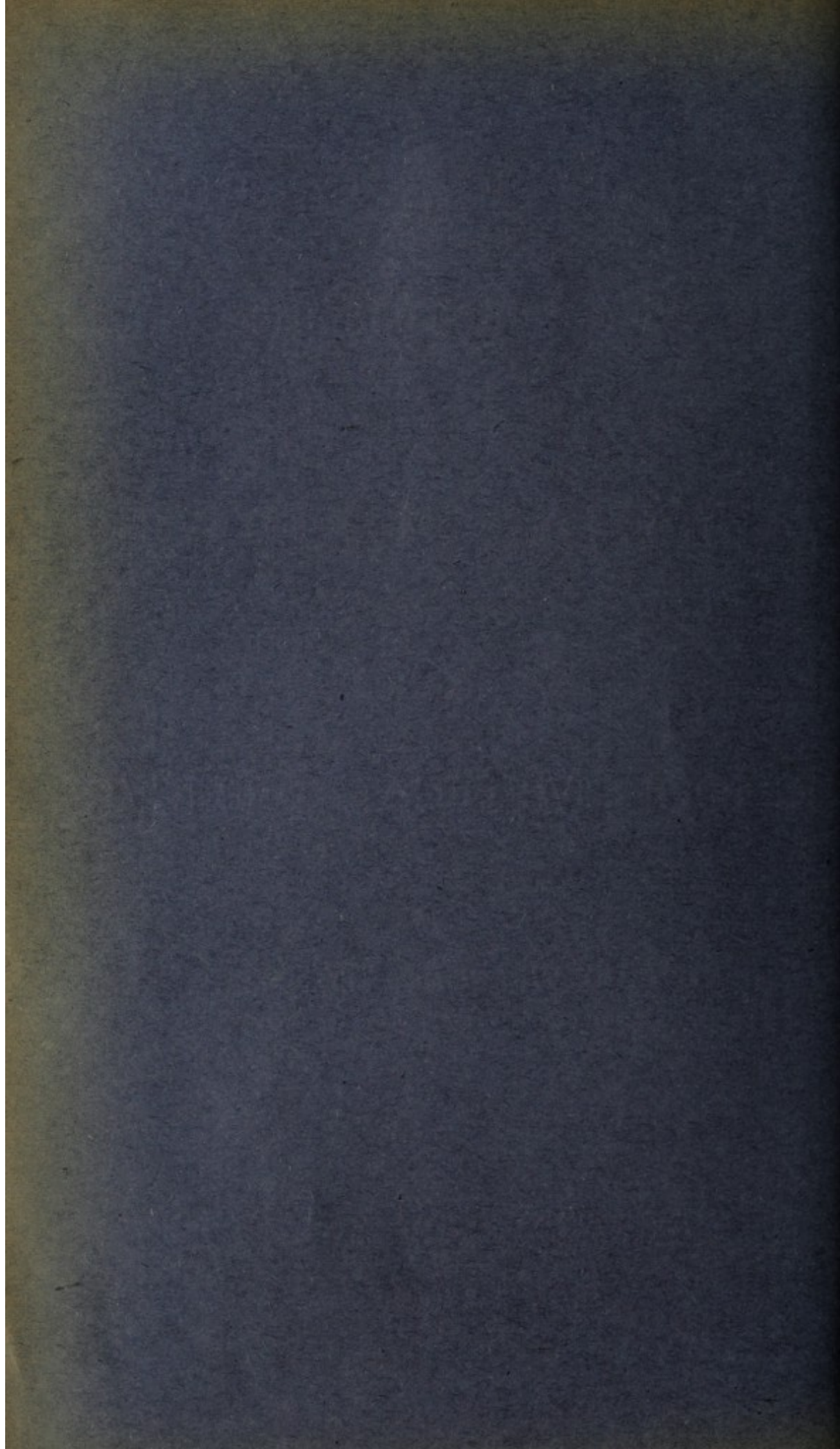
MEDICAL OFFICER, CARDIFF EDUCATION AUTHORITY;

MEDICAL OFFICER OF HEALTH, CITY AND PORT OF CARDIFF.

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S. GLOSSOP & SONS, LTD., NEW STREET.

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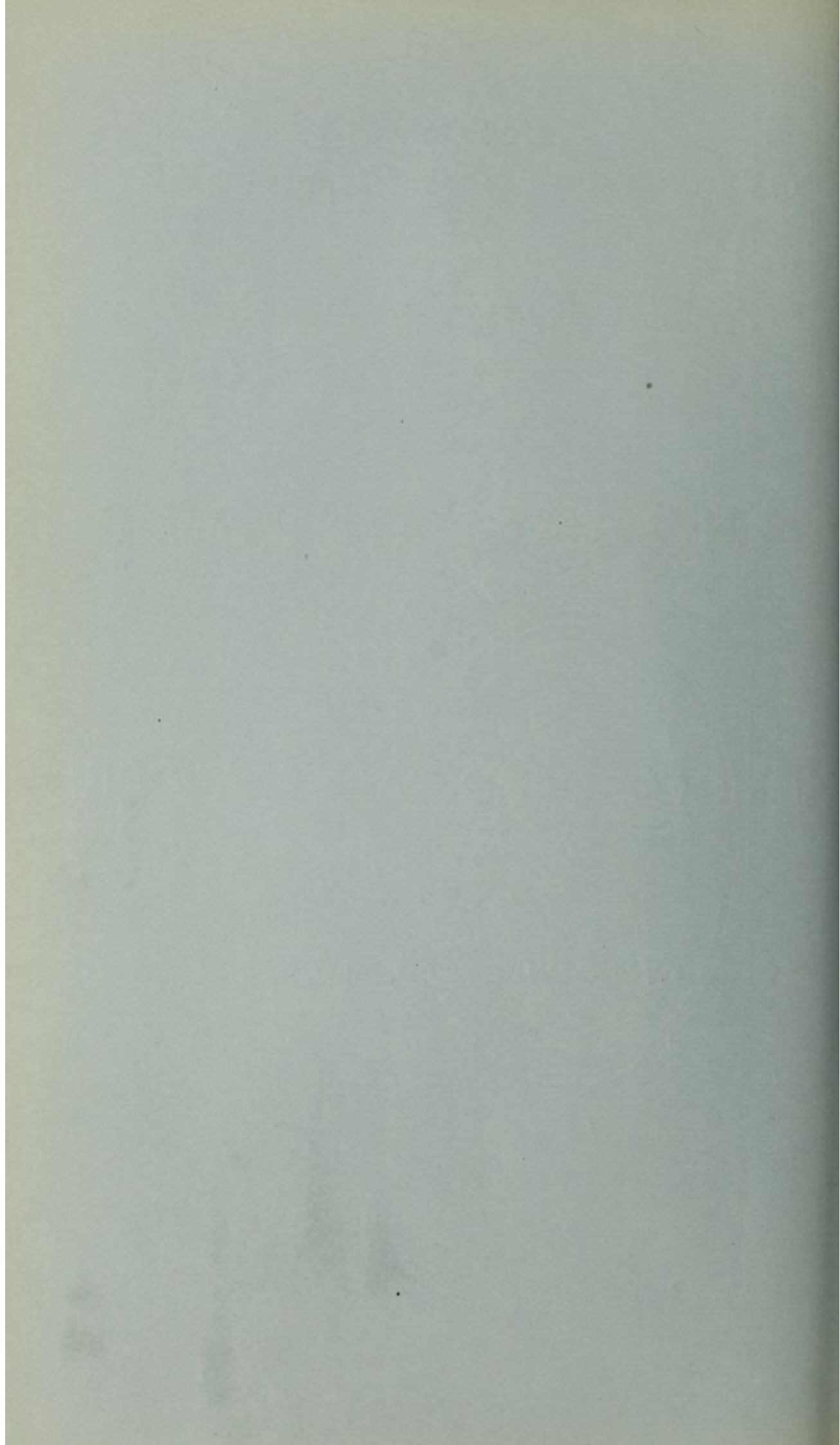
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CITY OF CARDIFF.

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Chairman :

COUNCILLOR J. J. E. BIGGS.

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Medical Inspection Staff :

School Medical Officer :

EDWARD WALFORD, M.D., D.P.H.

Medical Inspectors :

ELIZABETH F. ELDER, M.B., Ch.B., D.P.H.

A. F. BERNARD SHAW, B.A., M.B., D.P.H.

School Nurses :

AGNES C. BRODIE.

ELLEN WHITING.

CHRISTINA WALSH.

Clerk :

WALTER GOMAN.

CARDIFF EDUCATION COMMITTEE.

CITY HALL,

CARDIFF,

April, 1913.

TO THE CHAIRMAN AND MEMBERS OF THE EDUCATION COMMITTEE.

LADIES AND GENTLEMEN,

I have the honour of submitting to you my fourth Annual Report upon the Medical and Sanitary Supervision of the Public Elementary Schools under your control. The report includes an account of the medical inspection and treatment of school children during the year ended 31st December, 1912.

Section 13 of the Education (Administrative Provisions) Act, 1907, provides that the powers and duties of a Local Education Authority under the Act shall include :—"The *duty* to provide for the medical inspection of children immediately before or at the time of, or as soon as possible after their admission to a public Elementary School, and on such other occasions as the Board of Education direct, and the *power* to make such arrangements as may be sanctioned by the Board of Education for attending to the health and physical condition of the children educated in public Elementary Schools. Provided that in any exercise of powers under this Section, the local Education Authority may encourage and assist the establishment or continuance of voluntary agencies, and associate with itself representatives of voluntary associations for the purpose."

The Act therefore imposes upon the Education Authority the duty of the medical inspection of all children in these schools, and permits the Authority at its discretion to make arrangements for the treatment of children found upon inspection to require medical treatment.

The policy of the Board of Education in initiating and controlling the work of medical inspection and the issues raised by it is stated by the Board's Chief Medical Officer as follows :—

"From the outset the Board took the view, first, that the medical inspection of school children, though an essential and fundamental factor, was but one of a number of activities comprised in School Hygiene, and secondly, that the science and administration of School Hygiene itself could not be regarded as an independent science or branch of administration which could be pursued in detachment from wider public affairs, but was, in fact, an integral and vital part of that science, which, under the name of Public Health, deals with all questions affecting the health and physical condition of the nation. This was one of the principal reasons which lay at the base of the Board's principle that the statutory duty cast upon Local Education Authorities by the Education (Administrative Provisions) Act, 1907, Section 13, should be carried out and organised in intimate relation with the machinery, and in harmony with the purposes, of the Public Health Service already in being in this country, which itself is the fruit of a long period of experience, legislation, and administration. It seemed to the Board an obvious necessity, for the sake both of economy and efficiency, that the new School Medical Service should to the utmost extent work in co-operation with the existing machinery of medical and sanitary administration, developing and supplementing it as required, rather than that new agencies should be introduced, which might be redundant and therefore competing, and possibly a source of confusion, waste of effort, and even disorganisation. Thus not only would dual jurisdiction be avoided, but a further step would be taken in the direction of a simplified and unified state medical service as an appropriate medium for the solution of the problems of hygiene in relation to the education of the child not less than of the adult."

In accordance with the Board's Circular (596), this Report will deal, as far as possible, with the subject of School Hygiene, and will cover to some extent, the ground indicated under the following heads :—

- “(a) General review of the hygienic conditions prevalent in the Schools in the area of the Local Education Authority in respect of such matters as surroundings, ventilation, lighting, warming, equipment, and sanitation, including observations on the type and condition of sanitary conveniences and lavatories, water supply for washing and drinking purposes, the cleanliness of schoolrooms and cloakrooms, arrangements for drying children's cloaks and boots, and the relation of the general arrangements of the School to the health of the children.
- (b) General description of the arrangements which have been made for the co-relation of the School Medical Service with the Public Health Service and for the organization and supervision of medical inspection, and an account of the methods of inspection adopted, including :—
 - (i) A statement of the extent (if any) to which the Board's Schedule of Medical Inspection has not been followed and the reasons for such departure ;
 - (ii) A statement showing the assistance given to the School Medical Officer and his assistants by nurses, managers of schools, teachers, attendance officers, or other persons ;
 - (iii) A statement showing the methods adopted for securing the presence of parents at the inspection and their co-operation in the subsequent treatment of defects, together with a review of the effects of such methods ;
 - (iv) The extent to which disturbance of school arrangements was involved by the inspection. (Art. 43 (b) and 44 (h) of Code of 1908).
- (c) General statement of the extent and scope of the medical inspection carried out during the year, including :—
 - (i) The number of visits paid to Schools and Departments ;
 - (ii) The principle on which children have been selected for inspection (at entrance, before leaving, by selection according to ages or otherwise) ;
 - (iii) The number of children inspected (classified for age at date of inspection and for sex) ;
 - (iv) The number of children referred for subsequent or further examination ;
 - (v) The number of children in respect of whom directions were given for treatment of defects, including a classified statement of such defects ;
 - (vi) The average time per head occupied by inspection.
- (d) General review of the facts disclosed by medical inspection, under the headings contained in the Schedule to Circular 582, including tables showing the height and weight of children inspected (according to age and date of inspection and sex).
- (e) General review of the relation of home circumstances and social and industrial conditions to the health and physical condition of the children inspected, so far as facts bearing on this point have come under notice.
- (f) Review of the methods employed or available for the treatment of defects, such as defective eyesight, carious teeth, nasal obstruction or adenoids, tonsillitis, discharging ears, pediculosis, ringworm, and other skin diseases, including an account of the action of school nurses in obtaining or assisting in the treatment of such defects.
- (g) Review of action taken to detect and prevent the spread of infectious diseases, including reference to action taken under Articles 45 (b), 53 (b) and 57 of the Code of 1908.
- (h) 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.
- (i) Review of—
 - (i) The methods and results of instruction in personal hygiene and temperance in the Public Elementary Schools in the area ;
 - (ii) The methods and results of physical or breathing exercises in the Schools ;
 - (iii) Arrangements for open-air schools, school camps, etc., under Article 44 (g) of the Code of 1908.
- (j) Account of miscellaneous work, such as the examination of scholarship candidates, pupil teachers, or teachers of any grade.”

The special functions assigned to the School Medical Officer by the Education Code include :—

- (1) Reporting on the working and effect of any arrangements made under Article 44 (9) for educating children at an open-air school, school camp, or other place selected, with a view to the improvement of the health and physical condition of the children.
- (2) The power of advising or approving the closure of a school under Article 45 (b).
- (3) The power of authorizing the exclusion of certain children from a school on specified grounds under Article 53 (b), which grounds will be regarded as "reasonable grounds" under Article 53 (a).

METHODS OF MEDICAL INSPECTION ADOPTED DURING THE YEAR.

The Regulations of the Board of Education require that provision must be made for the medical inspection of all children admitted to, and of all children who are expected to leave, school in the school year ending 31st July. The Regulations also require that the Annual Report of the School Medical Officer should refer to the calendar year, and not to the school year, in order to correspond with the period fixed by law for the closely related report of the Medical Officer of Health. This report, therefore, includes an account of the medical inspection of the children entering and leaving the elementary schools during the year as required by the Regulations, together with an intermediate group between the ages of seven and nine years. Owing to lack of time and other circumstances, a complete examination of this latter group was impossible.

From many points of view, the examination of children about the age of seven years is perhaps more useful than the examination of those entering or leaving. Most of those entering the schools are under five years of age, when a medical inspection would not be likely to yield satisfactory results, unless perhaps in those requiring special examination. On the other hand, the inspection of those about to leave school frequently results in complete neglect of the defects found, as the child may have left school without any efficient treatment having been obtained. Further, owing to temporary absence, or to the children leaving before they were expected to do so, some may be missed when this final examination is made. So far as amelioration of defects is concerned, it would appear that the inspection of this intermediate group is likely to lead to good results. Upon the establishment of a complete School Clinic, it will be necessary to pay particular attention to this group.

During the calendar year, 8,322 children were inspected upon school premises, including 3,528 entering, 2,249 leaving, and 2,545 in the intermediate group between the ages of seven and nine years. To these must be added 1,849, who were referred by Teachers, School Attendance Officers, and Medical Inspectors for special examination, 32 mentally defective children, and 42 attending other special schools. Altogether 10,245 scholars were medically inspected. There were also 1,220 re-examinations of children previously examined at the City Hall or on school premises.

The following table gives a summary of the results of medical inspection of school children during the school year ended 31st July, 1912.

Children medically inspected on school premises :—

Infants (both sexes)	4,331
Boys (6 to 9 years)	1,698
Boys (12 to 15 years)	1,315
Girls (6 to 9 years)	1,554
Girls (12 to 15 years)	1,000
	— 9,898

Children referred for special medical inspection :—

	Inspected at City Hall.	Inspected on School premises.	
Boys	833	389	1,222
Girls	773	256	1,029
			— 2,251
			12,149

Re-examinations of children previously examined at the City Hall or on School Premises :—

Boys	...	...	...	...	...	786
Girls	...	...	...	...	...	522
						<hr/> 1,308 <hr/>

Children recommended for medical treatment (routine inspection) :—

					Number.		Percentage.
Infants	...	...	...	...	447	...	10.3
Boys and Girls (6 to 9 years)	...	...	...	...	1,182	...	36.3
Boys and Girls (12 to 15 years)	...	...	...	...	1,027	...	44.3
						<hr/> 2,656 <hr/>	<hr/> 26.8 <hr/>

The School Medical Service is co-ordinated with the Public Health Department of the City. The Medical Officer of Health acts as Chief School Medical Officer, and is directly responsible to the Education Committee, having the assistance of two Medical Inspectors, Dr. Elizabeth F. Elder, and Dr. A. F. Bernard Shaw, the latter being appointed in October, 1912, to take the place of Dr. E. F. Thomas, resigned.

In July, 1912, an additional School Nurse was appointed, Mrs. E. Whiting, who devotes most of her time to following up cases requiring medical treatment. Two Nurses, Miss A. C. Brodie and Miss C. Walsh, assist the Medical Inspectors in the routine and special examination of the children, and give some part of their time to following up and to the treatment of minor ailments.

There are thirty-seven Public Elementary Schools in the City, with accommodation for 33,302 scholars. The boys in all the schools are inspected by Dr. Shaw, and the girls by Dr. Elder, the children of both sexes in the Infants' Departments being inspected as far as possible by them in equal proportions.

The inspection is carried out in accordance with the following schedule, based upon that framed by the Board of Education :—

[FRONT.]

SCHEDULE OF MEDICAL INSPECTION.		
School No.	Name surname first	Child No.
Name of School	Address	Date of Birth
Previous School attended		Date of Admission to School
GENERAL OBSERVATIONS.		
<div style="text-align: center;">PERSONAL HISTORY</div> <div style="text-align: center;">(a) Previous illness of child (before admission)</div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Measles</div> <div>Scarlet Fever</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Whooping Cough</div> <div>Diphtheria</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>Chickenpox</div> <div>Other illnesses</div> </div> <div style="text-align: center; margin-top: 10px;">(b) Family Medical History (if exceptional)</div>		<div style="text-align: center;">DIRECTIONS TO PARENTS OR TEACHERS.</div>

[BACK.]

I.	II.	III.	IV.
1. Date of Inspection 2. Standard & Regularity of Attendance 3. Age of Child 4. Clothing & Footgear 5. Height 6. Weight 7. Nutrition 8. Cleanliness & Condition of Skin Head Body 9. Teeth 10. Nose and Throat Tonsils Adenoids Submax. and Cervical Glands 11. External Eye Disease 12. Vision R. L. 13. Ear Disease 14. Hearing 15. Speech 16. Mental Condition 17. Heart & Circulation 18. Lungs 19. Nervous System 20. Tuberculosis 21. Rickets 22. Deformities, Spinal Disease, &c. 23. Infectious or Contagious Disease 24. Other Disease or Defect Medical Officer's Initials			

Certain diseases are compulsorily notifiable to the Medical Officer of Health under the provisions of the Infectious Disease (Notification) Act, 1889; of these scarlet fever and diphtheria are by far the most common. Measles and whooping cough occur in epidemics of more or less severity at intervals of a few years, and on these occasions prevail much more extensively and produce a much higher mortality amongst school children than the notifiable diseases. The information obtainable of the non-notifiable infectious diseases, and of other disorders amongst scholars, is therefore not altogether complete. To meet this difficulty the following plan is carried out in this district.

The Head Teachers of Elementary Schools are supplied with forms upon which they forward to the School Medical Officer the names and addresses of all children absent on account of illness, except those suffering from the notifiable diseases and who have already been notified to them by the Medical Officer of Health. A School Nurse forthwith pays a visit to the address given in order to ascertain the cause of absence, and, if necessary, to advise medical treatment.

The School Attendance Officers work in co-operation with the Medical Officer's Department, and take the necessary steps to secure attendance when there is no sufficient cause for the absence of the child. In most cases the alleged cause of absence from school is illness. When this is found to be the case, these officers either obtain a medical certificate from the practitioner attending the patient, or refer the child to the School Medical Officer for special inspection.

The School Teachers have, as usual, taken great interest in the medical inspection of children under their care, and their co-operation has been of great service in facilitating the work of the Medical Inspectors. Mr. J. Perkins, the Superintendent School Attendance Officer, and his staff have co-operated with the School Medical Officers in every possible way.

It will be seen that the functions of the School Nurse correspond closely with those of the Attendance Officer, and, indeed, some Education Authorities have found it advisable to appoint trained School Nurses as Attendance Officers. There are obvious advantages in this arrangement, as nearly always the alleged cause for non-attendance at school is illness, and the Nurse engaged in following up cases recommended for treatment, who is on the staff of the School Medical Service, is in a better position to deal with such non-attendance than an Attendance Officer, who may not be acquainted with all the circumstances of each case. In "following up" the Nurse has to visit the homes of those children who are absent, and it seems an unnecessary overlapping for another official to visit the same house on a similar errand. In such cases it would be necessary, of course, for the Nurse to be in close touch with the Chief School Attendance Officer, in order to arrange the details and to secure the necessary evidence in the event of the Education Authority deciding to institute legal proceedings against the parents for non-attendance.

ARRANGEMENTS FOR ATTENDING TO THE HEALTH AND PHYSICAL CONDITION OF SCHOOL CHILDREN.

Tables XII—XIV. in this report indicate generally the extent to which it has been found possible to procure medical treatment for those children found on medical inspection to require such treatment. From these it will be seen that from one cause or another many ailments or defects do not receive effective treatment, or are altogether neglected by the parents or guardians of the affected children. Amongst these conditions, defective vision, carious teeth, disorders of throat and nose, and ringworm assume a prominent place.

The methods which are adopted with a view of procuring such treatment are briefly as follows:—If during the routine medical inspection upon the school premises, the Medical Inspectors find scholars suffering from any defects or disorders requiring medical treatment, the parents and school teachers are notified of the fact upon printed notices. If necessary, the affected child is excluded temporarily from school. If no attention is paid to the notice, the School Nurse visits the parents to ascertain the cause of the neglect, and to urge upon them the necessity of obtaining treatment. Such visits have frequently to be repeated.

The same process is carried out at the Inspection Clinic at the City Hall, where children referred for special examination attend once a week. But in this case, the sanction of the Board of Education has been obtained for the treatment of minor ailments by the School Nurses under medical supervision. Discharges from the throat, nose and ear, contagious skin disorders, sores, and bruises are treated, and in this way many disorders are ultimately dealt with.

There can be no doubt, however, that in some cases the expense of medical treatment is beyond the means of parents. This is perhaps particularly the case in connection with defective vision, when special attention by an Ophthalmic Surgeon is required, and where spectacles have to be obtained. The arrangements made for reducing the expense of this treatment only partially meet the difficulty. There is, of course, a tendency on the part of many parents to take advantage of the skilled treatment which is to be obtained, without cost, at the Cardiff Hospital, and complaints have been received from the Managers of this Institution that the Out-patient Department is overcrowded with such cases.

During the year the question of treatment has been from time to time under the consideration of the School Management Committee. Application was made to the Board of Education to sanction an arrangement whereby the Education Committee would be responsible for the payment of medical practitioners, who undertook the medical treatment of the children of necessitous parents. As this scheme does not in any way comply with the conditions laid down by the Board, that the arrangements by the Education Authority for the treatment of such children should form part of the organisation of the School Medical Service, this sanction was not obtained. The Committee are therefore now taking into consideration the establishment of a School Clinic.

The sanction of the Board of Education is necessary to enable Education Authorities to provide any kind of medical treatment for school children, and in Circular 596, issued in August, 1908, the Board point out that "before sanctioning schemes of treatment they would require to satisfy themselves that such use as was practicable and reasonable in each area had been made of existing agencies, that only children usually attending Public Elementary Schools should be treated by Education Authorities, that the parents of such children are unable themselves to provide medical treatment, and that the treatment is to be carried out in intimate connection with the system of education and with the school."

Before sanctioning the establishment of a School Clinic, the Board has in particular required to be informed:—

- (1) What precaution the Local Education Authority will take to secure that only those children shall be treated in a School Clinic for whose treatment adequate provision cannot otherwise be made, whether by the parents or by voluntary associations or institutions, such as hospitals, or through the agency of the Poor Law.
- (2) What precise diseases and defects will be treated.
- (3) By whom and on what terms and conditions the treatment will be carried out and what will be its extent.
- (4) What is the estimated cost of the Clinic in respect of buildings and equipment, maintenance and administration, and treatment, and how it is proposed to meet this cost, out of the rates or otherwise.

Such treatment must therefore be organised by, and be under the general supervision of the School Medical Officer, assisted by School Attendance Officers, School Nurses, and others, in order that continuous and effective treatment may be secured. In some instances the Board of Education has sanctioned contributions by Local Education Authorities to the funds of voluntary hospitals undertaking the treatment of school children, but only on condition that this treatment was carried on in connection with the School Medical Department, as otherwise it has been found impossible to enforce the continuous attendance at the hospital necessary to render the child fit to return to school within a reasonable period.

In my Annual Report for 1911, some general information was given relating to the establishment and cost of School Clinics. A further report was presented to the School Management Committee during the year 1912, giving more detailed information as to the probable cost of establishing a School Clinic in Cardiff upon certain definite lines. It was shown that no additional cost need be incurred in the provision of rooms for the Clinic, as the present accommodation in the City Hall, available for the special examination of school children, was sufficient for the purpose. The same rooms could be used upon alternate days for the different forms of special treatment.

For the treatment of defective vision, it would be necessary to provide equipment costing probably about £20. The appointment of an Ophthalmic Surgeon would probably entail an expenditure of about £100 per annum in salary, for attendance upon two afternoons a week, or £50 for one afternoon. If paid by fee at 7/- per case, the cost would probably be about the same. The annual cost of maintenance would be small.

In the case of the Dental Clinic, the cost of equipment would be about £40. The salary of the Dentist for attendance upon two afternoons a week would be about £80. A more efficient scheme would involve the employment of a whole time Dentist for inspection and treatment, at a salary of about £250 to £300 per annum.

The cost of treatment of diseases of the throat and nose—adenoids—would correspond very closely with that of defective vision.

If the treatment of ringworm by X-Rays is to be carried out in the same rooms, the initial cost of the apparatus would be £130, and the annual expenditure about £10. The salary of the Specialist would be about £100 per annum, or a fee of 10/6 per case. An alternative arrangement would be the treatment at the Specialist's house or surgery, the Specialist in this case finding the apparatus and paying the current expenses. This would involve the payment of a fee of £1 1s. or £1 10s. per case.

In addition to the above it would be necessary to employ another School Nurse at a salary of £80 to £100 per annum.

During the year the Board of Education has issued a circular (No. 792), calling the attention of Education Authorities to the Regulations under which grants will be made by the Board in aid of the provision of medical treatment for children attending Public Elementary Schools. The work in respect of which grants will be made relates to the medical treatment and work preparatory to, or associated with, such treatment, including the "following up" of defects discovered at the school medical inspection, with a view to securing appropriate amelioration by voluntary agencies or otherwise. The following is an extract from the circular referred to:—

"For the purpose of assessing grants in respect of the work of the school medical service which is ancillary to, or associated with, medical treatment, the Board will be prepared to take into account ameliorative undertakings falling under any of the following heads, if carried out by the School Medical Officer or his staff, or under his direction or supervision:—

- (a) the re-examination, after a suitable interval, of children found to be defective at the routine inspection, with a view to ascertaining whether appropriate treatment has been obtained, and the results of any treatment;
- (b) the further examination (including the examination of defective eyesight for errors of refraction) at Inspection Clinics or elsewhere, of children who have been found to be defective at the routine inspection;
- (c) the examination at Inspection Clinics or elsewhere of "special" cases referred by school attendance officers, care committees, teachers, parents and others;
- (d) the "following-up" of cases of defect by school nurses or health visitors by means of visits to the schools or the homes of the children in order to ascertain whether the parents have obtained and are following medical advice, or with a view to advising, instructing, or aiding parents in regard to obtaining treatment of minor ailments, or with a view to arranging for or supervising the cleansing of children who have been found to be in an uncleanly or verminous condition;
- (e) the following-up and after-care of cases of defect by children's care committees and other agencies working in co-operation with the School Medical Officer.

"Similarly, for the purpose of assessing grants in respect of medical treatment proper, the Board will take into account treatment falling under any of the following heads, if carried out by the School Medical Officer or his staff, or under his direction or supervision:—

- (i) the treatment of minor ailments carried out by school nurses;
- (ii) the provision of spectacles, surgical or other appliances;
- (iii) arrangements for medical or surgical treatment at hospitals, infirmaries, dispensaries, &c., or by private practitioners;
- (iv) treatment at School Clinics whether at general clinics for the treatment of various kinds of defects, or at special clinics providing for one type of ailment only, e.g., dental caries.

"The Board desire to direct special attention to section 163 of the Report for 1910 of their Chief Medical Officer. As indicated in that section, it appears that the disorders and maladies which are most suitable for treatment directly provided by Local Education Authorities under Section 13 of the Education (Administrative Provisions) Act, 1907, are limited in practice to minor ailments, uncleanness, ringworm

and other common skin diseases of children, defective eyesight or hearing, some external affections of the eyes and ears, and various temporary conditions of the mouth (including teeth), nose and throat. It is impossible entirely to exclude other conditions of a more general nature which can be dealt with while the child is in attendance at school, but there are affections and ailments which the Board would regard as being outside the ordinary province of the School Medical Officer, and which they would not deem suitable for inclusion in the Authority's scheme of treatment, unless it were shown that adequate treatment at a reasonable cost could not be otherwise obtained."

Some portion of the cost of medical treatment provided by the Education Authority could be recovered under the Local Education Authorities (Medical Treatment) Act, 1909. The powers contained in Section I. of the Act are as follows:—

"Where any Local Education Authority provides for the medical treatment of children attending any public elementary school under Section 13 of the Education (Administrative Provisions) Act, 1907, there shall be charged to the parent of every such child in respect of any treatment provided for that child, such an amount, not exceeding the cost of treatment as may be determined by the Local Education Authority, and in the event of payment not being made by the parents, it shall be the duty of the Authority, unless they are satisfied that the parent is unable by reason of circumstances other than his own default, to pay the amount, to require the payment of that amount from the parent, and any such amount may be recovered summarily as a civil debt."

Under the above powers certain Education Authorities have framed scales of charges for treatment. The following scale has been adopted by the London County Council:—

EYE AND DENTAL CASES.

Class.	Income of Standard Family, after deducting regular outgoings.*	Charge per Attendance.
		s. d.
I.	Under 17s. 6d.	Nil.
II.	17s. 6d. and under 20s.	0 4
III.	20s. and under 22s. 6d.	0 8
IV.	22s. 6d. and under 25s.	1 0
V.	25s. and under 27s. 6d.	1 4
VI.	27s. 6d. and above	1 8

* A standard family assumes five adults, each child over 14 years of age being regarded as an adult, and each child below that age being calculated 75 of an adult. Such expenses as rent, payments to sick clubs, insurance, fares of wage earners to and from work, are assumed as regular outgoings.

The arrangements in Cardiff for attending to the health of school children cannot be considered complete or satisfactory, as, notwithstanding the efforts of the School Nurses, Teachers and School Attendance Officers, many fail to obtain the prompt and efficient medical treatment which they require. It will be seen from the tabular statements in this report, that a certain number of parents comply with the notices sent them calling their attention to the children's health and to the necessity for medical treatment. Sometimes this treatment is obtained at once, either through a private medical practitioner, through the King Edward VII's. Hospital, or by some other means. In some cases, however, much delay occurs, and medical treatment is not obtained until after persistent following up by the School Nurses. Such medical treatment is not altogether satisfactory, as in many instances it is not carried out continuously or effectively, either through carelessness and indifference on the part of the parents, or from want of means. Some of the minor ailments are attended to, as already mentioned, at the School Clinic.

The other arrangements for attending to the health of school children consist mainly in giving facilities for the treatment of children suffering from defective vision or from dental caries, who are unable to pay the usual cost of such treatment. Three Ophthalmic Surgeons have agreed to attend children recommended by the School Medical Inspectors, at the reduced fee of 7/- per consultation and prescription. Arrangements have also been made with Opticians to supply spectacles at reduced prices (2/- for spherical, and 4/6 for cylindrical lenses) to those who have obtained prescriptions from the Ophthalmic Surgeons. Six Dentists have also agreed to attend school children upon a reduced scale of fees, as follows:—(1) Extractions, 6d. each tooth; (2) Stopping of teeth, 2/- each tooth, in cases where not more than one attendance is required, and 2/6 each tooth when more than one attendance is required.

SCHOOL CLOSURE AND EXCLUSION FROM SCHOOL.

It is seldom now that the closure of a school is resorted to with a view of preventing the spread of infectious disease. It has been found in practice that in large towns, in which there is a well organised Public Health Department, no advantage to the public health is to be derived from this extreme measure, and that the serious interruption to the education of the community caused by the closure of large elementary schools for a prolonged period cannot be justified in view of the small probability of checking the spread of an epidemic by this procedure. The organisation for discovering the nature of the illness causing absence from school of individual children has of late years been fairly complete, so that the exclusion from school, when necessary, of such children is usually sufficient for the purpose of preventing extensive outbreaks of infectious disease amongst scholars. The closure of elementary schools may be compelled by the Sanitary Authority under Article 57 of the Education Code, or may be voluntary on the part of the Local Education Authority. Article 57 is as follows :—

"Article 57. If the Sanitary Authority of the district in which the school is situated, or any two members thereof, acting on the advice of the Medical Officer of Health, require either the closure of the school or any department thereof, or the exclusion of certain children for a specified time, with a view to preventing the spread of disease or any danger to health likely to arise from the condition of the school, such requirement must at once be complied with."

"As regards the Grant, provision is made by Article 45 (b) where a school is compulsorily closed or is closed under the advice or with the approval of the School Medical Officer, or for any other unavoidable cause. It runs as follows :—

Article 45 (b) If the requisite number of meetings has not been held owing to a closure of the school under Article 57, or under the advice or with the approval of the School Medical Officer, or for any other unavoidable cause, the grant will be paid in full, provided that the requirements of this Article are satisfied after an allowance of nine meetings has been made for each week of such closure "

EXCLUSION OF CHILDREN.

"If the Sanitary Authority or two members thereof, acting on the advice of the Medical Officer of Health, require the exclusion of certain children for a specified time in order to prevent the spread of disease those children must be excluded (Article 57). Thus the Medical Officer of Health can initiate a compulsory process whether for closing the school or for excluding scholars, though he can only do so through the Sanitary Authority or two members thereof."

"The exclusion of children is also provided for on the authorisation of the School Medical Officer by Article 53 (b) of the Code, which is as follows :—

Article 53 (b). Where the Board (of Education) are satisfied (i) that proper arrangements have been made by the Local Education Authority for enabling the School Medical Officer to ascertain and certify cases in which the exclusion of children from school is desirable, and (ii) that the School Medical Officer has authorised the exclusion of certain children from the school

- (1) on the ground that their exclusion is desirable to prevent the spread of disease, or
- (2) on the ground that their uncleanly or verminous condition is detrimental to the other scholars, or
- (3) on the ground that, owing to their state of health or their physical or mental defects, they are incapable of receiving proper benefit from the instruction in the school.

the exclusion of such children shall be deemed for the purposes of this Code to be exclusion on reasonable grounds.

For the purposes of this provision the Local Education Authority may direct that no children who have been excluded under the authority of the School Medical Officer or under Article 57 or who have been absent from School owing to sickness, shall be re-admitted to school if the School Medical Officer is not satisfied that they can attend school without risk to themselves or others."

Acting under these Articles the practice adopted in this district is for the School Medical Officer to endorse certificates of medical practitioners excluding children on account of illness, unless there is some obvious reason for not doing so, and in this case, in order to avoid misunderstandings or to clear up doubtful points, the School Medical Officer communicates with the practitioner. Most of the exclusion certificates are, however, based upon information supplied by the Medical Inspectors of School Children. The arrangements for excluding children on account of infectious disease are of course greatly simplified by the School Medical Officer being the Medical Officer of Health.

The following rules relate to the exclusion from school of individual children suffering from infectious disease, and to the exclusion of those who, although not themselves so suffering, reside in houses in which there is infectious illness. Copies of these rules have been given to the Head Teachers of all the Elementary Schools.

INSTRUCTIONS TO HEAD TEACHERS AND PARENTS FOR DEALING WITH INFECTIOUS DISEASES.

DISEASE.	Period of Exclusion from School of Children suffering from the Disease.	Period of Exclusion from School of Children who are not ill, but who reside in infected houses.	REMARKS.
SCARLET FEVER OR SCARLATINA...	At least six weeks, and until there is no discharge from the throat, nose, or ears, and no peeling of the skin. A certificate of disinfection will be given by the Medical Officer of Health.	Eight days from last exposure to infection when case is removed to Isolation Hospital. In other cases until Medical Officer of Health gives certificate of disinfection.	These diseases are notified by Medical Practitioners to the Medical Officer of Health. All children from houses in which there is any such disease must be excluded from school.
DIPHTHERIA	Until throat is reported healthy. Bacteriological examination desirable. A certificate of disinfection will be given by the Medical Officer of Health.	Eight days from last exposure to infection when case is removed to Isolation Hospital. In other cases until Medical Officer of Health gives certificate of disinfection.	
SMALL POX	Until scabs have gone and skin is healthy. A certificate of disinfection will be given by the Medical Officer of Health.	Eighteen days from last exposure to infection, and until Medical Officer of Health gives certificate of disinfection.	
MEASLES OR GERMAN MEASLES	Three weeks from appearance of rash.	Sixteen days from last exposure to infection.	These diseases are not notified by Medical Practitioners to the Medical Officer of Health, but should be notified by Head Teachers. Children must not attend an Infants' school from a house where there is a case of any such disease, but children in departments for older scholars, who have previously suffered from the disease in question, need not be excluded under similar circumstances.
CHICKEN POX	Until scabs have gone and skin is healthy.	Eighteen days from last exposure to infection	
WHOOPING COUGH	Until cough is completely gone—at least five weeks.	Twenty-one days from last exposure to infection	
MUMPS	At least three weeks.	Twenty-one days from last exposure to infection	
ENTERIC OR TYPHOID FEVER	Until the child is well. A certificate of disinfection will be given by the Medical Officer of Health.	Need not be excluded.	This disease is notified by Medical Practitioners to the Medical Officer of Health.
RINGWORM	Until no broken off or diseased hairs can be seen, and until a microscopical examination reveals no evidence of the presence of ring-worm fungus.	Need not be excluded.	
ITCH (SCABIES)	Until all pimples and itching have disappeared.	Need not be excluded.	
LICE IN HEAD (PHEDICULOSIS CAPITIS)	Until all vermin have been removed.	Need not be excluded.	
OPHTHALMIA	Until the eyes have been free from discharge for at least a month.	Need not be excluded.	

It will be seen that it is the practice to exclude from school all children actually suffering from any infectious disorder, until they can be certified free from infection: In the case of convalescents from diphtheria, bacteriological examinations of the throat secretions are made when possible, and in such cases children are not allowed to return to school until negative results are obtained. A bacteriological examination of the throats of "contacts" is also made, and for this purpose the facilities offered at the Cardiff and County Public Health Laboratory are freely taken advantage of. All children of infected households are also excluded from school with the exceptions mentioned, in accordance with the rules referred to.

In large towns epidemics of measles occur usually about every two or three years, and at these periods large numbers of scholars in elementary schools are simultaneously attacked, so that if all healthy children from infected households were excluded from school during these epidemics, school attendance would be reduced to a very serious extent. It has been found in practice that this is entirely unnecessary, as the very great majority of children attending departments other than the Infants' Department are protected by an attack of this disease during infancy or early childhood. Consequently, however prevalent measles may be in the Infants' Department, it rarely spreads to the other standards. The procedure therefore which is adopted in this district is that which is followed in most large towns, and which is favourably commented upon by the Medical Officers of the Local Government Board and Board of Education in their Joint Memorandum on "Closure of and Exclusion from School," to the effect that when measles breaks out in a household, only those children are excluded who attend the infant school, together with those older children of the same household who have not had measles. Those who have had measles are allowed to attend as usual. This plan wherever adopted has been found quite satisfactory from a preventive standpoint, and has the considerable advantage of interfering as little as possible with school attendance. The following remarks occur in the memorandum relating to school closure in epidemics of measles:—

"School closure has probably more frequently taken place on account of epidemics of measles than for any other disease, but as the closure has been commonly deferred until a large proportion of the children are already absent, it has proved useless, in populous districts at least, for the purpose of preventing the spread of the disease.

"If measles is introduced into a school, the first crop of secondary cases will occur about 12 days after the original case, and in 12 days more there will be a second crop comprising the majority of the unprotected children. Thus school closure, as ordinarily practised after the second crop of cases has occurred, fails to prevent an epidemic. In view of this experience a class closure of short duration after the occurrence of the first case of measles in the class may be substituted, the class being closed on the ninth day after the sickening of the first child, for a period of five days only. After this period, only those who have sickened need be excluded, along with those in the same households who have not had measles or who attend the infant school."

The following table gives the number and cause of exclusions during the year on account of various forms of illness.

TABLE I.

Children excluded from School on Certificates of School Medical Officer after examination by Medical Inspectors:—

Cause of Exclusion.					Boys.	Girls.	Totals.
Diseases of Nose and Throat	...	...	...	...	12	9	21
External Eye Diseases	...	...	...	...	40	25	65
Defective Vision	...	...	...	...	5	...	5
Ear Diseases	...	...	...	...	17	6	23
Mental Defect	...	...	...	...	4	6	10
Heart Disorders	...	...	...	...	6	4	10
Respiratory Diseases	...	...	...	...	37	14	51
Diseases of Nervous System	...	...	...	...	14	25	39
Tuberculosis	Glands	...	...	...	6	5	11
	Phthisis	...	...	...	44	31	75
	Other Forms	...	...	...	6	5	11
Ringworm	...	...	...	...	121	81	202
Other Skin Disorders	...	...	...	...	119	89	208
Anæmia	...	...	...	...	26	17	43
Verminous Condition	...	...	...	...	...	17	17
Other Diseases or Defects	...	...	...	...	41	31	72
Totals					498	365	863

This table includes 107 children excluded from school after examination at the Tuberculosis Dispensary.

The number of certificates sent to schools excluding children on account of the existence of notifiable infectious diseases during the year amounted to 1,381.

ACTION TAKEN WITH A VIEW TO DETECTING AND PREVENTING THE SPREAD OF INFECTIOUS DISEASES.

This work is, of course, closely associated with the ordinary administrative work in the Department of the Medical Officer of Health.

The following table gives the number of scholars from the several schools notified to be suffering from infectious diseases.

TABLE II.

School.	Scarlet Fever.	Diphtheria	Totals.
Adamsdown C.	6	4	10
Albany Road C.	14	26	40
Allensbank C.	5	5	10
Court Road C.	6	6	12
Crwys Road C.	13	19	32
Eleanor Street C. ... ..	...	1	1
Gladstone C.	28	14	42
Grangetown C.	9	6	15
Kitchener Road C.	5	4	9
Lansdowne Road C.	6	1	7
Marlborough Road C.	27	5	32
Moorland Road C.	1	17	18
Ninian Park C.	3	3	6
Rodnor Road C.	16	4	20
Roath Park C.	9	10	19
Severn Road C.	7	25	32
South Church Street C. ... ..	...	1	1
Splotlands C.	10	15	25
Stacey Road C.	13	22	35
Wood Street C.	4	1	5
Canton N.P.	1	...	1
Cathays N.P.	1	10	11
Crofts Street N.P.	4	5	9
Grangetown N.P.	3	1	4
Metal Street N.P.	1	14	15
St. John's N.P.	2	3	5
St. Mary's N.P. (Bute Terrace)	1	...	1
St. Mary's N.P. (Clarence Road)	1	2	3
St. Mary's Mission N.P.	1	1	2
St. Monica's N.P.	5	3	8
Tredegaville N.P.	5	11	16
St. Alban's N.P.	1	2	3
St. Cuthbert's N.P. ... ..	...	...	...
St. David's N.P.	5	7	12
St. Mary's N.P. (Wyndham Crescent)	1	...	1
St. Patrick's N.P.	3	1	4
St. Peter's N.P.	5	3	8
Totals	222	252	474

C.—Council Schools.

N.P.—Non-Provided Schools.

The enclosed charts show the weekly notifications of scarlet fever, diphtheria, measles and whooping cough amongst scholars attending the public elementary schools. With respect to the notifications set forth in these charts, it must be borne in mind that scarlet fever and diphtheria are systematically notified to the Medical Officer of Health under the Infectious Disease (Notification) Act, whereas the information relating to cases of measles and whooping cough is for the most part derived from the Head Teachers on forms supplied to them for the purpose. This information, although of great value, is of necessity incomplete, and of course is not supplied at all during the holidays; this accounts for the apparent increase of cases of these diseases immediately after the holidays. It is evident that much of the success in controlling the spread of the non-notifiable diseases, such as measles and whooping cough, depends upon the powers of observation and co-operation of the School Teachers.

The following forms are used in connection with the control of infectious diseases in schools.

CARDIFF EDUCATION COMMITTEE.

TO THE SCHOOL MEDICAL OFFICER.

Notification of (1) School Children temporarily excluded from School by Head Teacher, or (2) Children absent from School on account of infectious disease (measles, whooping-cough, mumps, chicken-pox, etc.):—

SCHOOL.....DEPT.....

Name	Age	Address	(1) Reason for Temporary Exclusion, or (2) Suspected infectious disease causing absence

Signed,.....

Date.....191

Head Teacher.

CARDIFF EDUCATION COMMITTEE.

MEDICAL OFFICER'S OFFICE,
CITY HALL,
CARDIFF,

EXCLUSION.

TO THE HEAD TEACHER AND SCHOOL
ATTENDANCE OFFICER.

191

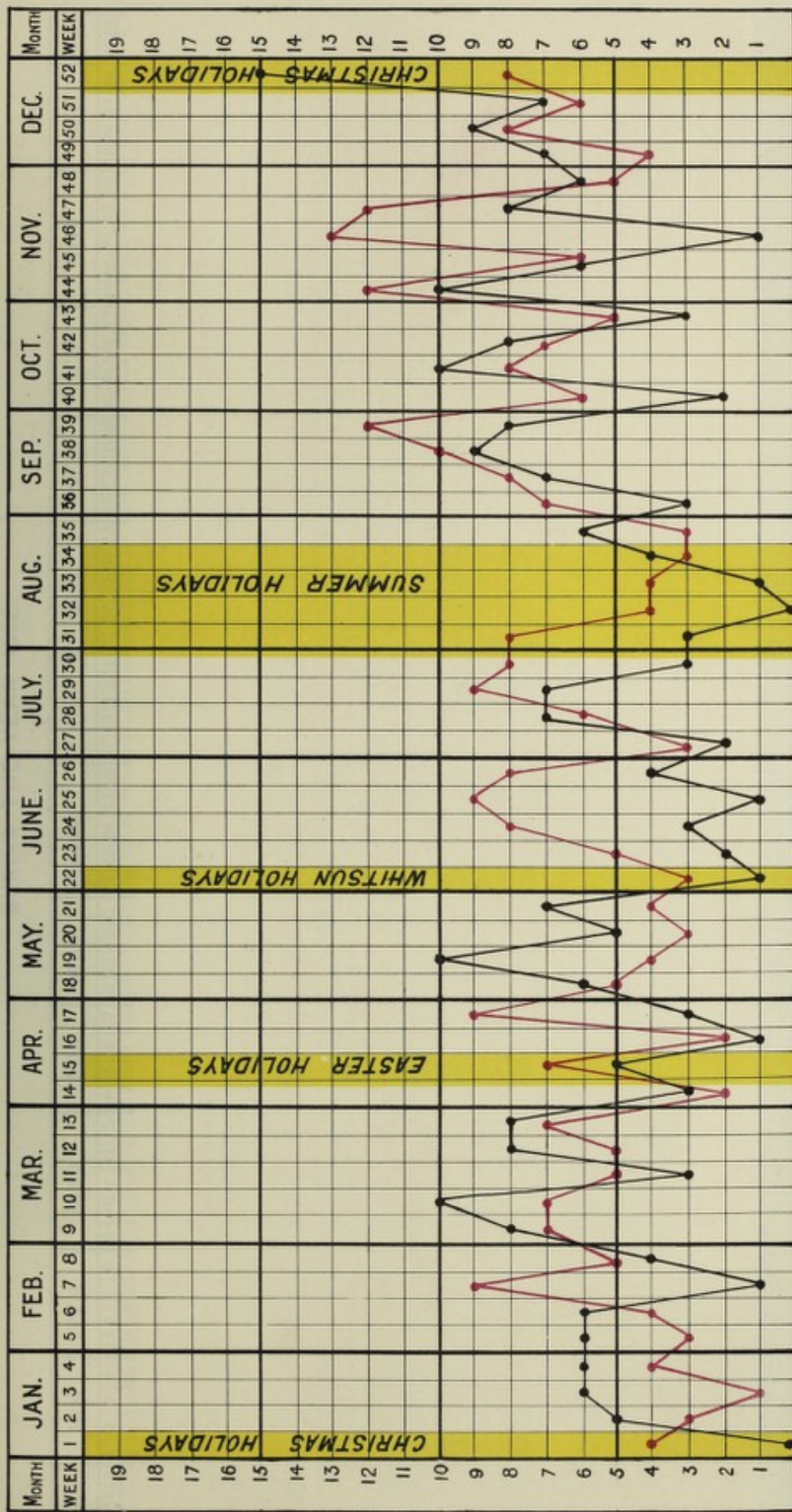
I hereby certify that.....
of.....attending the.....Department
of.....School has been excluded from
*School until further notice, * on the ground that.....is suffering from the following*
Infectious Disease, viz.:—.....

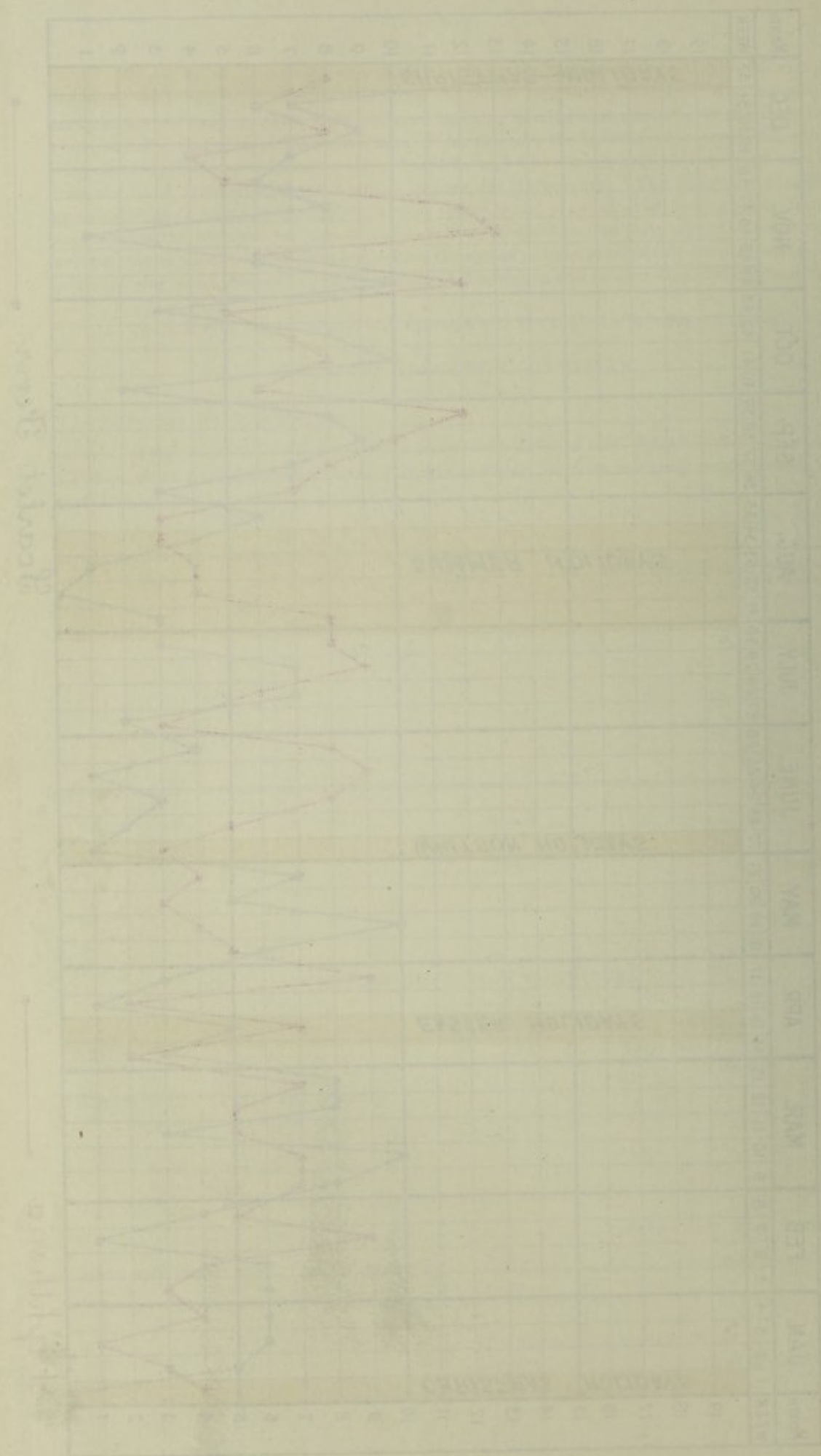
EDWARD WALFORD, M.D.,
School Medical Officer.

* A Re-admission Certificate will be sent in due course.

Chart A

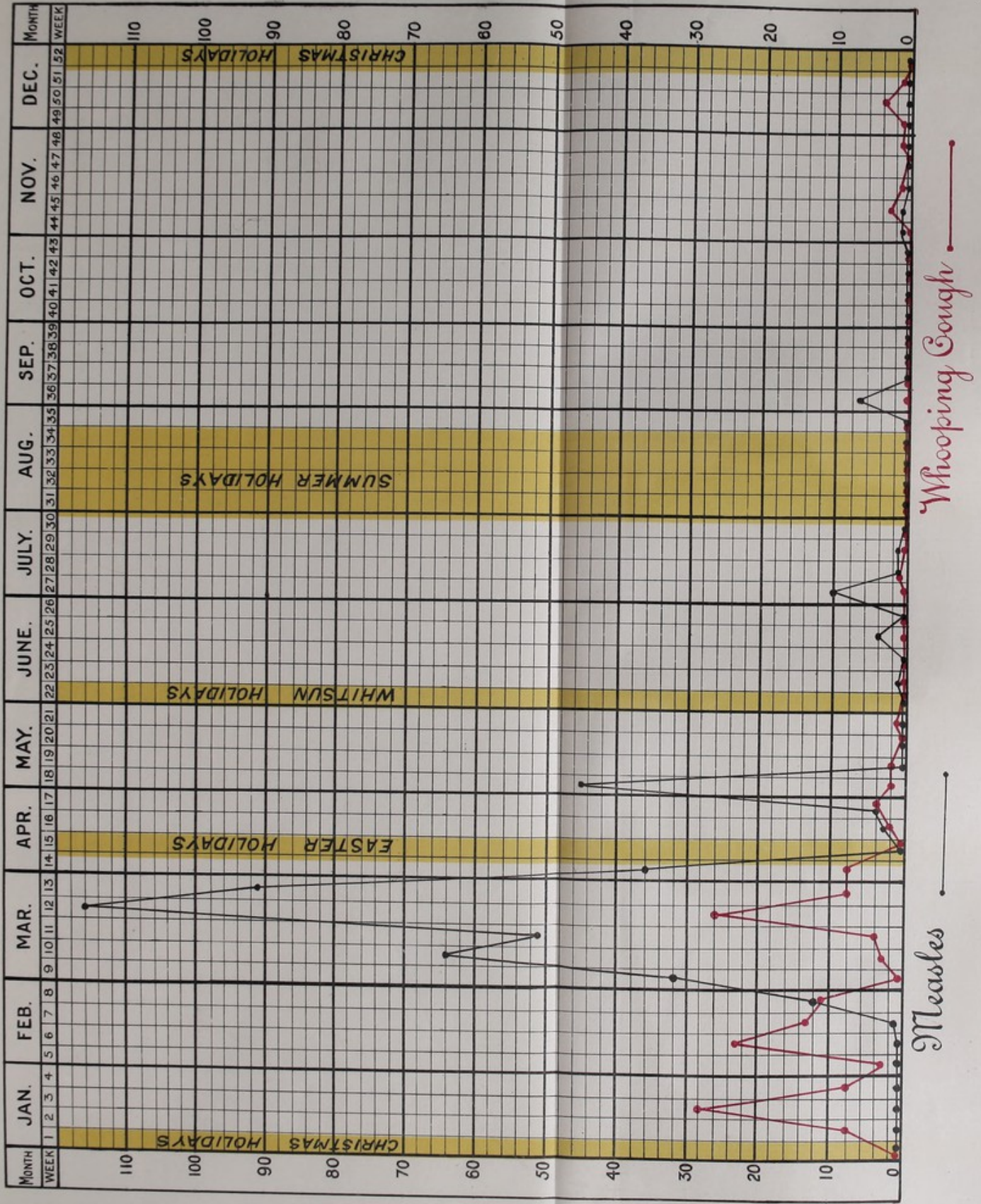
NOTIFICATIONS OF DIPHTHERIA AND SCARLET FEVER AMONGST SCHOOL CHILDREN IN EACH WEEK DURING THE YEAR 1912.





NOTIFICATIONS OF DISCONTINUITY AND SUBSTITUTIONS OF DATA IN REPORTS TO THE DIRECTOR OF THE BUREAU OF WEATHER SERVICE, U.S. DEPARTMENT OF AGRICULTURE, DURING THE YEAR 1943

NOTIFICATIONS OF MEASLES AND WHOOPING COUGH AMONGST SCHOOL CHILDREN IN EACH WEEK DURING THE YEAR 1912.



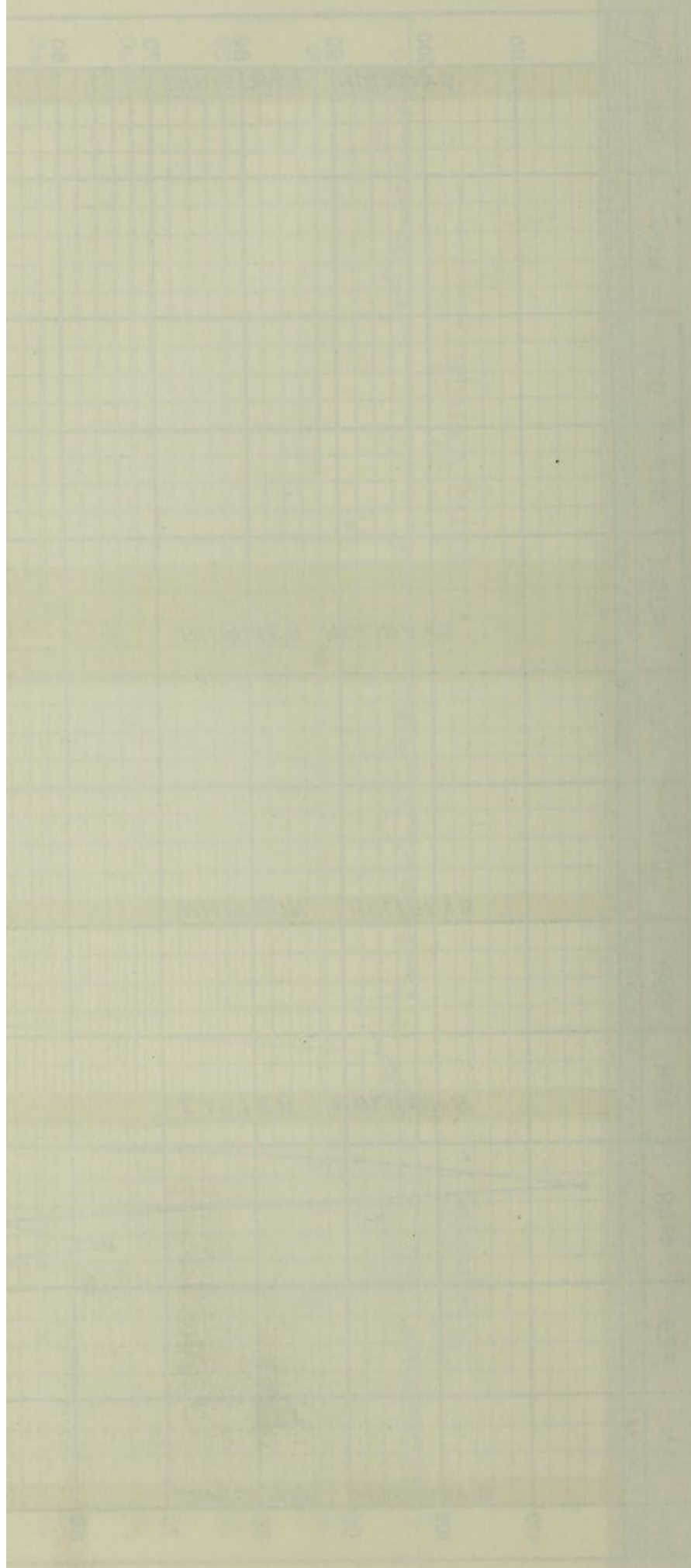


FIGURE 1. A graph showing the relationship between time and temperature for two different processes. The straight line represents a linear relationship, while the curve represents a non-linear relationship.

CARDIFF EDUCATION COMMITTEE.

RE-ADMISSION.

MEDICAL OFFICER'S OFFICE,
CITY HALL,
CARDIFF,

TO THE HEAD TEACHER AND SCHOOL
ATTENDANCE OFFICER.

191

I hereby certify that
of *attending the* *Department*
of *School may be re-admitted to School*
on the *day of* 191

EDWARD WALFORD, M.D.,
School Medical Officer.

CARDIFF EDUCATION COMMITTEE.

EXCLUSION.

MEDICAL OFFICER'S OFFICE,
CITY HALL,
CARDIFF,

TO THE HEAD TEACHER AND SCHOOL
ATTENDANCE OFFICER.

191

I hereby certify that
of *attending the* *Department*
of *School* ^{*has*} _{*have*} *been excluded from School*
until further notice, on the ground that the following Infectious Disease, viz.:*
..... *exists at the above-mentioned house.*

EDWARD WALFORD, M.D.,
School Medical Officer.

N.B.—This Certificate does not apply to the Patient.

* A Re-admission Certificate will be sent in due course.

CARDIFF EDUCATION COMMITTEE.

RE-ADMISSION.

MEDICAL OFFICER'S OFFICE,
CITY HALL,
CARDIFF,

TO THE HEAD TEACHER AND SCHOOL
ATTENDANCE OFFICER.

191

I hereby certify that
of *attending the* *Department*
of *School may be re-admitted to School*
on the *day of* 191,
the above-mentioned house having been disinfected.

EDWARD WALFORD, M.D.,
School Medical Officer.

N.B.—This Certificate does not apply to the Patient.

SUMMARY OF TABLES OF MEDICAL INSPECTION.

MALNUTRITION.—It has been found extremely difficult to fix a standard upon which an estimate of the amount of malnutrition amongst school children can be based. Useful indications may, however, be found in a study of the tables of weight and height. The variations which are shown in the estimates of this condition in reports of School Medical Officers, and in the tables compiled from information supplied by different Medical Inspectors in the same district, are evidence of the impossibility of drawing definite conclusions from these statistical data. The subject is, however, one of extreme importance, and requires further study and investigation. Opportunities for a more complete inquiry will be available upon the establishment of a School Clinic, which in itself will afford the means of a more detailed observation of the conditions under which the child is living. It will be seen on referring to Table IV., that the proportion of boys reported to be the subject of malnutrition exceeded that of the girls. In the Infants' Departments, the proportion was 4·3 per cent. amongst the boys, as compared with 3·8 per cent. amongst the girls. The variation was still greater in the higher standards. Amongst the children between the ages of 7 and 9 years, the proportion was 8·8 per cent. below normal of the boys, as compared with 2·2 per cent. of the girls. Of the total number of children examined in the routine inspection, 4·4 per cent. were found to be below normal in this respect.

CLEANLINESS.—Year by year improvement takes place in the general cleanliness of children attending the public elementary schools. This is doubtless due to some extent to the natural desire on the part of parents that their children should make a presentable appearance at the time of the medical inspection, and that they should compare favourably with their neighbours' children in this respect. There is abundant evidence, however, that a permanent influence for good has been produced by the closer medical supervision of the schools which has been exercised during recent years. Some parents still fail to recognize the serious consequence of sending their children to school in a dirty and neglected condition, and even at times with heads and bodies more or less covered with vermin. Much time and attention are afforded by the School Nurses to these conditions, which in many instances necessitate exclusion from school, together with visits and revisits at the home with definite instructions to the parents as to the requisite cleansing process.

It is evident that some use will be made of the new Cleansing and Disinfecting Station, which has been provided by the Sanitary Authority, and which will be opened for use in or about June next.

The worst and most obstinate cases can be dealt with by prosecutions by the Education Authority for non-attendance at school, or under the provisions of the Children Act, 1908. Such verminous children are in the first instance excluded from school by the School Medical Officer, when, if no attention is paid to the instructions given, the parents are prosecuted for non-attendance at school of their children. In the last annual report of the Chief Medical Officer of the Board of Education, the following case is reported as bearing upon this subject:—“On the 17th May, 1912, an important decision was given by the King's Bench Division of the High Court of Justice in the case of *Walker v. Cummings*, which was heard before the Lord Chief Justice, Mr. Justice Pickford, and Mr. Justice Avory. The *Hampshire* Local Education Authority had, through Dr. Walker, one of their Assistant School Medical Officers, prosecuted Mr. Cummings in respect of the non-attendance of his daughter at school. The Andover Justices refused to convict on the ground that the fact that the child had been presented at School, although in an unclean condition, and had been refused admission, deprived them of power to convict on the ground of non-attendance. The Local Education Authority, acting through Dr. Walker, appealed against the decision, and the Borough Justices stated a case for the decision of the High Court. The Lord Chief Justice, in delivering judgment, said that on the findings of the Justices, it was clear that the respondent knew that the child had been refused admission on account of its verminous condition, and that he had made ineffective attempts to cure it. If a child was sent to school in a verminous condition by a parent who, if he took the proper course, could cure it, that was not causing a child to attend school within the meaning of the Bye-law. There was no obligation on the teacher to

admit a verminous child, and to do so might cause much anxiety and expense to the parents of other children. The Justices should have convicted, and the case must go back to them with a direction to that effect. Mr. Justice Pickford and Mr. Justice Avory agreed."

Proceedings can also be instituted under Section 12 of the Children Act, against parents who have persistently neglected their children, and Section 122 of the same Act gives power to the Education Authority to themselves take steps to have the person or clothing of verminous children cleansed, and to make arrangements with the Sanitary Authority for the use of their Cleansing and Disinfecting Apparatus.

At the routine inspection, 1.6 per cent. of the children examined in the schools were found with verminous heads, and 1.9 per cent. with verminous bodies. During the year a large number of children (17,740) were specially examined by the School Nurses for neglected and verminous conditions. On the first examination, 571 children were found in this condition, and notices were sent to all the parents; 383 of these were subsequently re-examined, and 321 of them were found to have been cleansed. The School Nurses have done most excellent work in this connection.

DEFECTIVE TEETH.—The medical inspection of school children has revealed the fact that dental disease is much more prevalent than was formerly supposed. It has been found that throughout the country only about 5.6 per cent. of all children examined possessed completely sound teeth. Of those 12 years of age and over, 38.2 per cent. were found with four to six teeth decayed. This proportion corresponds very closely with that found in the Cardiff schools during the year 1912. Of the boys from 12 to 15 years of age 32.2 per cent., and of the girls at the same age 29.9 per cent. were found with four or more teeth decayed. Of the total number of children examined in the schools, 18.0 per cent. were found with sound teeth, 36.5 with less than four teeth decayed, and 45.5 with four or more decayed.

Of the 595 cases requiring treatment followed up by School Nurses, 415, or 69.7 per cent. had obtained no treatment whatever, the parents having altogether failed to comply with the recommendations made by the School Medical Officer.

From these figures it will be seen that the question of remedial treatment is a very urgent one, but it is also one which is not altogether easy of solution, for it is found in some towns that even when the services of a Dentist are offered free of charge, it is difficult to induce children to avail themselves of this advantage. Sometimes one visit is paid by the child under these circumstances, probably out of curiosity, but in many cases no consecutive or effective treatment has been carried out, owing to the failure on the part of the parents to overcome the active opposition on the part of the child.

Dental caries is due probably to a variety of causes, improper food in infancy and in after life is responsible for a good deal of the mischief; want of cleanliness of the teeth also plays an important part in the causation of this defect.

The steps which have been taken up to the present to procure dental treatment for school children in this district, include certain facilities which have been given by some of the local Dentists, who have agreed with the Education Authority to reduce their fees in the case of school children recommended for treatment by the School Medical Officer, charging 6d. for each extraction, 2/- for each tooth stopped (when not more than one visit is required), and 2/6 in other cases. During the year, 22.9 per cent. of the cases followed up by the School Nurses obtained treatment in this way, 2.5 per cent. were treated at the King Edward VII's Hospital, and 4.9 per cent. were treated privately, leaving 69.7 per cent. untreated.

It has been found that where a well organised dental clinic has been established, the proportion of untreated cases can be greatly reduced. For instance, in the last report of the Clinic at Cambridge, it is stated that this proportion has now been reduced to 19.6 per cent. It would seem that the best results have been obtained in those places in which whole-time Dentists have been engaged, who can devote some part of their time to the inspection of the children in the schools. This plan can also be adopted with advantage when part-time Dentists are employed, who are able to give one or two afternoons a week to the inspection. In large towns and districts it has usually been found

impracticable to treat all the dental disease existing in school children at all ages. It has therefore usually been necessary for the Dentist to concentrate his attention upon those between the ages of 6 and 8 years, when the earliest symptoms of decay are likely to be manifest in the new permanent teeth.

It is probable that under the existing conditions of medical inspection, the amount of dental caries is rather understated than overstated in the tables in this report, as defects would be discovered by a Dentist with a mirror and probe which would escape the attention of the Medical Inspector. Hence the advantage of securing the services of an experienced Dentist to undertake the inspection as well as the treatment on behalf of the Education Authority, should they decide upon providing such treatment.

DEFECTIVE VISION.—The routine inspection upon the school premises was the means of discovering a considerable number of children whose vision was defective. The preliminary test on these occasions is carried out by means of Snellin's test cards, which, with ordinary care, gives a fairly accurate indication of defective vision. The method consists in placing the child at the end of a well-lighted room and showing him a card, having upon it letters of different sizes and placed at a distance of twenty feet (six metres). The smallest type which he is able to read clearly at that distance is an index of his visual acuity. The result is stated in the form of a fraction, in which the numerator indicates the distance in metres between the test card and the child, and the denominator the size of the smallest type recognised by the child at that distance. Thus $\frac{6}{6}$ indicates normal or good vision, and the graduated scale is usually shown as $\frac{6}{8}$, $\frac{6}{12}$, $\frac{6}{18}$, &c., as shown in Table X. It is considered that a reading of $\frac{6}{18}$ or worse indicates a condition which requires the skilled advice of an Ophthalmic Surgeon, and all children showing such defective vision are advised to obtain treatment without delay. The inspection of 8,322 children in the schools revealed 481 cases of defective vision; 427 of these gave readings of $\frac{6}{18}$ or worse, and were recommended for medical treatment.

At the present time the defects may be remedied in several ways, but it will be seen that many cases remain altogether untreated. The methods available for the treatment of defective vision are as follows:—(1) Privately, by general practitioner or specialist; (2) By Ophthalmic Surgeons, with whom arrangements have been made to prescribe for cases at the reduced fee of 7/- per consultation; in these cases several Opticians have agreed to supply spectacles at reduced charges (2/- for spherical, and 4/6 for cylindrical lenses).

The following table shows the extent to which parents have availed themselves of these facilities during the years 1910, 1911 and 1912:—

Prescriptions obtained from:—	1910.	1911.	1912.
(a) School Ophthalmic Surgeons ...	2.0 per cent.	11.4 per cent.	10.2 per cent.
(b) King Edward VII's. Hospital ...	35.6 ..	23.1 ..	15.1 ..
(c) Privately	2.9 ..	1.3 ..	5.4 ..
Obtained Spectacles	40.4 ..	32.3 ..	27.2 ..
Not treated	59.3 ..	64.0 ..	69.3 ..

It would appear, therefore, that the proportion of cases of defective vision not treated has not diminished during the past three years. Parents in many cases fail to appreciate the importance of this condition, and sometimes raise objections to spectacles. Some again, although anxious to obtain treatment for their children, are unable to afford the reduced charges set forth in the above scale. It would seem highly desirable that some special provision should be made for this latter class, in view of the unfavourable influence of defective eyesight upon the educational progress of the child. In most districts in which School Clinics have been established treatment for defective vision takes a prominent place.

DISEASES OF THE THROAT, NOSE, AND EAR.—Many children in the elementary schools are found with conditions of the throat and nasal passages which seriously interfere with their health and progress at school. Enlarged tonsils and adenoids are frequently associated with mental dullness and deafness, and by obstructing the air passages may cause pulmonary inefficiency and possibly a predisposition to tuberculosis and other infectious disorders. Fortunately these conditions frequently yield to energetic and special treatment, but if neglected may result in permanent physical weakness

The position of Education Authorities with respect to the curative and preventive treatment of tuberculosis amongst school children is likely to be improved by recent legislation. If the amount of this disease in a community is to be reduced to any extent, it is obviously of the first importance to commence systematic treatment in the earliest stages of the disease, and to apply those measures intended to prevent the development of active tuberculosis amongst children whose physical condition indicates the probability of an attack unless they are placed under suitable conditions.

The Tuberculosis Regulations of 1912 make all forms of tuberculosis notifiable to the Medical Officer of Health. Consequently the disease as it occurs amongst children will be likely to receive more attention on the part of Education and Sanitary Authorities than has hitherto been the case. The National Insurance Act and the Finance Act, 1911, provide means for making grants in aid to sanatoria and other institutions for the treatment of adults and children suffering from tuberculosis, and grants in aid are promised to Sanitary Authorities providing institutional treatment for all classes of the community. Further, there is the provision of the Board of Education grant in aid of treatment by Education Authorities. Such grant would be available for the provision of open-air schools or suitable institutions for this treatment. Grants in aid of the capital cost of sanatoria for children will, however, only be made in case of residential institutions for cases of tuberculosis. Such sanatoria as provide education in schools certified under the Elementary Education (Defective and Epileptic Children) Act are entitled to receive from the Board of Education, in addition to the ordinary school grant, a grant in aid of the treatment provided. This treatment grant is available not only for residential schools, but also for open-air day schools.

Moreover, as under the Insurance Act, the dependents (children) of insured persons may also participate in the institutional treatment of tuberculosis arranged for by the Local Insurance Committee, the cost to the Education Authority will be comparatively small. Already the Tuberculosis Dispensary in Cardiff is available for the treatment of tuberculous children, and some of these attending the public elementary schools, have received treatment at this institution. These children are referred to the Tuberculosis Officer by the Medical Inspectors of School Children, and by general medical practitioners.

It is anticipated that in the near future a complete organisation for the treatment of tuberculous children will comprise several institutions in close association with the Public Health Department of the Sanitary Authority, and mutually correlated, so that children may be transferred from one to another without difficulty, and it is to be hoped that those bodies who are directly responsible for the provision of institutional treatment will fully realize the importance of securing an efficient administrative co-ordination between the School Clinic, Dispensary, Laboratory, Open-Air School, Sanatorium, and Hospital. Many delicate children, who might in unfavourable surroundings fall into the ranks of the consumptives, can of course be properly treated under suitable conditions and with special care in their own homes, and without any institutional treatment at all. In such cases the services of the Health Visitor and School Nurse may be resorted to with advantage. It is seldom that the parents of such children resent a little elementary instruction in domestic hygiene when judiciously administered by a sympathetic visitor, who may also be usefully employed in calling the special attention of the Medical Inspector to other children who have been in contact with tuberculous persons. It is probable that a good deal of useful information was imparted both to adults and to school children by the demonstrations and lectures given during the recent visits to this town and neighbourhood of the Tuberculosis Exhibition of the Welsh National Memorial Association. Those of the audiences who were willing to learn could not fail to understand the first principles of preventive treatment in connection with this disease.

It is of course abundantly clear to all intelligent observers that even with the most perfectly organised system of institutional treatment, no appreciable reduction in the amount of tuberculosis will be effected unless the general public consent to obey the rules of healthy living, and cease to congregate in dirty, ill-ventilated and over-crowded slums, and unless those responsible pay more attention in future to the planning of streets and towns, and to the construction of dwellings, than they have done in the past.

It is probable that the due enforcement of recent legislation, prohibiting the sale of milk from cows suspected to be tuberculous, will, in time, have some effect in diminishing the amount of this disease in children, whose diet in early life frequently consists almost entirely of unboiled milk.

Undoubtedly insufficient and improper diet is responsible for a good deal of illness and physical deficiency amongst young children, who may in consequence be rendered susceptible to the infection of tubercle. In this way therefore the provision of meals to children requiring them may be one of the preventive measures against this disorder.

Sir George Newman has pointed out that it is advisable to associate as far as possible any scheme for the provision of meals to children with the department of the School Medical Officer, where the records of children suffering from malnutrition are kept, and he suggests that the following functions might appropriately devolve upon the School Medical Officer :—

- “(1) He should report to the Local Education Authority all cases of bad or insufficient nutrition observed in the course of medical inspection (whether routine inspection or special inspection). Such cases should be put on the feeding list pending investigation as to the cause of malnutrition. (Unless, of course, it is already obvious that the malnutrition is due to conditions in which the Local Education Authority's meals will be of no use).
- “(2) Cases of doubt as to the propriety of keeping any child (whether selected as a result of medical inspection or otherwise) on the feeding-list, should be referred to him for report before the decision is taken.
- “(3) Cases of the temporary exclusion from the feeding list of children who are temporarily excluded on medical grounds from school attendance should be notified to him.
- “(4) He should periodically inspect the registers of the attendance at meals, both as regards the attendance generally, and as regards the attendance of individual children with whose cases he has previously been concerned.
- “(5) He should approve the dietary.
- “(6) He should satisfy himself of the hygienic conditions of the feeding centres.
- “(7) He should supervise the quality, quantity, cooking and service of the food.
- “(8) He should attempt to form and to record a judgment upon the effects of the proceedings taken under the Act upon the physical well-being of the children, both generally and as regards individual cases.”

During the year 1912, forty-seven, or 0·5 per cent., of the children examined during the routine inspection were reported to be suffering from tuberculosis in some form. Of these, fourteen were amongst the children aged 7 to 9 years, and seventeen amongst those between 12 and 15 years. Of the children who were referred for special examination, fifty-nine were reported to be suffering from tuberculosis.

TABLE

Number and Age Periods of Children

SCHOOL.	Infants—Boys.						Infants—Girls.					
	Ages—Years.					Total	Ages—Years.					Total
	3	4	5	6	7		3	4	5	6	7	
Adamsdown C.	33	17	7	5	62	...	37	22	8	7	74
Albany Road C.	33	23	20	...	76	...	28	42	11	3	84
Allensbank C.	24	28	9	7	68	...	17	23	14	6	60
Court Road C.	19	8	4	3	34	...	23	11	6	3	43
Crwys Road C.	34	28	7	2	71	...	19	24	13	3	59
Eleanor Street C.	4	4	1	3	12	...	2	2	4	...	8
Gladstone C.	31	40	12	7	90	...	21	49	25	7	102
Grangetown C.	2	26	10	1	3	42	1	17	11	4	4	37
Kitchener Road C.	34	45	41	28	148	...	38	35	36	17	126
Lansdowne Road C.	2	15	13	9	2	41	1	9	15	5	9	38
Marlborough Road C.	2	34	45	32	12	125	...	16	50	33	15	114
Moorland Road C.	60	32	23	7	122	...	58	40	19	5	122
Ninian Park C.	2	2	4	10	18	...	6	7	4	2	19
Radnor Road C.	1	15	16	8	3	43	1	13	22	9	2	47
Roath Park C.	3	43	36	13	7	102	2	17	39	13	8	77
Severn Road C.	3	63	41	17	6	130	5	43	37	19	2	106
South Church Street C.	2	4	2	...	8	...	1	3	...	...	4
Splotlands C.	34	19	9	6	68	...	32	22	6	4	64
Stacey Road C.	43	34	9	3	89	2	24	29	7	...	60
Wood Street C.	21	16	15	4	56	1	13	17	10	2	42
Canton N.P.	11	8	2	3	24	...	16	10	5	4	35
Cathays N.P.
Crofts Street N.P.	18	6	2	...	26	...	18	4	3	2	27
Grangetown N.P.	4	6	3	...	13	...	2	1	3	...	6
Metal Street N.P.	23	18	7	2	50	...	28	26	6	...	60
St. John's N.P.	2	7	3	1	13	...	3	4	...	...	7
St. Mary's N.P.	6	5	7	1	19	...	10	8	2	...	20
(Bute Terrace)
St. Mary's N.P.	3	1	...	1	5	2	1	1	...	...	4
(Clarence Road)
St. Mary's Mission N.P.	15	8	...	6	29	...	18	9	5	...	32
St. Monica's N.P.	21	4	5	...	30	...	18	8	3	...	29
Tredegaville N.P.	6	14	11	3	1	35	2	9	8	5	...	24
St. Alban's N.P.	5	9	5	1	20	...	9	9	3	2	23
St. Cuthbert's N.P.	2	...	1	...	3	...	2	3	...	...	5
St. David's N.P.	18	29	16	5	68	...	24	24	14	...	66
St. Mary's N.P.	11	10	8	1	30	...	13	8	8	6	35
(Wyndham Crescent)
St. Patrick's N.P.	7	3	1	4	15	1	9	4	4	1	18
St. Peter's N.P.	16	13	5	3	37	...	4	14	6	2	26
TOTALS ...	19	746	599	311	147	1,822	18	618	641	313	116	1,686

C.—Council Schools.

III.

Inspected at Routine Inspection :—

Boys.					Girls.							SCHOOL.
Ages—Years.				Total	Ages—Years.				Total	Totals		
7	8	13	14		7	8	13	14				
...	...	36	1	37	49	2	53	...	104	277	Adamsdown C.	
37	7	60	2	136	57	2	31	...	90	386	Albany Road C.	
51	11	40	1	103	40	6	27	...	73	304	Allensbank C.	
50	23	43	2	118	73	3	31	...	107	302	Court Road C.	
47	10	48	...	105	51	5	50	...	106	341	Crwys Road C.	
12	...	15	...	27	14	1	14	...	29	76	Eleanor Street C.	
38	12	48	...	128	68	7	37	2	114	434	Gladstone C.	
50	11	62	1	164	61	7	60	...	128	371	Grangetown C.	
13	21	35	...	69	...	...	17	...	17	360	Kitchener Road C.
...	...	56	1	57	...	...	44	...	44	181	Lansdowne Road C.
50	14	35	2	111	50	4	36	...	90	440	Marlborough Road C.	
59	14	76	...	159	...	...	46	...	46	449	Moorland Road C.
...	...	42	...	42	26	6	51	...	83	162	Ninian Park C.	
3	...	45	...	48	78	10	47	...	135	273	Radnor Road C.	
34	14	39	...	87	57	6	45	...	108	376	Roath Park C.	
...	...	67	...	67	103	25	57	...	185	488	Severn Road C.	
14	4	23	2	43	15	...	7	...	22	77	South Church Street C.	
37	15	73	...	175	98	3	58	...	159	466	Splotlands C.	
28	23	38	...	89	40	10	25	3	78	318	Stacey Road C.	
...	...	37	...	37	34	5	40	...	79	215	Wood Street C.	
12	4	...	...	16	26	6	22	...	54	129	Canton N.P.
1	12	13	...	26	10	1	8	...	19	45	Cathays N.P.	
10	4	...	...	14	15	...	...	...	15	82	Crofts Street N.P.
...	...	18	...	18	...	...	9	...	9	46	Grangetown N.P.
12	11	23	4	50	32	6	21	...	59	219	Metal Street N.P.	
18	1	25	1	45	16	4	19	1	40	105	St. John's N.P.	
22	5	18	...	45	5	5	17	...	27	111	St. Mary's N.P.	
											(Bute Terrace)	
24	2	8	2	36	19	5	21	...	45	90	St. Mary's N.P.	
											(Clarence Road)	
19	1	...	...	20	25	...	7	...	32	113	St. Mary's Mission N.P.
14	10	7	...	31	17	3	14	...	34	124	St. Monica's N.P.	
18	5	31	...	54	10	5	20	...	35	148	Tredegaville N.P.	
29	8	12	...	49	24	2	12	...	38	130	St. Alban's N.P.	
9	...	8	1	18	7	1	4	...	12	38	St. Cuthbert's N.P.	
46	6	39	...	91	...	...	35	...	35	256	St. David's N.P.
...	...	4	...	4	23	3	11	...	37	106	St. Mary's N.P.	
											(Wyndham Crescent)	
...	...	15	...	15	25	3	7	...	35	84	St. Patrick's N.P.	
23	7	44	1	75	22	4	34	2	62	200	St. Peter's N.P.	
50	255	1,183	21	2,409	1,190	150	1,037	8	2,385	8,322	TOTALS	

N.P.—Non-Provided Schools.

Table showing the number, age and sex of children medically examined at routine

	Infants—Boys. (Entrants).		Infants—Girls. (Entrants).		Boys. (7 to 9 years).	
	Number	Per cent.	Number.	Per cent.	Number.	Per cent.
Number Examined ...	1,822	...	1,706	...	1205	...
Clothing :—						
Good ...	692	37.9	817	47.8	431	35.7
Average ...	1,021	56.0	832	48.7	620	51.5
Below Average ...	109	5.9	57	3.3	154	12.7
Boots—Insufficient ...	38	2.0	28	1.6	26	2.1
Nutrition :—						
Good ...	633	34.7	615	36.0	584	48.4
Normal ...	1,109	60.8	1,026	60.1	514	42.6
Below Normal ...	80	4.3	65	3.8	107	8.8
Cleanliness (Head) :—						
Clean ...	1,752	96.1	1,370	80.3	1,124	93.2
Dirty ...	26	1.4	6	0.3	41	3.4
With Nits ...	28	1.5	282	16.5	30	2.5
Verminous ...	16	0.8	48	2.8	10	0.8
Cleanliness (Body) :—						
Clean ...	1,722	94.5	1,629	95.4	1,096	90.9
Dirty ...	67	3.6	47	2.7	52	4.3
Verminous ...	33	1.8	30	1.7	57	4.7
Teeth :—						
With Sound Teeth ...	532	29.2	510	29.9	101	8.3
With less than 4 decayed ...	568	31.1	511	29.9	291	24.1
With 4 or more decayed ...	722	39.6	685	40.1	813	67.4
Diseases of Nose and Throat	188	10.3	143	8.3	146	12.1
External Eye Diseases ...	64	3.5	48	2.8	59	4.9
Defective Vision* ...	11	0.6	20	1.1	101	8.3
Ear Diseases ...	32	1.7	20	1.1	14	1.1
Deafness ...	6	0.3	1	0.05	3	0.2
Heart Disorders ...	10	0.5	8	0.4	55	4.5
Respiratory Diseases ...	48	2.6	43	2.5	27	2.2
Diseases of Nervous System ...	3	0.1	1	0.05	1	0.08
Tuberculosis :—						
Glands ...	5	0.2	5	0.2	4	0.3
Phthisis ...	4	0.2	2	0.1	8	0.6
Other Forms ...	...	...	...	...	...	...
Rickets ...	27	1.4	11	0.6	19	1.5
Deformities ...	16	0.8	7	0.4	3	0.2
Ringworm ...	14	0.7	13	0.7	6	0.5
Other Skin Disorders ...	60	3.3	34	1.9	74	6.1
Other Diseases or Defects ...	82	4.5	53	3.1	69	5.7

* The vision of "entrants" is not tested at

IV.

inspection, and the results of such examination, during the year 1912 :—

Girls. (7 to 9 years).		Boys. (12 to 15 years).		Girls. (12 to 15 years).		Totals.	
Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number	Per cent.
1,340	...	1,204	...	1,045	...	8,322	...
648	48.3	412	34.2	417	39.9	3,417	41.0
663	49.4	712	59.1	611	58.4	4,459	53.6
29	2.1	80	6.6	17	1.6	446	5.3
35	2.6	23	1.9	24	2.3	174	2.1
309	23.0	537	44.6	265	25.3	2,943	35.3
1,001	74.7	610	50.6	749	71.6	5,009	60.2
30	2.2	57	4.7	31	2.9	370	4.4
1,198	89.4	1,148	95.3	807	77.2	7,399	88.9
1	0.07	18	1.5	1	0.09	93	1.1
108	8.0	35	2.9	213	20.3	696	8.4
33	2.4	3	0.2	24	2.3	134	1.6
1,287	96.0	1,100	91.3	1,000	95.7	7,834	94.1
45	3.3	79	6.5	38	3.6	328	3.9
8	0.6	25	2.0	7	0.6	160	1.9
77	5.7	178	14.7	100	9.5	1,498	18.0
396	29.5	638	52.9	632	60.5	3,036	36.5
867	64.7	388	32.2	313	29.9	3,788	45.5
184	13.7	107	8.8	103	9.8	871	10.4
19	1.4	24	2.0	14	1.3	228	2.7
65	4.8	175	14.5	109	10.4	481	5.8
13	0.9	25	2.0	12	1.1	116	1.4
30	2.2	14	1.1	21	2.0	75	0.9
30	2.2	29	2.4	18	1.7	150	1.8
2	0.1	23	1.9	14	1.3	157	1.9
2	0.1	...	...	3	0.3	10	0.1
1	0.07	5	0.4	1	0.09	21	0.2
1	0.07	10	0.8	1	0.09	26	0.3
...
3	0.2	18	1.4	5	0.5	83	1.0
2	0.1	11	0.9	13	1.2	52	0.6
3	0.2	2	0.1	...	...	38	0.4
14	1.0	39	3.2	11	1.0	232	2.8
10	0.7	61	5.0	42	4.0	317	3.8

routine inspection except in special cases.

TABLE V.

School Children recommended for Treatment (Routine Inspection) :—

	Infants (Entrant-)		Boys and Girls (7 to 9 years)		Boys and Girls (13 to 15 years)		Totals.		
	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.	
Children Examined ...	3,528	...	2,545	...	2,249	...	8,322	...	
Children recommended for treatment ...	502	14.2	1,068	41.9	568	25.2	2,138	25.7	
Diseases of Nose & Throat	156	4.4	94	3.6	38	1.7	285	3.4	
Defective Teeth ...	84	2.4	886	34.8	324	14.4	1,294	15.5	
External Eye Diseases ...	45	1.3	22	0.8	2	0.09	69	0.8	
Defective Vision ...	20	0.5	171	6.7	236	10.5	427	5.1	
Ear Diseases ...	50	1.4	32	1.2	25	1.1	107	1.3	
Heart Disorders ...	8	0.2	35	1.3	1	0.04	44	0.5	
Nervous Disorders ...	2	0.05	3	0.1	...	...	5	0.06
Respiratory Diseases ...	48	1.3	10	0.4	2	0.09	60	0.7	
Anæmia ...	10	0.3	3	0.1	3	0.1	16	0.2	
Ringworm ...	22	0.6	9	0.3	1	0.04	32	0.4	
Other Skin Disorders ...	51	1.4	37	1.4	14	0.6	102	1.2	
Tuber- culosis	Glands ...	7	0.2	5	0.2	2	0.09	14	0.1
	Pulmonary ...	5	0.1	9	0.3	2	0.09	16	0.2
	Other Forms ...	...	...	...	...	...	...	...
Other Diseases or Defects	74	2.1	7	0.3	22	0.9	103	1.2	

TABLE VI.

Age periods of 1,849 children inspected at Special Inspection :—

Age.	Inspected at the City Hall.		Inspected on School Premises.		Totals.
	Boys.	Girls.	Boys.	Girls.	
3	6	7	...	...	13
4	44	23	1	3	71
5	82	71	15	23	191
6	77	66	21	27	191
7	84	76	28	40	228
8	81	81	26	39	227
9	81	73	40	30	224
10	52	71	32	25	180
11	62	71	34	19	186
12	68	51	29	14	162
13	79	64	16	10	169
14	...	...	6	1	7
Totals ...	716	654	248	231	1,849

TABLE VII.

Results of examination of children inspected (Special Inspection) :—

	Inspected at City Hall.		Inspected on School Premises.		Totals.
	Boys.	Girls.	Boys.	Girls.	
Defective Teeth ...	...	...	3	1	4
Diseases of Nose and Throat ...	21	10	13	10	54
External Eye Diseases ...	39	23	14	11	87
Defective Vision ...	14	13	45	33	105
Ear Diseases ...	24	12	9	6	51
Mental Defect ...	6	6	1	2	15
Heart Disorders ...	11	8	9	1	29
Respiratory Diseases ...	53	18	6	1	78
Diseases of Nervous System ...	19	32	7	...	58
Tuberculous Diseases ...	27	22	6	4	59
Ringworm ...	139	92	10	12	253
Other Skin Disorders ...	159	128	30	21	338
Anæmia ...	30	30	6	5	71
Other Diseases or Defects ...	47	56	32	5	140
Normal ...	148	214	57	119	538
Totals ...	737	664	248	231	1,880

In a number of cases included in the foregoing table several diseases or defects occurred in the same child.

Re-examinations of children previously examined at the City Hall or on School Premises :—

Boys	...	...	...	...	...	...	717
Girls	...	...	...	...	...	...	503
Total							1,220

Average Height (without shoes) and average Weight (with clothes) of children medically inspected (routine inspection) :—

TABLE VIII.

MALES.									
Age	Number	AVERAGE HEIGHT.				AVERAGE WEIGHT.			
		Anthro- pometric Committee 1883 (Average)	Cardiff Schools			Anthro- pometric Committee 1883 (Average)	Cardiff Schools		
			Average	Average			Average	Average	
Years		ft. in.	ft. in.	Centimetres		st. lbs.	st. lbs.	Kilograms	
3	16	2 11	3 1.5	95.2		2 6	2 5.5	15.19	
4	734	3 1	3 2.3	97.3		2 9	2 8.0	16.33	
5	604	3 4	3 4.5	102.9		2 12	2 10.8	17.60	
6	303	3 7	3 6.5	107.9		3 2½	3 0.1	19.09	
7	1,067	3 10	3 9.0	114.3		3 7½	3 5.1	21.36	
8	253	3 11	3 9.8	116.3		3 13	3 7.2	22.32	
13	1,139	4 9	4 8.1	142.5		5 12½	5 6.8	34.84	

TABLE IX.

FEMALES.									
Age	Number	AVERAGE HEIGHT.				AVERAGE WEIGHT.			
		Anthro- pometric Committee 1883 (Average)	Cardiff Schools			Anthro- pometric Committee 1883 (Average)	Cardiff Schools		
			Average	Average			Average	Average	
Years		ft. in.	ft. in.	Centimetres		st. lbs.	st. lbs.	Kilograms	
3	15	2 10	3 0.5	92.7		2 3½	2 3.8	14.42	
4	603	3 0	3 2.0	96.5		2 8	2 7.0	15.88	
5	626	3 3	3 4.4	102.6		2 11	2 10.3	17.37	
6	302	3 6	3 6.2	107.2		2 13¾	2 13.2	18.68	
7	1,213	3 8	3 8.6	113.3		3 5½	3 4.1	20.91	
8	143	3 10½	3 9.3	115.1		3 10	3 5.7	21.64	
13	971	4 9½	4 8.8	144.2		6 3	5 11.6	37.02	

TABLE X.

VISION OF 4,419 CHILDREN INSPECTED AT ROUTINE INSPECTION.

Sex and Age of Children Examined.	Number Examined.	Normal. $\frac{6}{6}$		$\frac{6}{8}$		$\frac{6}{12}$		$\frac{6}{18}$		$\frac{6}{24}$		$\frac{6}{33}$		$\frac{6}{60}$	
		R.	L.	R.	L.	R.	L.	R.	L.	R.	L.	R.	L.	R.	L.
Boys—(7 to 9 years) ...	1,181	1,110	1,091	4	1	15	16	30	49	10	13	6	7	6	4
Girls—(7 to 9 years) ...	1,006	851	842	53	37	31	53	38	32	16	21	8	8	9	13
Boys—(13 to 15 years) ...	1,201	939	956	81	59	48	42	60	67	26	32	27	21	20	24
Girls—(13 to 15 years) ...	1,031	769	776	86	71	65	70	43	33	24	35	20	18	24	28
TOTALS ...	4,419	3,669	3,665	224	168	159	181	171	181	76	101	61	54	59	69
PERCENTAGES ...	...	83.0	82.9	5.1	3.8	3.6	4.1	3.9	4.1	1.7	2.3	1.4	1.2	1.3	1.5

Children specially examined by the School Nurses for neglected and verminous conditions :—

Children examined	17,740
Children found upon first examination to be neglected or verminous	571
Notices sent to parents	571
Children (previously found to be neglected or verminous) re-examined	383
Children, who upon the first examination were neglected or verminous, found upon re-examination to have been cleansed	321

TABLE XI.

Children with minor ailments treated by School Nurses :—

Disease or Defect.	Boys.	Girls.	Totals.
Ringworm	81	39	120
Other Skin Disorders	75	40	115
Scabies	45	20	65
Verminous Conditions... ..	1	17	18
Other Conditions	10	13	23
Totals	212	129	341

The results of the procedure known as "following up" (including "special" and "routine" cases) are given in the following three tables :—

TABLE XII.

Defects other than defective teeth and vision :—

	Number.	Percentage
Cases followed up ... { By visits of School Nurses 650 By other inquiries ... 456 }	1,106	...
Defects treated :—		
(a) At King Edward VII's. Hospital	134	12.1
(b) By Medical Practitioners	199	18.0
(c) By Queen's Nurses	61	5.5
(d) At Tuberculosis Institute	27	2.4
(e) By School Nurses	282	25.5
(f) Home Treatment	258	23.3
Not treated	145	13.1

In the foregoing table "home treatment" refers to cases of minor ailments treated by parents, either upon instructions from the School Nurses or from Chemists.

The diseases or defects that had not been treated at the time of enquiry were :—

Diseases of Nose and Throat	...	...	...	...	83
External Eye Diseases	...	...	...	...	5
Ear Diseases	...	...	...	...	12
Deafness	...	...	...	...	2
Respiratory Diseases	...	...	...	...	4
Diseases of Nervous System	...	...	...	...	1
Tuberculous Diseases	...	...	...	...	3
Rickets	...	...	...	...	1
Ringworm	...	...	...	...	18
Other Skin Disorders	...	...	...	...	12
Verminous Condition	...	...	...	...	1
Other Diseases or Defects	...	...	...	...	3
Total	...	...	...	...	145

TABLE XIII.

Defective Vision :—

	Number.	Percentage
Cases followed up	371	...
<div> <div> By visits of School Nurses 532 </div> <div> By other inquiries ... 19 </div> </div>		
Cases treated or prescriptions obtained :—		
(a) School Ophthalmic Surgeons	38	10.2
(b) At King Edward VII's. Hospital	56	15.1
(c) Privately	20	5.4
Obtained spectacles	101	27.2
Not treated	257	69.3

TABLE XIV.

Defective Teeth :—

	Number.	Percentage
Cases followed up	595	...
<div> <div>By visits of School Nurses 476</div> <div>By other inquiries 119</div> </div>		
Cases treated :—		
(a) By School Dentists	136	22.9
(b) At King Edward VII's. Hospital	15	2.5
(c) Privately	29	4.9
Not treated	415	69.7

VIRGIL STREET SCHOOL FOR MENTALLY DEFECTIVE CHILDREN.

Children on Register at end of Year	...	...	...	...	...	41
Average Attendance	...	...	...	...	...	32
Children Admitted during the Year	...	...	...	...	...	8
Children Left during the Year	...	...	...	...	...	15

Reasons for Leaving :—

Over Age	...	...	...	...	...	4
Ineducable...	...	...	...	...	...	1
Transferred to Normal Schools	...	...	...	...	...	1
Left the town	...	...	...	...	...	2
At Remunerative Work	...	...	...	...	...	2
In an Institution	...	...	...	...	...	1
Illness	...	...	...	...	...	4

TABLE XV.

Number and ages of children attending Virgil Street School for Mentally Defective Children,
who were medically inspected during the year 1912 :—

AGE LAST BIRTHDAY.	BOYS.	GIRLS.	TOTAL.
Years.			
8	1	2	3
9	3	1	4
10	2	1	3
11	3	4	7
12	6	...	6
13	3	1	4
14	...	2	2
15	...	2	2
16	...	1	1
Totals	18	14	32

TABLE XVI.

Physical and Mental Condition of Children attending Virgil Street School for Mentally Defective Children :—

	BOYS.	GIRLS.	TOTALS.
Number of children examined	18	14	32
1.—Physical Condition :—			
Nutrition normal	16	12	28
Nutrition below normal	2	2	4
Defective Vision	2	1	3
Defective Hearing	2	2	4
Defective Speech	3	...	3
Dental Caries	7	7	14
Diseases of Nose and Throat	5	1	6
Epilepsy	1	1	2
Other conditions	1	1	2
2.—Physical Stigmata of :—			
Palate... ..	6	4	10
Face	1	...	1
Teeth	2	1	3
Ear	1	...	1
3.—Personal History :—			
Infantile convulsions	2	1	3
Rickets	1	2	3
4.—Family History :—			
Insanity	1	...	1
Epilepsy	3	2	5
Feeble-mindedness	1	...	1
Alcoholism ... ..	...	1	1
Tuberculosis	3	...	3
5.—Diagnosis :—			
Feeble-mindedness	17	14	31
Imbecility	1	...	1
Idiocy... ..	...	...	...
6.—Line of Training :—			
Manual	5	4	9
Doubtful	4	3	7
Combined	9	7	16

ORAL SCHOOL FOR DEAF CHILDREN.

TABLE XVII.

Number, sex, and ages of children medically inspected :—

AGE.	BOYS.	GIRLS.	TOTALS.
Year.			
7	1	2	3
8	...	1	1
9	1	...	1
10	3	1	4
11	1	1	2
12	1	2	3
13	3	2	5
14	...	2	2
15	1	1	2
Totals	11	12	23

TABLE XVIII.

Results of medical examination of deaf children :—

	BOYS.	GIRLS	TOTALS.
Number Examined	11	12	23
Clothing :—			
Good	6	9	15
Average	5	3	8
Nutrition :—			
Good	3	4	7
Normal	8	8	16
Cleanliness (Head) :—			
Clean	11	9	20
With Nits ... ..	...	3	3
Cleanliness (Body):—			
Clean	11	12	23
Teeth :—			
With less than 4 decayed	5	7	12
With 4 or more decayed	6	5	11
Hearing :—			
Partially deaf	4	3	7
Totally deaf	7	9	16

TABLE XVIII.—continued.

	BOYS.	GIRLS.	TOTALS.
Speech :—			
Normal	5	5	10
Defective	5	4	9
Dumb	1	3	4
Enlarged Tonsils ... ..	...	2	2
Defective Vision	1	2	3
Otorrhœa ... ..	...	2	2
Heart Disorders	2	...	2
Respiratory Diseases ... ..	...	2	2
Rickets ... ..	...	1	1
Goitre (slight) ... ..	...	1	1
Skin Disorders	1	...	1
Causes of Deafness :—			
Congenital	8	7	15
Acquired through :—			
Measles ... ..	...	2	2
Scarlet Fever ... ..	...	1	1
Meningitis	2	1	3
Pertussis	1	...	1
Undetermined ... ..	...	1	1

SCHOOL FOR BLIND CHILDREN.

TABLE XIX.

Number, sex, and ages of children medically inspected :—

AGE.	BOYS.	GIRLS.	TOTALS.
Years.			
7	1	1	2
8	...	1	1
9	...	2	2
10	2	1	3
11	2	...	2
12	3	1	4
13	1	1	2
14	1	...	1
15	1	...	1
16	...	1	1
Totals	11	8	19

TABLE XX.

Results of medical examination of blind children :—

	BOYS.	GIRLS.	TOTALS.
Number examined	11	8	19
Clothing :—			
Good	4	5	9
Average	5	3	8
Below Average	2	...	2
Nutrition :—			
Good	2	2	4
Normal	9	6	15
Cleanliness (Head) :—			
Clean	11	5	16
With Nits ... ..	...	3	3
Cleanliness (Body) :—			
Clean	10	8	18
Dirty	1	...	1
Teeth :—			
Sound	2	...	2
With less than 4 decayed	6	4	10
With 4 or more decayed	3	4	7
Enlarged Tonsils ... ..	...	3	3
Deafness	1	...	1
Mental Defect	1	...	1
Heart Disorders	1	...	1
Bronchitis	1	1	2
Defective Speech	1	...	1
Rickets	1	1	2
Causes of Blindness or Defective Vision :—			
Cataract	2	2	4
Corneal Ulceration	1	1	2
Congenital Blindness (Ophthalmia Neonatorum)	3	1	4
Optic Atrophy	2	...	2
Nystagmus	2	3	5
Keratitis	1	...	1
Doubtful ... ..	...	1	1

I have the honour to be, Ladies and Gentlemen,

Your obedient Servant,

EDWARD WALFORD,

School Medical Officer.