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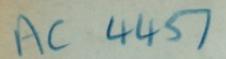
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# ANNUAL REPORT

CHIEF SCHOOL MEDICAL OFFICER

TO

OF THE

## The Education Committee

OF THE

# NOTTS. COUNTY COUNCIL,

#### FOR THE YEAR 1910,

BY

HENRY HANDFORD, M.D., D.P.H., Camb.

Fellow of the Royal College of Physicians of London. Fellow of the Royal Sanitary Institute. Hon. Consulting Physician to the General Hospital, Nottingham, and to the Nottm. and Notts. Sanatorium for Consumption.

NOTTINGHAM : E. H. LEE, PRINTER, UPPER PARLIAMENT STREET. 1911. "The first requisite to success in life is to be a good animal."

Herbert Spencer (Education).



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## . INDEX. .

PAGE

| Absence of Chi               | ldre  | n         |      | 5,  | 14 |
|------------------------------|-------|-----------|------|-----|----|
| Adenoids                     |       |           |      | 11, | 24 |
| Area                         |       |           |      |     | 3  |
| Attendance Off               |       |           |      |     | 8  |
| Attendance of                | Pare  | nts       |      | 5,  | 10 |
| Average Attend               | lance |           |      |     | 3  |
| Blind Children               |       |           |      |     | 7  |
| Boots                        |       |           |      |     | 15 |
| Breathing Exer               | cises | s         |      |     | 8  |
| Care Committe                | es    |           |      |     | 11 |
| Caretakers                   |       |           |      |     | 8  |
| Children : Num               |       |           | 1    | 4,  | 12 |
| ,,                           |       | absent    |      | 5,  | 14 |
| Cleanliness                  |       |           |      | 19, | 20 |
| Clothing                     |       |           |      | 16, | 20 |
| Closure of Scho              | ols   |           |      |     | 6  |
| Deaf Children                |       |           |      | 7,  | 25 |
| Defects                      |       |           |      | 4,  | 11 |
| Dental Treatme               | nt    |           |      | 6,  | 22 |
| ""                           |       | at Welb   | eck  |     |    |
|                              |       | School    | •••  |     | 6  |
| Disinfection                 |       |           |      |     | 6  |
| Disinfection<br>Ear Diseases |       |           |      |     | 25 |
| Lye Diseases                 |       |           |      |     | 24 |
| Exclusion from               | Sch   | ool       |      | 7,  | 19 |
| Feeble-minded                | Child | lren      | 7,   | 25, | 26 |
| Glands, Enlarge              |       |           |      |     | 24 |
| Hair                         |       |           |      | 19, | 20 |
| Heart Diseases               |       |           |      |     | 26 |
| Height                       |       |           |      |     |    |
| Height · Urhan               | 22    | Rural     |      |     |    |
| Se                           | hools | s         | •••  |     |    |
| Home Visiting                |       |           | •••  |     | 19 |
| Hygiene                      |       |           |      |     | 7  |
| Infectious Disea             | ses   |           | - 5, |     |    |
| Lung Diseases                | • •   |           |      |     | 26 |
| Measles                      |       | 1 3 . 1 - | 5.   | 14, | 15 |

|                        |       |        | PAGE     |
|------------------------|-------|--------|----------|
| Medical Officers of H  | fealt |        | 6        |
| Mentally Deficient     | • •   | 7      | , 25, 26 |
| Neglect                | • •   |        | 5        |
| Nervous Diseases       | •••   |        | 26       |
| Nose, Disease of       |       |        | 24       |
| Number on Books        | • •   |        | 3        |
| Nurses                 |       |        | 3, 20    |
| Nutrition              |       |        | 19       |
| Open Air Schools       |       |        | 5, 8     |
| Physical Exercises     |       |        | 8        |
| Population             |       |        | 3        |
| Poverty                |       |        | 5, 11    |
| Prosecutions           |       |        | 4, 20    |
| Pupil Teachers         |       |        | 8        |
| Rickets                |       |        | 26       |
| Ringworm               |       |        | 27       |
| Sanitary Deficiencies  |       |        | 7        |
| School Closure         |       |        | 6        |
| Schools : Number       |       |        | 3        |
| School Nurses          |       |        | 3, 20    |
| Society for Prevention | of Ci | uelty  |          |
| to Children            |       |        | 21       |
| Spectacles             |       |        | 11       |
| Speech, Defects of     |       |        | 25       |
| Staff                  |       |        | 3, 4     |
| Teachers               |       |        | 9        |
| Teeth                  |       | 6,     | 22, 23   |
| Temperance             | · · · |        | 7, 8     |
| Treatment              |       |        | 4, 5, 6  |
| Fonsils                |       |        | 24       |
| Tooth Brushes          |       |        | 22       |
| Fuberculosis           |       |        | 26       |
| Verminous Conditions   |       |        | 19. 20   |
| Vision                 |       |        | 24       |
| Weight                 |       | 5, 16, | 17, 18   |
| Whooping Cough         |       |        | 14, 15   |
|                        |       | 10000  |          |



### To the Education Committee

#### of the

### Notts. County Council.

THE SHIRE HALL,

Nottingham,

April, 1911.

My Lords and Gentlemen,

I have the honour to present my third Annual Report, which deals with the year 1910.

In drawing it up the same general plan has been followed as in the two previous years, in order that comparison may be more easily made, and that improvements and advances may be more readily understood. The general plan adopted is based very closely upon the wishes expressed by the Board of Education in their Circular, No. 596, issued in August, 1908. The chief alterations are that the statistical tables, instead of being printed in two large sheets, have been cut up into several smaller portions and placed in juxtaposition to the subject matter to which they relate; and that the description of the detailed work of Medical Inspection has been mainly written by Dr. Holmes, who is engaged in the actual work of inspection and can, therefore, give a more living picture.

The population of the County for Elementary Education purposes (that is the Administrative County, excluding the Municipal Boroughs of Mansfield, Newark, and Retford), amounts to about 280,852. The area is 507,835 acres, or 793<sup>1</sup>/<sub>2</sub> square miles. The number of schools is 248. The average number of children upon the books during the year was 47,704; and the average attendance was 43,134.

The Staff consists, in addition to myself, of

Dr. T. E. Holmes

Dr. Rose Hudson

and five Nurses, namely, Miss Parmiter, Miss Barker, Miss Watkins, Miss Marriott, and Miss Collier. The three latter only commenced work in July, 1910.

The clerical work is done by two typists, who give part of their time to work for the Health Department and receive equivalent assistance, when necessary, from the head clerk.

Fortunately, the health of the staff was good on the whole, and but little time was lost from sickness, so that the year 1910 may be taken to represent an average year's work.

The total number of children completely examined in the year 1910 was 10,229, compared with 8,990 in 1909 and 4,236 in 1908.

In addition, the Nurses have examined the girls' hair in 55,299 instances and found it to contain nits or vermin in 60.8 per cent. This includes a considerable number of re-examinations. The short hair of the boys was only affected in 6.7 per cent. A very great deal of work has been done in this direction of which full details are given on pp. 19, 20. With the increased staff of nurses it has been possible to do much more work in visiting the homes, and it is in this direction that most improvement may be expected. The task is an unusually difficult one, but some progress is being made.

During the year the parents of eight children were prosecuted for not sending their children to school in a condition fit for admission, and convictions were obtained in seven cases.

Of the 10,229 children fully examined 641, or 6.26 per cent. were in immediate need of treatment, and the parents were so advised. This is a much smaller number than in 1909, when 10.3 per cent. needed treatment, or in 1908 when 9.8 needed treatment, although the number of children examined is larger and the standard has not been altered. The explanation is probably that the plan of medically inspecting, in addition to "entrants" and "leavers," all children who, the teachers consider, are physically or mentally unfit to benefit by the instruction given has already brought a large proportion of the unsound children under inspection, and now little more than the normal proportion of children needing treatment come under notice. This is a satisfactory result.

Of the 641 children needing treatment, it has been ascertained by the subsequent visits of a nurse that 290, or 45.9 per cent. succeeded in obtaining it. This is a great advance and compares very favourably with 34.6 per cent. in 1909. It shows the advantage of "following up" the cases *quickly*. In 84 cases poverty was pleaded as the reason for no treatment being obtained, and in 121 no cause but neglect or indifference could be ascertained. There can be no doubt that the formation of "Care Committees" which is at the present time under consideration, is the best means of dealing with such cases.

The interest of the parents in Medical Inspection is not only well sustained, but continues to grow. This says much for the kindliness and efficiency with which the actual inspection is carried out. In 1908 a parent or near relative was present in 38.1 per cent. of the children examined, in 1909 in 49.6 per cent., and in 1910 in a little over 50 per cent. More precisely, in 46.9 per cent. of the boys and 53.5 per cent of the girls. There were only 507 children absent from inspection from illness and all other causes together. Only 40 objections from parents came to my knowledge. This shows that parental objection to Medical Inspection continues to be a negligible quantity.

In connection with the tables there are several important points to which attention should be directed, even though 'statistics' are not popular.

In the first place, the very close similarity in the proportionate figures obtained in each of the three years is the best proof of the care and accuracy with which the work has been done. The remarkably small variation in the average height and weight in each of the three years, speaks well for the accuracy of the weighing and measuring machines, and for the care with which the nurses and teachers have used them. The interesting table on page 18 shewing the greater height and weight of children in country districts is of much value, and pleads for open air schools.

Similarly, the statistics relating to infectious diseases come out almost exactly alike each year, and form a useful basis upon which to advise as to school closure.

Finally, it may be taken that a workable statistical basis of the needs of this County as revealed by Medical Inspection has now been obtained, though of course it will be subject to slight modifications from year to year.

It is all the more important, therefore, that the question of treatment should be more seriously considered now that the needs and requirements are no longer a matter of speculation. In considering the subject of treatment the teeth take a prominent, if not indeed the first place, both on account of their importance to health and on account of the almost universal prevalence of disease. The fact that the proportion of boys and of girls, taken separately, found to have one or more decayed teeth needing treatment was almost exactly the same (namely, 87.2 per cent. of the boys and 87.6 per cent. of the girls), shows that the observations are probably accurate. They are confirmed by the observations of trained dentists, who, with the additional aids to diagnosis which they habitually employ, find from 90 up to even as many as 97 per cent. of school children needing treatment.

I am exceedingly glad to say that for some years past, owing to the kindness and generosity of the Duchess of Portland, a commencement has been made in providing dental treatment for the children attending the Welbeck school. I hear from the Dentist, Mr. Renshaw, that at the present time nearly 60 children are receiving periodical attention in one way or another. In addition, instruction has been given on the care of the teeth and much interest excited. For each child who is a member of this dental club, the parent pays one penny per week, and the deficit, which is considerable, is made up by the generosity of Her Grace the Duchess of Portland. It is much to be hoped that similar dental treatment will soon be started in other parts of the County.

The matter of school closure has entailed a good deal of consideration and has been carried out, in most instances, in consequence of the personal advice of the Chief School Medical Officer.

Schools and departments have been closed for the periods and at the dates shewn on the adjacent table. The co-operation of the Medical Officers of Health of the various Urban and Rural Districts in the County has proceeded without a hitch. The school buildings and furniture have been disinfected after the prevalence of infectious disease, where necessary.

Two matters in connection with school closure are not satisfactory.

First, that the School Medical Officer should be expected to advise the closure of a school when the attendance has fallen below a certain point owing to the prevalence of infectious illness, *in order to avoid loss* of grant; even though school closure will not favourably influence the course of the epidemic and the healthy children would be much better at school. And, secondly, that the closure of the infant division of a mixed school now again entails loss of grant.

| LIST OF SCHOOLS CLOSED ON | ACCOUNT OF INFECTIOUS | DISEASE DURING 1910. |
|---------------------------|-----------------------|----------------------|
|---------------------------|-----------------------|----------------------|

|                      |                                 | CLOSED            |                               |                      | N                                 | CLOSED            | CAUSE.                        |
|----------------------|---------------------------------|-------------------|-------------------------------|----------------------|-----------------------------------|-------------------|-------------------------------|
| DISTRICT.            | NAME OF SCHOOL.                 | FROM TO           | CAUSE.                        | DISTRICT.            | NAME OF SCHOOL.                   | FROM TO           | CAUSE.                        |
| Kirkby-in-Ashfield   | Church Street, Council          | Jan. 10-Jan. 31   | Measles                       | Newark Rural         | Barnby-in-the-Willows             | July 14-Aug. 2    | Whooping Cough                |
| Kirkby-in-Ashfield   | Chapel Street, Council          | Jan. 10—Jan. 31   | Measles                       | Carlton              | Church, Infants'                  | July 18-July 29   | Mumps                         |
| Mansfield Woodhouse  | Church                          | Jan. 10-Feb. 7    | Measles and Mumps             | Basford              | Lynby-cum-Papplewick              | July 26-July 29   | Measles and Whooping<br>Cough |
| Mansfield Woodhouse  | Council                         | Jan. 10-Feb. 7    | Measles                       | Skegby               | Blidworth, Church                 | Aug. 2-Aug. 9     | Measles                       |
| Southwell            | Wesleyan, Infants'              | Jan. 15-Feb. 14   | Whooping Cough                | Skegby               | Blidworth, Wesleyan               | Aug. 2-Aug. 8     | Measles                       |
| East Retford Rural   | Grove, Church                   | Jan. 26-Feb. 10   | Scarlet Fever                 | East Retford Rural   | Sutton-cum-Lound                  | Aug. 15-Aug. 22   | Measles                       |
| Kirkby-in-Ashfield   | St. Thomas', Council            | Feb. 7-Mar. 21    | Measles                       | Bingham              | Upper Broughton, Council          | Aug. 17—Sep. 26   | Cerebro Spinal Fever          |
| Kirkby-in-Ashfield   |                                 | Feb. 7-Mar. 21    | Measles                       | Bingham              | Hickling, Council                 | Aug. 22-Sep. 26   | Cerebro Spinal Fever          |
| Kirkby-in-Ashfield   | Infants'<br>North End, Council, | Feb. 9-Mar. 21    | Measles                       | Southwell            | Farnsfield, Church,<br>Infants'   | Aug. 25-Sep. 19   | Measles                       |
| Newark Rural         | Harby, Council                  | Feb. 9-Mar. 7     | Measles                       | Southwell            | Farnsfield, Church,<br>Mixed      | Aug. 29-Sep. 19   | Measles                       |
| • Warsop             | Council, Infants'               | Mar. 17—April 25  | Measles                       | Newark Rural         | South Collingham Brough           | Sep. 5-Sep. 26    | Whooping Cough                |
| Basford              | Selston, Westwood               | Mar. 18-April 18  | Whooping Cough                | Southwell            | Lowdham, Infants'                 | Sep. 5-Sep. 26    | Whooping Cough                |
| Newark Rural         | Thorney, Church                 | Mar. 28—April 25  | Measles and Chicken           | Southwell            | Farnsfield, Wesleyan,<br>Infants' | Sep. 5-Oct. 10    | Measles                       |
| Warsop               | Church                          | April 5-April 25  | Pox<br>Measles                | Bingham              | Widmerpool, Church                | Sep. 5-Sep. 26    | Cerebro Spinal Fever          |
| Leake                | Willoughby-on-the-Wolds         | April 5-May 2     | Measles                       | Misterton            | Beckingham, Council,<br>Infants'  | Sep. 5-Sep. 26    | Whooping Cough                |
| Basford              | Wilford, Endowed                | April 15—April 25 | Whooping Cough                | Southwell            | Farnsfield, Wesleyan,<br>Mixed    | Sep. 19-Oct. 10   | Measles                       |
| Southwell            | Upton, Church                   | April 20-May 23   | Scarlet Fever                 | Basford              | . Selston Underwood,<br>Infants   | Sep. 26-Oct. 17   | Measles                       |
| East Retford Rural . | North Leverton                  | May 4-May 23      | Chicken Pox                   | West Bridgford .     | . Musters Road, Infants'          | Sep. 29-Oct. 24   | Measles                       |
| West Bridgford       | . Trent Boulevard, Infants'     | May 5-May 23      | Measles                       | East Retford Rural . | South Leverton                    | Sep. 30-Oct. 31   | Scarlet Fever                 |
| Skegby               | Skegby Church, Infants'         | May 9-May 30      | Measles                       | Basford              | . Selston, Bagthorpe              | Oct. 5-Nov. 7     | Measles                       |
| Southwell            | Oxton, Church                   | May 11-June 27    | Measles and Whooping<br>Cough | Basford              | . Colwick, Church                 | Oct. 18-Nov. 7    | Measles                       |
| Eastwood             | New Eastwood, Council           | May 11-May 23     | Measles                       | Basford              | . Selston, Church, Infants        | Oct. 24-Nov. 14   | Measles                       |
| Sutton-in-Ashfield . | Hardwick Street, Council        | May 13-May 30     | Measles                       | Bingham              | Upper Broughton, Counci           | Oct. 25-Nov. 21   | Measles                       |
| Sutton-in-Ashfield . | Mansfield Road, Council         | May 13-May 30     | Moasles                       | Blyth and Cuckney .  | Blyth, Church, Infants'.          | Dec. 5-Dec. 23    | Chickenpox and Measle         |
| Sutton-in-Ashfield . | Central, Council                | May 13-May 30     | Measles                       | Basford              | . New Brinsley, Infants' .        | Dec. 7-Dec. 23    | Measles                       |
| Sutton-in-Ashfield . | Church Street, Council          | May 13-May 30     | Measles                       | Southwell            | . Norwell, Church                 | Dec. 7-Dec. 23    | Diphtheria                    |
| Basford              | Beauvale, Council,              | May 13-May 30     | Measles                       | Bingham              | . Hickling, Council .             | Dec. 12-Dec. 23   | Measles                       |
| Skegby               | Infants<br>Stanton Iron Works,  | May 26-June 20    | Measles                       | Blyth and Cuckney .  | . Blyth, Church, Mixed .          | Dec. 14-Dec. 23   | Measles and Chickenpo         |
| Bingham              | Kinoulton                       | June 13-June 27   | Measles                       | Southwell            | . Weston, Church .                | Dec. 19-Dec. 23   | Measles                       |
| East Retford Rural . | South Leverton                  | June 13-June 27   | Scarlet Fever                 | Carlton              | . Netherfield, Church .           | Dec. 19-Dec. 23   | Measles                       |
| Carlton              | Porchester, Council             | July 4-July 29    | Measles                       | East Retford Rural . | . Misson                          | Dec. 19-Dec. 23   | Measles                       |
| Bingham · · · ·      | Orston, Church                  | July 4-Aug. 2     | Scarlet Fever                 | Leake                | . Costock                         | . Dec. 19-Dec. 23 | Diphtheria                    |
|                      |                                 |                   |                               | The second second    |                                   |                   |                               |
|                      |                                 |                   |                               |                      |                                   | 1                 | ·                             |

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The Board of Education state :---

"As regards the scope of the Report, however, the Board consider

"that it is desirable that it should deal with the whole subject of "School Hygiene, and should cover as much as possible of the "ground indicated under the following heads."

"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, equip-"ment, 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."

I have dealt with these matters generally in my two previous reports but without much useful result, and there is nothing fresh to say. One of the chief sanitary deficiencies consists in the infrequent emptying of pail closets. In flagrant cases representations are made in the proper quarter, and it is presumed with benefit.

Under Section 53 (b) of the code 3,015 children have been excluded, generally for periods of three days, on account of verminous conditions which rendered them an active source of infection to other children.

The Board of Education require a :---

"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."

The blind and deaf children are being dealt with under the Act of 1893, and in the course of the year 4 children have been medically examined and sent to special institutions.

The Act of 1899 has not been adopted, and the mentally or physically defective and epileptic children are not being dealt with in special institutions.

The Board of Education require a 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 exer-"cises in the schools."

I am not consulted about these matters, and have no knowledge of what is being done.

#### (III) "Arrangements for open-air schools, school camps, etc., "under Article 44 (g) of the Code of 1908."

No arrangements for open-air schools or school camps have been made.

#### (IV) "Account of miscellaneous work, such as the examination "of Scholarship Candidates, Pupil Teachers, or Teachers "of any grade."

All new pupil teachers, bursars, intending bursars and pupil teacher candidate scholarship holders have been examined by me for the past five years. The examination is thorough, and takes about 17 minutes with the assistance of a nurse. The examinations were held at Nottingham, Newark, Hucknall and Retford, and included a record of the height and weight as well as an examination of the heart, lungs, urine, sight, hearing, teeth and hair, in addition to general constitutional conditions. It also entailed repeated re-examinations of a large proportion of the candidates until all serious remediable defects had been satisfactorily treated.

During 1910, with the assistance of Dr. Holmes, Dr. Rose Hudson and a nurse, I examined 40 males and 114 females. Their general physical condition is undoubtedly improving; but the extensive decay of teeth is still not regarded sufficiently seriously, especially considering the prejudicial effect upon articulation as well as upon general health.

Since November, 1908, all newly-appointed caretakers with wages of 10/- per week and upwards are required to pass a medical examination before the appointment is confirmed. Four caretakers were examined.

And, further, all newly-appointed attendance officers and clerks in the Education Department are required to pass a medical examination before the appointment is confirmed. Three attendance officers and two clerks were examined in 1910.

Finally, in regard to future work, there would be much advantage in Medically Inspecting children *during their twelfth year of age* instead of "those about to leave." From the fact that of 10,229 children examined 4,014 were "entrants" and only 2,284 "leavers," it is evident that many "leavers" are missed and finally leave school without being Medically Inspected. There are many reasons for this, and the most obvious as well as the most useful remedy would be to adopt the twelfth year for the last Medical Inspection.

I again desire to acknowledge in the fullest possible way the very cordial and often most zealous co-operation of the teachers, with which the success of Medical Inspection is so largely bound up.

My own staff have worked hard and patiently, and that, too, at work which is not popular.

> I have the honour to remain, Your obedient Servant, HENRY HANDFORD, Chief School Medical Officer.

### REPORT.

#### Prepared by T. E. HOLMES, M.D., Cantab.; D.P.H., Lond.

The card system of records, adopted at the commencement of the work, has been continued, and duplicate cards are still kept at the Shire Hall.

The School Medical Officers are assisted by the School Nurses in the weighing, measuring and sight testing of the children. In a few instances the children have been weighed and measured by the Teachers. The examination of the hair for vermin is carried out entirely by the Nurses.

Very material assistance has been given by the Teachers throughout the County, and their interest and willing co-operation in the work during the past year has been most gratifying. All the preliminary arrangements have been carried out by them as in previous years. The records for 1910 show that a parent or near relation was present in 46.9 per cent. of the boys examined and 53.5 per cent. of the girls. These figures are a slight increase on those of last year, and clearly show that the interest of the parents in medical inspection is by no means diminished. Their presence, of course, adds considerably to the time required for the examination, but it is very desirable that they should be encouraged as much as possible by the teachers to see their children actually examined. Their presence is indeed the essential factor, and the subsequent treatment of any defect that is found at the inspection is rendered much easier once their sympathies are aroused.

Much more detailed information has been obtained as regards the cooperation of the parents in remedying the defects discovered at the inspection. Since the appointment of the three additional nurses the majority of the parents have been visited at least once, and, in many cases several times, by the School Nurses. Unfortunately it was not possible with the staff of two nurses in the first half of the year, and by the time the homes were visited some children had left the district. It is to be hoped that next year this will be avoided to a great extent by following up the cases soon after the inspection.

The information has been obtained by the visits of the nurses to the actual homes, and is set out in the accompanying table. It will there be seen that out of 641 children whose parents were advised to obtain medical treatment in 1910, 290 have been treated, amounting to  $45 \cdot 2$  per

cent. The treated cases included 43 who have had operations (chiefly on the throat) performed. The percentage of treated cases in 1909 was 34.6. The untreated cases in 1910 number 351 (54.8 per cent.) Of these 63 have promised to obtain advice later on. Poverty and neglect are responsible for 205 untreated cases (31.9 per cent.)

In 1909 31.8 per cent. of the children with defective vision obtained advice as against 45.9 per cent. in 1910. The increase in the number of cases treated for defective vision is thus seen to be considerable, and the reason is in all probability due to the home visiting of the school nurses. A still further improvement is anticipated when the cases are followed to the homes immediately after the inspection, as is now possible, and in addition when the establishment of After Care Committees is an accomplished fact. There is little doubt that much could be done locally by such a body, especially in the cases where neglect and poverty are responsible for the want of treatment. The work of such Care Committees would undoubtedly relieve the School Nurses to some extent, on the other hand it would probably lead to a large increase in correspondence. There is every indication that these local bodies will be established in the early future, at any rate in the larger Urban areas.

TABLE SHEWING THE NUMBER OF CHILDREN AND THE DISEASES FOR WHICH PARENTS HAVE BEEN ADVISED TO OBTAIN TREATMENT DURING THE CALENDAR YEAR 1910.

|   |  | TREATED.  |           |   | UNTREATED OWING TO          |            |                                       |  |  |
|---|--|---|-----------|---|-----------------------------|------------|---------------------------------------|--|--|
| COMPLAINT.  | Number<br>of<br>Notices.   | Advice<br>Obtained.                                       | Operation | Neglect.  | Poverty.                    | Objection. | Left<br>School &<br>nothing<br>known. | Promised<br>to obtain<br>Treat-<br>ment.                       |  |
| Defective Vision<br>Enlarged Tonsils<br>Adenoids<br>Tonsils and Adenoi<br>Deafness<br>Teeth Decayed<br>Heart Disease<br>Ear Discharge<br>Thyroid Enlarged<br>Cleft Palate<br>Hernia<br>Necrosis of Jaw<br>Spinal Disease<br>Laryngitis<br>Rickets | <br>$^{+438}_{-29}$ $^{6}_{-45}_{-2}_{-2}_{-2}_{-14}_{-1}_{-1}_{-1}_{-1}_{-1}$ | *201 $16$ $4$ $1$ $10$ $1$ $ 9$ $1$ $1$ $ 1$ $1$ $ 1$ $1$ |           | $ \begin{array}{c} 61\\ 33\\ 7\\ 3\\ 12\\ -\\ 2\\ 1\\ -\\ -\\ 1\\ -\\ 1\\ -\\ -\\ 1 \end{array} $ | 63<br>10<br>3<br>1<br>5<br> |            | 51<br>6<br>1<br>                      | 50<br>7<br>1<br>-<br>2<br>-<br>2<br>-<br>1<br>-<br>-<br>-<br>- |  |
| Totals  | <br>641  | 29  | 0         | 121   | 84                          | 19         | 64                                    | 63   |  |

These include 53 cases of squint.
 \* 137 of these are wearing glasses.

The extent to which school arrangements have been disturbed has varied considerably. Teaching has, however, never been entirely suspended, but it has been necessary in some of the larger schools to empty a class room, especially in those instances where both School Medical Officers have been present with a view to completing the inspection in one day. The teaching has been most seriously interfered with in small singleroomed schools, but as these are mostly inspected in the summer it has generally been possible to conduct some teaching out of doors. In other instances the educational disturbance has been confined solely to the children under examination.

The Board of Education require :---

- "A 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.'"

No accurate record has been kept of the number of visits paid to schools and departments. The time occupied in inspecting a school has varied from a single morning or afternoon to three or four days.

Children selected for inspection have been those commencing and those finishing their school life, and in addition all children who are considered physically or mentally defective by the teachers. The number of children inspected during the year 1910 amounted to 10,229, viz., 5,068 boys and 5,161 girls. These comprise entrants 4,014, leavers 2,284, specials 3,931. The number of children inspected during the year probably represents the amount of work that can be done by two School Medical Officers working in the schools throughout the year. It is an increase of over 1,200 children on the numbers inspected in 1909, the reason being that the work was not interrupted by illness of either of the medical inspectors. The proportionate results again approximate very closely to those obtained in previous years, and this is especially seen in the figures giving the average weight and height of the children at various ages, showing that this work has been very carefully carried out during the year. As pointed out in the report for last year the percentages at ages 7 to 11 inclusive must not be taken as representative of the whole of elementary school children at those ages.

No children have been referred for subsequent examination in the same year as the inspection, but a list of children who are considered specially delicate when examined by the school Medical Officers is kept at the Shire Hall, and such children are examined yearly until their health is better. A list of these "delicates" is sent to the Head Teacher before the Medical Inspection, and the parents are specially invited to be present at the Medical Examination.

There is a considerable decrease in the number of directions issued to parents for the treatment of defects in their children. They comprise 6.26 per cent. of the children inspected, as compared with 10.3 per cent. in 1909, and 9.8 per cent. in 1908. When it is considered that in 1909 all the physically and mentally defective children were specially collected by the Teachers and presented for examination, it is not surprising to find that the number of directions issued has considerably decreased, and this, probably, represents about the average proportion of directions to parents to be issued in future years. It should however, be borne in mind that only two parents have been advised to obtain treatment for their children for decayed teeth, and this of course by no means represents the number of cases urgently requiring dental treatment. Notices have only been issued where the defect has been found to be seriously handicapping the child. Errors of refraction less than 6/12 as in previous years have not been referred for treatment. It should also be stated that the numbers of cards of instruction issued to the parents do not include those for the treatment of verminous hair, of which 4,392 were issued by the School Nurses. A much smaller number of cards is issued by the Head Teachers, but no record is kept of these.

The average time per head occupied by the inspection is exceedingly difficult to estimate, varying from a few minutes to 20 minutes or even half-an-hour, and dependent on the condition of the child and the presence of the parent. It is certainly not less than eight minutes per child even with the assistance of a nurse, and is not materially lessened by practice. This does not include the time occupied in testing sight, weighing, measuring, and hair examination, which is usually done by the Nurse prior to the inspection. Each School Doctor examined about 150 children per week when engaged every day at the schools.

The Board of Education require :--

"A general review of the facts disclosed by medical inspection,

"under the headings contained in the Schedule, Circular 582,

"including tables showing the height and weight of children

" inspected (according to age at date of inspection, and sex)."

Another year's work has abundantly shown that the system of medical inspection is in the majority of instances welcomed by the parents. The examination of the girls' hair has been conducted with much energy in the large Urban areas on the west side of the County, and the exclusion and prosecution of the worst cases has necessarily aroused much ill feeling, but it is equally certain that it is welcomed by the more careful mothers, and indeed, many have stated that they have had much less trouble with their children's hair since this work was commenced.

During the year 507 children have been absent from the inspection, including those absent from all causes. This amounts to 4.95 per cent., this figure exactly corresponding with that of last year. In 40 cases the parents were definitely known to object, and in most cases have written a letter to the Head Teacher to this effect. It is quite reasonable to suppose that some of the other absentees have been kept away from school at the time of the medical inspector's visit, but probably this is not a large number. No complaints about the medical inspection have come to my knowledge.

With regard to the prevalence of infectious diseases amongst children of different ages, there is a remarkable similarity in the figures in each year since the medical inspection was commenced. As shown in the accompanying table giving details in the years 1908, 1909, 1910, Measles is essentially a disease of young children, since at the age of eight years more than 75 per cent. have become protected by an attack. The table showing the proportion of children who have had Whooping Cough, as in the case of the Measles table, again demonstrates the close approximation during the three years given. In the case of Whooping Cough not more than 40 per cent. of elementary school children have had the disease at the age of eight.

|      | 1908   |   | 1908 1909           |   | 1910                |   |  |
|------|--|---|---------------------|---|---------------------|---|--|
| Age. | Number of<br>Males and<br>Females<br>Examined. | Percentage<br>who have<br>had<br>Measles, | Number<br>Examined. | Percentage<br>who have<br>had<br>Measles. | Number<br>Examined. | Percentage<br>who have<br>had<br>Measles. |  |
| 3    | 231  | 32.5                                      | 241                 | 45.7                                      | 291                 | 47.99                                     |  |
| 4    | 497  | 48.2                                      | 971                 | 52.8                                      | 1092                | 57.75                                     |  |
| 5    | 827  | 50.45                                     | 1540                | 56.35                                     | 2291                | 58.35                                     |  |
| 6    | 339  | 61.05                                     | 862                 | 61.0                                      | 1020                | 62.55                                     |  |
| 7    | 204  | 64.4                                      | 676                 | 73.7                                      | 635                 | 71.5                                      |  |
| 8    | 173  | 76.25                                     | 609                 | 78.15                                     | 527                 | 77.3                                      |  |
| 9    | 160  | 69.35                                     | 536                 | 78.5                                      | 494                 | 79.15                                     |  |
| 10   | 171  | 71.95                                     | 461                 | 79.35                                     | 487                 | 81.95                                     |  |
| 11   | 187  | 67.35                                     | 529                 | 77.4                                      | 435                 | 82.3                                      |  |
| 12   | 969  | 78.7                                      | 1624                | 81.4                                      | 2018                | 83.5                                      |  |
| 13   | 417  | 75.5                                      | 842                 | 81.75                                     | 849                 | 81.7                                      |  |
| 14   | 58   | 83.05                                     | 79                  | 81.85                                     | 77                  | 73.72                                     |  |

PERCENTAGE OF CHILDREN WHO HAVE ALREADY HAD MEASLES AT AGES 3-14.

PERCENTAGE OF CHILDREN WHO HAVE ALREADY HAD WHOOPING COUGH AT AGES 3-14.

|      | 1908   |  | 1908 1909           |  | 1910                |  |  |
|------|--|--|---------------------|--|---------------------|--|--|
| Age. | Number of<br>Males and<br>Females<br>Examined. | Percentage<br>who have<br>had Whoop-<br>ing Cough. | Number<br>Examined. | Percentage<br>who have<br>had Whoop-<br>ing Cough. | Number<br>Examined. | Percentage<br>who have<br>had Whoop-<br>ing Cough. |  |
| 3    | 231  | 25.55  | 241                 | 25.55  | 291                 | 29.25  |  |
| 4    | 497  | 27.9   | 971                 | 33.1   | 1092                | 31.63  |  |
| 5    | 827  | 36.15  | 1540                | 38.0   | 2291                | 35.8   |  |
| 6    | 339  | 39.55  | 862                 | 37.9   | 1020                | 41.15  |  |
| 7    | 204  | 42.8   | 676                 | 44.1   | 635                 | 41.85  |  |
| 8    | 173  | 42.7   | 609                 | 38-9   | 527                 | 41.65  |  |
| 9    | 160  | 38.05  | 536                 | 42.15  | 494                 | 38.85  |  |
| 10   | 171  | 36.8   | 461                 | 44.99  | 487                 | 39.55  |  |
| 11   | 187  | 37.6   | 529                 | 36.35  | 435                 | 39.47  |  |
| 12   | 969  | 34.35  | 1624                | 35.6   | 2018                | 35.2   |  |
| 13   | 417  | 33.95  | 842                 | 38.55  | 849                 | 39.05  |  |
| 14   | 58   | 39.1   | 79                  | 50.2   | 77                  | 44.7   |  |

As in the past, the children found most defective are of the ages 6 to 12, and the only children of these ages who were examined were those specially selected by the Teachers as being physically or mentally deficient.

The same standard has been adopted with the examination of the clothing and footgear. They have been noted as good, fair or average, below average, insufficient. Among the boys the clothing was insufficient or very dirty in 0.8 per cent. and among the girls in 0.5 per cent. The

boots were bad in 1.14 per cent. of the boys, and 0.89 per cent. of the girls. These figures compare favourably with those of 1909, where insufficient clothing was present among the boys to the extent of 2.4 per cent., and among the girls to the extent of 2.2 per cent. The boots were bad in 2.75 per cent. of the boys and 2.2 per cent. of the girls. In some cases undoubtedly the children are arrayed in their best, but the Teachers invariably remark about this fact, so that the above figures are probably not very wide of the mark. The clothing of the infants is in a large number of cases quite excessive, and it is not at all uncommon to find the upper part of the body wrapped in seven or eight garments. Further, additional clothing however necessary during the presence of a cold is worn for a very long time after all trace of this has disappeared. It has also been noticed that many of the children wear cloaks, mufflers and large hats during physical exercises in the open air rendering it exceedingly difficult for them to carry out the exercises properly. When the parents have been present at the inspection they have been advised to discontinue these practices and also short socks in infants have been discountenanced. In only a few isolated cases has the clothing been found to be sufficiently scanty to endanger health.

The heights and weights have been taken without boots, and for the most part Salter's Spring balances have been used. This work is carried out almost entirely by the school nurses who visit the school a few days before the medical inspection. It is only very occasionally done by the teachers or the Medical Inspectors. There is again a very close approximation of the average heights and weights given in the report for 1909, notwithstanding the fact that nearly 1,500 more children have been inspected. In one case, e.g., males of 12 the average height 4ft. 4.7 inches is the same as in the previous year, and the rest only vary by one or two decimal points. This affords clear proof that much care is exercised by the school nurses. The average heights and weights of boys and girls at the ages 3 to 15 are given in the accompanying table.

#### HEIGHT AND WEIGHT TABLE.

| - 14 | ×.  |    |     |     |
|------|-----|----|-----|-----|
|      | -e. | 50 | 3.7 | 100 |
|      |     | 0  | Y   | ×.  |
| -    |     |    | ~   |     |

|         |                 |               |                | and the second second second second second |                 |
|---------|-----------------|---------------|----------------|--|-----------------|
| Age in  | Number          | Average Hei   | ght per Child. | Average Wei                                | ight per Child. |
| Years.  | of<br>Children. | Feet. Inches. | Centimetres.   | Stones. Lbs.                               | Kilogrammes     |
| L'ouroi | Chinaren        |               |                |  | mogrammes       |
| 3       | 168             | 8 0.7         | 93-2           | 2 5.0                                      | 14.97           |
| 4       | 602             | 8 8.0         | 99.05          | 2 8.3                                      | 16.46           |
| 5       | 1156            | 8 5.0         | 104.15         | 2 - 11.3                                   | 17.82           |
| 6       | 504             | 3 7.1         | 109.45         | 3 0.6                                      | 19.82           |
| 7       | 317             | 3 8.9         | 114.00         | 3 4.4                                      | 21.05           |
| 8       | 234             | 3 11.3        | 120.15         | 3 9.3                                      | 23.26           |
| 9       | 213             | 4 1.2         | 125.0          | 3 13.1                                     | 23.20           |
| 10      | 230             | 4 3.1         | 129.8          | 4 4.0                                      | 27.21           |
| 11      | 215             | 4 4.9         | 184.4          | 4 9.8                                      | 29.84           |
| 12      | 978             | 4 7.0         | 139.7          | 5 4.0                                      | 88.56           |
| 13      | 405             | 4 8.3         | 143.0          | 5 8.5                                      | 85.1            |
| 14      | 41              | 4 10.0        | 147.8          | 5 13.9                                     | 85.6            |
| 15      | 5               | 5 2.8         | 159.5          | 7 8.0                                      | 45.5            |
| 10      |                 | 0 20          | 1000           | 1 00                                       | 100             |
| Total   | 5068            |               |                |  |                 |
|         |                 |               | Girls.         |  |                 |
| 3       | 123             | 3 0.1         | 91.7           | 2 3.9                                      | 14.46           |
| 4       | 490             | 3 2.7         | 98.3           | 2 7.4                                      | 16.06           |
| 5       | 1135            | 8 4.7         | 103.35         | 2 10.0                                     | 17.22           |
| 6       | 516             | 3 6.7         | 108.45         | 2 12.6                                     | 18.42           |
| 7       | 318             | 3 8.4         | 112.8          | 3 8.3                                      | 20.54           |
| 8       | 293             | 3 10.7        | 118.65         | 8 7.1                                      | 22.26           |
| 9       | 281             | 4 0.8         | 123.95         | 3 12.2                                     | 24.58           |
| 10      | 257             | 4 2.7         | 128.75         | 4 2.9                                      | 26.72           |
| 11      | 220             | 4 4.8         | 182.85         | 4 8.9                                      | 20.14           |

| 8     | 123  | 3 | 0.1  | 91.7   | 2 | 8.9  | 14.46 |
|-------|------|---|------|--------|---|------|-------|
| 4     | 490  | 3 | 2.7  | 98.3   | 2 | 7.4  | 16.06 |
| 5     | 1135 | 8 | 4.7  | 103.35 | 2 | 10.0 | 17.22 |
| 6     | 516  | 3 | 6.7  | 108.45 | 2 | 12.6 | 18.42 |
| 7     | 318  | 3 | 8.4  | 112.8  | 3 | 8.8  | 20.54 |
| 8     | 293  | 3 | 10.7 | 118.65 | 8 | 7.1  | 22.26 |
| 9     | 281  | 4 | 0.8  | 128.95 | 3 | 12.2 | 24.58 |
| 10    | 257  | 4 | 2.7  | 128.75 | 4 | 2.9  | 26.72 |
| 11    | 220  | 4 | 4.3  | 132.85 | 4 | 8.9  | 29.44 |
| 12    | 1040 | 4 | 7.0  | 139.7  | 5 | 5.0  | 34.02 |
| 13    | 444  | 4 | 9.0  | 144.75 | 5 | 11.0 | 35.25 |
| 14    | 36   | 4 | 10.6 | 148.85 | 6 | 5.9  | 40.55 |
| 15    | 7    | 5 | 2.1  | 157.5  | 6 | 13.4 | 44.25 |
| 16    | 1    | 4 | 7.5  |        | 4 | 18.0 |       |
| Total | 5161 |   |      |        |   |      |       |

An interesting comparative table has also been compiled showing the heights and weights of scholars in the Urban and Rural districts. In the former the schools selected have been those at Hucknall, Arnold, Carlton, Sutton-in-Ashfield, Mansfield Woodhouse and Worksop, while in the latter case schools in purely agricultural districts some distance from towns have been taken. Only children of age 4, 5, 6, 12 and 13 have been selected, as the intermediate ages are examined owing to some special defect. In every case save one it will be seen that the figures for the boys and girls in the rural areas are larger than those in Urban Districts.

#### Comparative Heights and Weights of Children. Urban versus Rural Schools.

|      | BOYS.    | GII      | RLS.     |          |
|------|----------|----------|----------|----------|
| AGE. | URBAN.   | RURAL.   | URBAN.   | RURAL.   |
|      | FT. INS. | FT. INS. | FT. INS. | FT. INS. |
| 4    | 3 2.8    | 3 8.0    | 3 2.4    | 3 2.8    |
| 5    | 8 4.5    | 3 5.5    | 3 4.4    | 3 5.5    |
| 6    | 3 5.9    | 8 7.8    | 3 6.0    | 8 7.3    |
| 12   | 4 6.4    | 4 7.7    | 4 7.2    | 4 8.0    |
| 13   | 4 7.7    | 4 9.2    | 4 8.6    | 4 9.4    |

WEIGHTS.

|      | BOYS.    | GIR      | LS.      |          |
|------|----------|----------|----------|----------|
| AGE. | URBAN.   | RURAL.   | URBAN.   | RURAL.   |
|      | ST. LBS. | ST. LBS. | ST. LBS. | ST. LBS. |
| 4    | 2 8.8    | 2 8.6    | 2 7.8    | 2 8.3    |
| 5    | 2 11.0   | 2 12.4   | 2 10.0   | 2 10.7   |
| 6    | 2 13.4   | 3 1.8    | 2 12.4   | 3 0.4    |
| 12   | 5 8.0    | 5 7.0    | 5 8.0    | 5 8.0    |
| 18   | 5 8.0    | 5 12.1   | 5 9.3    | 6 0.9    |

#### NUMBERS EXAMINED AT RESPECTIVE AGES.

| BOYS. |        |        | GIRLS. |        |        |       |
|-------|--------|--------|--------|--------|--------|-------|
| AGE.  | URBAN. | RURAL. | TOTAL. | URBAN. | RURAL. | TOTAL |
| 4     | 85     | 104    | 189    | 88     | 102    | 190   |
| 5     | 189    | 242    | 431    | 204    | 237    | 441   |
| 6     | 80     | 145    | 225    | 87     | 128    | 215   |
| 12    | 149    | 150    | 299    | 178    | 149    | 327   |
| 13    | 85     | 123    | 208    | 90     | 148    | 223   |
|       |        |        | 1352   |        |        | 1896  |

With regard to nutrition 5.6 per cent. of the boys, and exactly the same percentage of girls have been found to be "below average." These figures do not differ materially from those of 1909 and include all children examined.

The subject of cleanliness still resolves itself chiefly into considerations of verminous conditions, and there remains much to be done in this direction. Cleanliness of the body among the younger children, speaking generally, reaches a high standard, which gradually falls as the children become able to look after themselves, and it is a great pity that washing of the body other than the face, neck and hands, is confined among the poorer classes to the Saturday night bath.

With reference to verminous conditions it must be remembered that during the latter half of 1910 the services of five nurses were available, and this explains the large increase (more than double the figures of 1909) in the number of girls' hair examined. During the whole year 55,299 girls were inspected (including a large number examined more than once) and in 60.8 per cent. the hair was found to be verminous. It should here be stated that the term "verminous" includes all conditions where lice or their eggs (nits) are present in greater or less degree. The number of girls who were excluded for a short period on account of verminous hair during the year was 1802, and it was necessary to re-exclude 1213 of these for a still further period. Among the boys the hair was verminous in 6.7 per cent., 5,068 having been examined. In only a very few cases were living lice present in the boys' hair. As previously stated 4,392 cards giving precise instructions for remedying the verminous condition of the hair were issued by the nurses, and in nearly all the schools the Head Teacher keeps a quantity of these cards for use in suitable cases. The Teachers have also been supplied with small books of exclusion forms for use when excluding children with verminous hair. These are exactly similar to the ones in daily use by the Nurses, but in only a very few instances have the Teachers used these forms to any extent. The difficulty of following up the excluded cases and their re-examination on return to school is very great even with five nurses, and the attention of the

latter has been confined to the more seriously affected girls. The number of homes visited with reference to verminous hair has been 2702, and the mother, or a near relation, was instructed how to remedy the condition. Actual treatment by the nurses has been confined to cutting off some of the hair of the worst cases, but the parents' consent has always been obtained before this has been done. The practice now is to visit all the homes of the worst cases and to interview the mother or the person responsible for the child. A large number of final notices have been served on the parents warning them that unless the child was sent to school in a clean condition on a certain date, legal proceedings would be taken for nonattendance. These have proved a powerful lever with the more careless parents. Eight parents have been prosecuted during the year and convictions obtained in all but one case. The School Nurses now do all the work in connection with these legal proceedings. Unfortunately relapses occur in the absence of regular inspections by the nurses, but there can be little doubt that there is an improvement in degree, if not in the actual number, of children affected, and the teachers and more careful mothers are emphatic about this. The strain of this disagreeable work has fallen chiefly on the nurses since in only a few instances are the Teachers really taking trouble to examine the hair even after a nurse has left a list at the school giving the condition of the hair of every scholar. If they would only exclude the bad cases as requested, and notify the correspondent of such action, a nurse would be sent at some early date to investigate. This would entirely eliminate the more seriously affected girls who are really the greatest source of danger.

A more careful examination of the clothing of children in the elementary schools has unfortunately revealed the unpleasant fact that a much larger number harbour body lice than was expected. From July to December, 1910, the clothing of 267 children was examined, and it was necessary to exclude 116 children owing to the presence of body lice. The teachers are well aware of a residuum of dirty children and these are the ones mainly examined. In a few cases notice has been sent to this department by education authorities outside the County that verminous children have moved to certain schools in Nottinghamshire. This information has been very valuable and has been acted upon at once. It is much to be hoped that this practice will be continued.

The Society for Prevention of Cruelty to Children has helped considerably by inspecting the infected homes and advising cleansing, but when the bedding becomes infected with vermin it is an exceedingly difficult matter to effect a permanent improvement without adequate disinfection in a steam stove. It is much to be regretted that only in a very few places in this County is such an apparatus available, especially as the need has been pointed out for several years on public health grounds.

TEETH. This vast subject is one of the most pressing among Elementary School children. Conservative treatment in early life is unknown among the poorer classes, and even the extraction of decayed stumps and sharply pointed and misplaced milk teeth, leading to abscesses and in some cases actually injuring the mouth is to a very large extent entirely neglected. It is really deplorable how little attention is paid to the cleanliness of the mouth, and how long temporary and decayed teeth which can be easily pulled out by the fingers are left to be pushed out by the erupting permanent teeth. The latter in many cases are found to be very irregular owing to previous neglect, and it is easily understood how seriously such a condition affects proper mastication and digestion. Among the boys 12.8 per cent., and among the girls 12.4 per cent. were found to have all their teeth sound; nearly half of these children were of the ages 3 to 4. Eighty seven decimal two per cent. of the boys and 87.6 per cent. of the girls had one or more carious teeth. It must be remembered that the examination of the teeth is by no means detailed, and the figures undoubtedly understate to some extent the real amount of decay. The average number of carious teeth per child varies from 3.5 to 6.5 in the boys, and from 3.5 to 6.7 in the girls. The supply of tooth brushes and prepared chalk has been continued by the Director of Education and the Secretary to the Director. The distribution and collection of small amounts have involved much trouble. During the year 2,322 brushes and 4,212 packets of powdered chalk (approximately 1 oz.) at 2d. and 1d. each respectively have been distributed. Unfortunately the interest though great at first has not been maintained, but there is undoubtedly some improvement in the cleanliness of the teeth, and this is especially so in a few schools where the Head Teachers have made a special effort in this matter. Printed instructions on the care of the teeth have been given to each purchaser of a tooth brush, and fuller details have been sent out to the Head Teachers for use in hygiene lessons. As stated in the 1909 report cleanliness of the mouth is only one of the causes of dental decay—a most complex and difficult subject. The Teachers can do much to help in this matter, and they have recently been requested to actually look at the teeth and make any necessary remarks about them in much the same way as the cleanliness of the hands, face and boots have been singled out for attention in the past. The difficulty, however, of training a young child in the daily use of a tooth brush is very great, especially in the many cases where it is actively discouraged at home.

TABLE SHEWING THE PROPORTION OF CHILDREN WITH ALL THE TEETH Sound, and also with one or more Teeth Carlous at the different Ages.

| Age in Years. | Number<br>Examined. | Proportion with<br>all Teeth Sound. | Proportion with<br>one or more<br>Teeth Carious. | Average Number<br>of Carious Teeth<br>per Child of the<br>latter. |
|---------------|---------------------|-------------------------------------|--|---|
| 8             | 168                 | 44.05                               | 55.9   | 4.67  |
| 4             | 602                 | 27 9                                | 72.1   | 5.84  |
| 5             | 1156                | 14.9                                | 85.1   | 5.98  |
| 6             | 504                 | 8.1                                 | 91.9   | 6.45  |
| 7             | 317                 | 5.68                                | 94.4   | 6.59  |
| 8             | 284                 | 3.8                                 | 96.2   | 6.37  |
| 9             | 213                 | 3.3                                 | 96.7   | 5.11  |
| 10            | 230                 | 5.65                                | 94.4   | 4.70  |
| 11            | 215                 | 7.4                                 | 92.6   | 4.23  |
| 12            | 978                 | 10.3                                | 89.7   | 3.83  |
| 13            | 405                 | 6.9                                 | 93.1   | 3.53  |
| 14            | 41                  | 0.00                                | 100.0  | 3.85  |
| 15            | õ                   | 20.00                               | 80.0   | 6.25  |
| Total         | 5068                | 12.8                                | 87.2   |   |
|               |                     |                                     |  | 114 10 1021 1   |

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|-------|----------------|----------------------|-------|-------|
| 3     | 123            | 40.6                 | 59.3  | 4.28  |
| 4     | 490            | 24.9                 | 75.1  | 5.05  |
| 5     | 1135           | 16.3                 | 83.8  | 6.02  |
| 6     | 516            | 7.7                  | 92.3  | 6.15  |
| 7     | 318            | 6.6                  | 93.4  | 6.25  |
| . 8   | 293            | 4.09                 | 95.9  | 5.68  |
| 9     | 281            | 6.05                 | 94.0  | 5.07  |
| 10    | 257            | 5.83                 | 94.2  | 4.41  |
| 11    | 220            | .9.9                 | 90.1  | .8.78 |
| 12 -  | 1040           | 11.2                 | 88.8  | 8.59  |
| 13    | 444            | 8.78                 | 91.2  | 3.78  |
| 14    | 36             | 11.1                 | 88.9  | 3.93  |
| 15    | 7              | 0.0                  | 100.0 | 6.71  |
| 16    | 1              | 0.0                  | 100.0 | 7.00  |
| Total | 5161           | 12.4                 | 87.6  |       |
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23

The diseases of the nose that require treatment are almost negligible amounting to only  $\cdot 03$  per cent. among the boys and to  $\cdot 15$  per cent. among the girls. No facilities exist in the schools for anything but a very cursory examination of the nasal cavities or indeed for any expert examination.

As regards enlarged tonsils the proportion of boys affected was 10.8 per cent. and the girls 13.8 per cent. These figures very closely corresponding to those of 1909 showing that the same standard has been adopted. Only the more seriously affected cases were advised to obtain treatment.

Only 2.8 per cent. of the boys and 3.2 per cent. of the girls were obviously affected with adenoids, and operation was advised in the necessary cases. In 1909 the proportion of boys affected was 3.4 per cent. and the girls 2.9 per cent.

Enlargement of the submaxillary and cervical glands was present among 4.5 per cent. of the boys and 4.9 per cent. of the girls compared with 5.8 and 7.7 per cent. respectively in 1909. There is very little evidence of tubercular glandular disease among the children attending Elementary Schools in this County. Quite a number of those noted as having enlarged glands have been obviously due to some temporary cause, such as sores about the face and scalp and also decayed teeth with abscess formation.

External eye disease is not prevalent to any serious extent and is chiefly limited to convergent squint and inflammation of the eye lids.

The same procedure has been adopted in testing vision as in previous years and it has been confined to children of 6 years of age and upwards. It has not been possible to test all the children aged 6 owing to the fact that they do not know the alphabet sufficiently well. Snellen's test types are used, and in the case of younger children cards with small letters have been adopted as these are read much more easily. Only those whose vision is 6/12 or worse in either eye have been classed as defective, and the proportion of cases of defective vision among the boys was 7.6 per cent. (18.5 per cent. in 1909) and 10 per cent. among the girls (16.6 per cent. in 1909). No detailed enquiry has been made to explain this preponderance of defective sight among the girls. The nurses have carried out the vision testing almost entirely, but the children whose parents are advised to obtain treatment for defective sight are always tested again by the Medical Inspector. It is again necessary to point out that these figures cannot represent the true proportion of children with defective sight as they have been specially selected for examination by the teachers.

There is a noteworthy improvement in the number of children who have obtained advice, as shown in the Table on page 11, and 31.2 per cent. of those advised are now wearing spectacles. The greatest objection to the wearing of glasses is shown in some of the Rural Districts, false ideas of the weakening effect of spectacles being very prevalent.

The chief ear disease recorded has been otorrhea, amounting to 3.2 per cent. in the boys and 4.4 per cent. in the girls. These figures are slightly lower than in 1909. During the latter half of the year the homes of some of the more seriously affected cases were visited by the School Nurses and the mothers instructed in the method of syringing. Here again in a large number of instances very little is done to relieve these chronic ear discharges, and in some cases they have been sufficiently foul to be a nuisance in school. The non-operative treatment is certainly very tedious and requires much time and patience, and the radical operation for this condition is not uniformly successful. Many of the mothers give a history of ear discharge during the time of cutting the teeth, and quite a number of these cases apparently heal without seriously affecting the hearing.

Deafness among the boys amounted to 3.7 per cent. and among the girls to 4.8 per cent. Only the more serious cases where education has been seriously hindered have been advised to obtain treatment, as many parents seem quite unable to appreciate minor degrees of the complaint. No time has been available to test these deaf children other than by whispered voice, and under school conditions it has not been possible to make accurate diagnosis of the cause. In those instances where enlarged tonsils and adenoids were obviously affecting the hearing, advice has been given to have them removed, and out of 45 notices issued for deafness 23 obtained advice, including 13 who had operations.

Defective speech has been noted in  $2 \cdot 4$  per cent. of the boys and  $1 \cdot 7$  per cent. of the girls. The defects have been chiefly confined to stuttering, stammering, and those due to cleft palate and highly vaulted palate.

The mental condition has been chiefly gauged by the teachers. The dull boys amount to 8.4 per cent. and the dull girls to 5.6 per cent., compared with 12.8 per cent. among the boys and 8.3 per cent. among

the girls in 1909. The mentally deficient and feeble minded children were found to be about  $\cdot 27$  per cent. of the boys and about  $\cdot 36$  per cent. of the girls. Five of the most troublesome who caused much disturbance of the school routine were excluded under article 53 (b) 3 of the Code for 1909.

Very few cases of serious heart disease have been met with in the schools but one or two quite unsuspected cases have been found and their parents advised, and also the teachers with regard to physical exercises and play. Seven boys and ten girls were found to have congenital heart disease and 26 boys and 43 girls had acquired valvular disease of the heart. These numbers show a slight increase over those in 1909.

With regard to lung disease the same methods of classification have been adopted as in previous years. Tuberculosis of the lungs among children attending school is undoubtedly uncommon, only 8 cases among children of school age were seen during the year, and some of these were not attending school at the time of examination. Under school conditions the diagnosis of pulmonary tuberculosis and chronic bronchitis is exceedingly difficult, but there is no evidence that it is as common in this County as has been found in some other areas. Bronchitis was present in 1.57 per cent. of the boys and 1.08 per cent. of the girls.

The only diseases of the nervous system that have been classified are St. Vitus's Dance, Epilepsy and Paralysis. One boy was found to be suffering from St. Vitus's Dance and two boys from Epilepsy. Seventeen boys and twelve girls were found to have had infantile paralysis, and in suitable cases the teachers have been advised to encourage the use of the paralysed limbs as much as possible.

Tuberculosis not including cases of lung disease amount to 0.217 per cent. among the boys and 0.057 per cent. among the girls. These figures taken in conjunction with those for phthisis show that tuberculosis among children actually attending school in this County is very rarely found.

The prevalence of rickets in the limbs and trunk among school children is much the same as last year.

Deformities have been classified as in 1909. Spinal disease is very uncommon among children attending school. Lateral spinal curvature was present in 4 boys and 6 girls, and angular spinal curvature was found in 2 boys and 1 girl. Infectious or contagious diseases were only discovered in 61 boys and 59 girls, and these were chiefly ringworm and a few cases of chicken pox and itch. This cannot represent the true proportion of cases of ringworm, as only a small portion of the scholars attending each school are examined, but in the routine examination of the girls' hair by the nurses, very little ringworm has been found.





