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CUMBERLAND COUNTY COUNCIL.

EDUCATION COMMITTEE

REPORT

OF THE

SCHOOL MEDICAL OFFICER

F. H. MORISON, M.D., D.P.H., &c.,

ON THE

Medical Inspection of School Children.

FOR THE YEAR ENDED

DECEMBER 31st, 1926.

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To the Chairman and Members of the Education Committee.

MR. CHAIRMAN, LADIES AND GENTLEMEN,

I have pleasure in presenting my Nineteenth Annual Report on the Medical Inspection and Treatment of School Children, that for the year ended 31st December, 1926.

I do so with mixed feelings of regret and satisfaction. Regret that owing to financial stringency we have been unable to extend a Service which is capable of doing so much to safeguard the health of the rising generation, and satisfaction that in spite of many difficulties we have been able to obtain so much treatment for those children who require it.

One direction in which I would like to see treatment extended is that of the dental service. One Dental Surgeon is totally inadequate to serve a school population of nearly 27,000.

Another direction in which extension is most desirable is in measures of prevention.

The Medical Staff is so fully occupied in carrying out the statutory duties that no, or very little, time can be devoted to other work. Maternity and Child Welfare is no part of the School Medical Service, but I am convinced that a great deal of treatment could be avoided if we had an efficient Maternity and Child Welfare Scheme, which would enable *all* children to be kept under medical supervision till they reached the age for being entered on a school register.

There is still a great deal of misunderstanding as to the true functions of the Public Health and School Medical Services. Their primary objects are the preservation of health, the prevention and not the treatment of disease. Parents require to be taught that to safeguard the health of children, and to maintain them in health, is of infinitely greater importance than to cure them of disease, therefore the sooner the slightest departure from health is noticed and remedied, the better for the child.

It is the utmost folly to wait till a child is obviously ill, and then and only then to seek medical advice.

In may last report I published, in Appendix B, observations "On Iodine," by Dr. Kenneth Fraser. In a revised edition of that report, he said :—

> "When this report was originally issued.....my own investigations were admittedly primitive for reasons given before. I wrote, therefore, under the fear that I claimed too much for Iodine. Since then a mass of information has come my way, and *I know quite definitely that I claimed too little.*"

That Dr. Fraser claimed too little for Iodine I am perfectly convinced.

The two following quotations, taken from a mass of letters on this subject, one from a specialist in the Midlands, and one from a distinguished Professor in Ireland, are clear indications that his observations are appreciated outside the County of Cumberland :—

> "Your report 'On Iodine' is the most important contribution to medicine that has appeared for many years."

> "I feel that it is a most important contribution to our knowledge of 'deficiency diseases.'"

Iodine therapy has brought under effective treatment (see Appendices B. & C.) a large section of well-known conditions which can hardly be classed as definite diseases, but which nevertheless give rise to troublesome symptoms, the causes of which were hitherto never realised, and for which the treatment, if any were given, was most ineffective. But to my mind the vista opened up on the preventive side of medicine, and on which Dr. Fraser is now engaged, is of infinitely greater importance even than the curative side, which has been so ably dealt with in "On Iodine."

I have the honour to be,

Ladies and Gentlemen,

Yours obediently,

F. H. MORISON, M.D., D.P.H.,

School Medical Officer.

I.—STAFF.

Dr. Simpson was appointed to the Maryport area, in place of Dr. Haydock, who received another appointment, otherwise there have been no alterations in the staff of the School Medical Service during the past four years.

In no case is the full time of any member, either medical or nursing, of the staff given to the School Medical Service.

The time is apportioned, as may be necessary, between school work, tuberculosis, maternity and child welfare, and general public health.

There are obvious and distinct advantages in arranging the work on such a basis, not the least of which is the enormous saving in travelling expenses which would be incurred by any other method.

II.—CO-ORDINATION.

In order that co-ordination may be full and complete, the County is divided into six Medical Areas, with one Medical Officer in charge of each. He is responsible to the School Medical Officer, who is also the County Medical Officer, for the whole of the work in his area, whatever head it may come under (with the exception of venereal diseases), and so the completest co-ordination is secured, and any case is easily transferred from one branch to another.

The closest possible co-ordination ought to exist between the School Medical Service and the work of maternity and child welfare, for unless there is an efficient and thorough infant and child welfare scheme in operation, an unnecessary burden is thrown on to the School Medical Service in the way of treating disease, disease moreover, a large amount of which could and should have been prevented, had it been possible to examine and treat all children falling in the age period prior to their admission to school.

In all areas where there is a Maternity and Child Welfare Clinic, there is close co-operation between the School Clinic work and the Maternity and Child Welfare Clinic. A similar type of record card is used for each Clinic, and these are transferred from the Child Welfare section to the School section when the child starts attending school.

In this way it is possible to have many defects attended to early—defects which would, as a general rule, remain untreated till the age of the first routine inspection at school.

Later on I will show that, of the number of children examined for the first time on their admission to school, 17 per cent. require some form of treatment for a definite physical defect.

In other words, nearly one in every five children begins its school life and its education handicapped by ill-health more or less marked.

If we remember that, in addition, there must be double this number who, without showing any definite defect, have departed from normal, sufficiently to warrant their being kept under careful observation, we must recognise how serious the problem is, and we must determine to do all in our power to prevent such a serious state of affairs.

To what cause or causes can this bad start in life be attributed ?

1. I think, undoubtedly, the first and main cause is bad and improper feeding during infancy and early childhood, and

2. The bad home conditions in which many of the children are reared.

There are, of course, other contributory causes, such as the want of medical attention to the earliest manifestations of departure from health, but I am convinced that the remedy for much of the ill-health of the child prior to school age, and of the school child itself, can only be remedied by education of the parents. And in this connection I venture to say that no more satisfactory work, and no work that would give a higher reward, could be undertaken by the Women's Institutes throughout the County than the education of parents, and young people who in a few years will be parents, in such matters as the care and management of infants and young children as well as sound practical instruction in the principles of diet in general, as well as sound instruction in everyday cookery.

The care of debilitated children under school age is a matter of vital importance to the health of the school child.

Early manifestations of on-coming diseases are not always easy to recognise, but the sooner they are recognised the easier are they to remedy, and the more economical it becomes in the end. Prevention is *cheaper* than cure.

III.—SCHOOL HYGIENE.

The hygienic condition of many of the schools in the area leave much to be desired, especially as regards ventilation lighting, warming, the sanitary conveniences and lavatories, water supply, cleanliness of schoolrooms and cloakrooms, &c.

Owing to pressure of other work it has not been possible during recent years to have regular and systematic reports on these matters sent in on each school, but arrangements are now made for a full report on each school during the current year.

During the year the attention of the Director of Education has been drawn to various matters, many have received immediate attention and have been remedied, but in the absence of a public water supply it is exceedingly difficult to get a satisfactory supply to some of the schools.

Both Dr. Towers and Dr. Mason in their reports draw attention to various sanitary defects in the schools, but, as Dr. Towers truly says : " In some schools the defects are not amenable to remedy except at great expense, and these could not be pressed at a time like the present."

IV.—MEDICAL INSPECTION.

For administrative purposes the County is divided into six areas, each in charge of one Medical Officer.

Beyond slight changes in administration no alteration has taken place in our methods during the year.

Age Groups of Children Inspected.

The children inspected come into the same groups as in previous years, viz. : Code groups, including Entrants, Intermediates (8 years of age), and Leavers (12 years of age and over).

"Specials," *i.e.*, children of any age not being Code or routine cases; and Re-examinations, *i.e.*, children who for any reason it is considered advisable to examine more than once in the year.

The number coming under each group will be found in Table I. at the end of this report.

The Board's schedule has been adhered to, with the slight exception noted in the report for 1921.

V.—FINDINGS OF MEDICAL INSPECTION.

In Table II. will be found, set out in detail, the number and class of defects which were found.

In considering this, however, it must be remembered that in a great many instances more than one defect is found in one child, and whilst each defect is counted in the total number found (see Table II. A), the number only of children examined is given (Table II. B), irrespective of the number of defects from which any child may be suffering.

Thus, of the 7,930 children examined in the Code groups, 1,381 required treatment.

The percentage of "Specials" requiring treatment is, of course, much higher than this. They are selected for examination because they are suspected of having some defect.

In the Code groups it will be noted that while 17% of Entrants required treatment, 21% of Intermediates and 14% of Leavers also required treatment.

In considering these figures it must be remembered that the eyesight of Entrants is not tested, as it is considered that no reliable results can be got by the examination of such young children. In the Intermediate Group eye cases supply a considerable proportion of the whole; this, I consider, accounts for the difference between the two groups.

But surely we cannot complacently sit down and feel contented if we realise the fact that 17 % of the children on admission to school are handicapped at the outset of their career by some physical defect. Moreover, we must remember that even this figure would be much increased were we to include in the total the number of children suffering from the ill-effects of dental decay.

The remedy for this state of affairs I believe to be in more efficient infant and child welfare schemes, and education of parents, more especially with reference to the diet of their children.

(A) Uncleanliness.

During the year 445 cases of uncleanliness were reported by the Medical Staff, equivalent to 2 per cent. of the total number of children examined. It is gratifying to record that the improvement noted in former years is still maintained.

737 visits to the schools were paid by the nurses, who made 51,086 examinations and detected and had remedied 761 dirty and verminous conditions in the children.

(B) Minor Ailments.

The total number of minor defects noted is 183 in excess of that noted the previous year, viz., 2,001 against 2,184

(C) Tonsils and Adenoids.

The incidence of these conditions of the nose and throat shows little variation from year to year.

I think it is undoubtedly the case that not so many serious cases are seen as in former years, but still the fact remains that a little over 10% of all children examined show signs, more or less marked, of these conditions.

During the year 644 cases were referred for treatment, and 1,014 to be kept under observation.

The very unsatisfactory condition of many of the children's teeth, even at the early age of five, is one of the main contributory causes of these conditions ; the unsatisfactory home conditions of many of the children is another cause. This being so, it is evident that the main preventive factor is with the parents themselves.

By judicious and careful feeding of infants and children a very large proportion of the decay of the first set of teeth can be prevented, and even though the housing conditions in many areas leaves much to be desired, much more could be done than is done to keep the existing houses clean and in much better sanitary conditions.

(D) TUBERCULOSIS.

(a) *Pulmonary.*—64 definite cases were found, 40 requiring treatment (7 Routines and 33 Specials), and 24 to be kept under observation (9 Routines and 15 Specials), whilst 141 suspected cases (31 Routines and 110 Specials) were noted. 118 were referred for treatment and 23 to be kept under observation.

A large percentage, in fact practically all, of these cases, both definite and suspected, are "contacts" of cases of tuberculosis already known.

During the year 505 school children were examined specially with a view to discover whether they had tuberculosis or not, because they were "contacts" of known cases.

Ten, or 2%, were found to be suffering from Pulmonary Tuberculosis, and 75, or 14.8% were suspicious, and will be examined again from time to time.

(b) *Non-Pulmonary.*—64 cases of tuberculosis, affecting glands, bones and joints, spine, and other parts of the body, were also noted.

(E) SKIN DISEASES.

Of these there were 917 referred for treatment, whilst 42 were to be kept under observation.

The cases referred for treatment consisted of :—

Ringworm of the Head	69
,, ,, Body	50
Scabies	68
Impetigo	503
Small Septic Sores, &c.	227

Neither Ringworm of the head nor of the body was so prevalent as in the previous year. Scabies was slightly more prevalent, but the number of cases of Impetigo remained practically the same.

(F) External Eye Diseases.

Of these there were 561 cases, 349 requiring treatment, and 212 to be kept under observation.

(G) Vision.

1,654 cases of defective vision were noted, 682 in the Routines. 378 were referred for treatment, whilst 304 are to be kept under observation. Among the "Specials" there were 972, 364 requiring treatment, and 608 to be kept under observation.

I am greatly indebted to Dr. Ross, Ophthalmic Surgeon of Carlisle, for the following notes on Defective Vision, which have been re-printed in leaflet form. A copy is enclosed to each parent when a letter intimating that a school child has defective eyesight is sent.

"Twenty years ago a scholar wearing glasses was almost a curiosity. To-day there are hundreds. Many parents, remembering their own school days, say, 'why is it that so many children need glasses nowadays?" and go on to lament the bad sight of the present generation.

But the eyesight of this generation of children is no worse than the last.

The answer to the question of the parents is simple. To-day the Teacher and the School Doctor are on the alert, and look for and find the children whose eyes are imperfect.

Faults discovered are corrected by glasses. Twenty years ago they were not.

The Value of Glasses in Cases of Defective Vision.

The normally shaped eye of a school child can see very distinctly everything at any distance and up to three or four inches from his eyes.

If the eye is not perfectly shaped, the result is imperfect vision.

If the eye is too long, then the child cannot see well at a distance, and the blackboard is a blur to him. But he can read perfectly, and see extremely well near at hand.

If the eye is too short, he may be able to see quite clearly at a distance and for reading, but he has some difficulty in continuing to see clearly for reading. All the time it needs an effort on his part.

His eyes tire, his attention wanders, and he cannot concentrate and learn so easily or so continuously as if he had normal eyes.

The eye may be not quite spherical, but slightly egg-shaped. In this case he cannot see clearly, either at a distance or for reading. He also tires, and often suffers from headaches. Now all the trouble lies in the fact that any difference from the perfect shape, even 1/20th part of an inch, means a difficulty in focussing the eye.

If the eye is too long, no effort on the part of the child is of any use.

If too short, an effort does help to focus.

If egg-shaped, an effort may or may not help.

The wearing of proper glasses, exactly to neutralise the defect of focussing, puts the child almost—in many cases exactly—in the position of having a perfectly shaped eye.

What are the results of neglecting to wear glasses where focussing is not perfect ? These are many, and one or more, or all the following disabilities follow :—poor sight ; the effort to correct the faulty focussing results in headache, irritability, inability to concentrate, difficulty in learning ; increase in the fault and corresponding increase in the degree of these disabilities ; squint.

Squint, or cast in the eye, is the most easily recognised result of a defect in the shape of the eye or eyes, and results in most cases from the strain of trying to focus.

Not all squints are due to this cause ; some are due to disease of the eye or injury, or faults in the muscles or nerves of the eye.

Popular Fallacies.—How often a squint is neglected because of such untrue yet commonly current ideas !

" It is due to teething or measles."

" The child is too young to have the squint seen to."

" The child will grow out of it."

And so on.

The answer to these is this :—A squinting eye may go blind *in a month* from the onset of the squint, and it will be useless for ever for reading with, and useless for earning a livelihood.

No child is too young to have attention.

Every squint should be seen to within a fortnight of its first appearance.

Squint Dangers of Postponing Treatment.

The first is, that of untreated squints ; every third squinting eye losses useful vision *for ever.*

The tragedy of this is painfully brought home when the " good " eye is lost through injury. Many cases have occurred in Cumberland.

(2) After eight years of age treatment (for saving the sight of the squinting eye) is almost always useless.

(3) Every week lost in having proper glasses fitted, and training of the squinting eye carried out, means less and less chance of retaining or improving the sight of the squinting eye.

The Deformity.—The squint is of no importance. The eye can be put straight by operation later. It is the loss of *seeing power of value* that matters, and squinting eyes, unless trained day in day out up to the age of eight, invariably lose this power, in some cases all trace of it disappears.

The treatment of squint is :—

(1) Complete correction of the defect in focussing by glasses.

(2) Training the weak eye every day, without a break of a single day, up to eight years of age.

(3) Constant attention to the glasses, which must be clean and rigid and straight."

(H) Ear Disease and Hearing.

Of ear diseases there were 206 referred for treatment, whilst 73 were to be kept under observation.

Of defective hearing, 66 cases were referred for treatment and 33 for observation.

(I) Dental Defects.

327 cases were noted at the medical inspection as requiring treatment.

It must, of course, be understood that this figure represents only the very worst cases, with abscesses and serious septic conditions of the mouth, ordinary cases of dental caries are not included in the figures relating to medical inspection.

(J) Crippling Defects.

In spite of many and great difficulties, which have for the most part been overcome by the enthusiasm of all those engaged in the work, the Cripple Scheme in Cumberland may, I think, claim to be a very efficient one, and one which has done an enormous amount of good work since its inception in 1919 for the unfortunate victims of the various crippling conditions.

The work continues to progress, but there would appear to be some reluctance on the part of parents to bring very young children, infants in fact, to the Clinics suffering from such conditions as congenital club-foot. It may be said generally that no infant is too young for orthopædic treatment, and that the earlier treatment is obtained the easier and less painful is a cure.

Clinics are held at four centres, Carlisle, Penrith, Whitehaven and Maryport, every month, and in addition, a Consulting Surgeon attends once or twice a year from Manchester to see selected cases.

Hospital cases are sent either to the Ethel Hedley Hospital, Windermere; or to the Shropshire Orthopædic Hospital, Oswestry.

Surgical appliances are made either at Oswestry or Windermere, but some special appliances are made at Liverpool.

Surgical clogs, introduced by Miss Nelson, to which reference was made in my last year's report, have quite fulfilled expectations, and have been adopted in other areas.

The first After-care Clinic was held in 1921, and since that time 250 After-Care Clinics have been held, at which 3,151 Attendances have been made.

317 children have been admitted to Hospital, 323 plasters have been applied, and 690 appliances have been provided and renewed.

The 924th name has just been added to the Cripple register, and we have to-day 442 cripples still on the active treatment register.

(See also page 22)

VI.—INFECTIOUS DISEASES.

The procedure for dealing with infectious diseases in schools, is that agreed upon in 1909. It is found satisfactory in working, and has not been varied.

Infectious Diseases—Diphtheria.

During 1926 there were outbreaks of Diphtheria of a virulent nature at Hayton (How Mill), Brampton, and Hallbankgate. There was also an outbreak numerically greater, but not virulent, at Flimby.

The outbreak at Hayton began in August, 1925, and continued intermittently until September, 1926.

In all, according to my information, 13 cases occurred between August, 1925, and July, 1926. Four cases proved fatal, and one case was at one time not expected to recover. After the first notification, the school was visited by a member of the County Medical Staff, and swabs were taken from a number of the children. Cases occurred intermittently up till November, 1925, and on the 1st December the school was again visited, and 17 swabs were taken from the standards concerned from the families among which cases had occurred, and from the teaching staff. One boy was found to be positive who was a brother of the original case. A further swab was taken from this case immediately, for the purpose of investigating the virulence. The bacteriological report was that the bacilli were present in small numbers and were virulent. This carrier, who had been excluded from school, was, therefore, allowed to return, and during the following week two fresh cases occurred. He was, therefore, re-excluded, and during his absence no fresh cases occurred. Fresh cases occurred at the end of February, one of which was a cousin of the carrier case. After an operation for the removal of his tonsils, he returned to school. It is unfortunate that his tonsils were not sent for further examination, as in all probability virulent bacilli would have been found in the crypts. He had, however, in the meantime, returned to school early in May, and subsequently two other cases occurred, one being the girl who sat next to him in school, and another a girl who sat about "a yard away." Following his return to school one additional case occurred, and in view of two negative swabs from this case, and of our failure to trace any other possible source of infection, and of no result having followed the disinfection of the school on two occasions, and the destruction of books, pencils, etc., from the children concerned, representations were made to the Board, requesting a visit from one of the Medical Officers of the Ministry to demonstrate the Schick Test and preventive inoculation. On the 3rd September, a Medical Officer of the Ministry visited the County, and under his direction the Schick Test was applied to all children whose parents had signed the form of consent. In all, some 70 children were tested, and the members of the School Staff. All except 14 gave positive reactions, and all of these were subsequently inoculated on four occasions with diphtheria prophylactic, with the exception of one or two who did not complete the series. Since the inoculation no fresh cases have occurred, and the carrier case has now been attending school for some months.

With regard to the outbreak at Hallbankgate, this occurred quite suddenly in the Autumn of 1926, when, within a period of ten days, there were 11 cases with 3 deaths.

Owing to the virulence of the outbreak, the Schick Test was omitted, and 140 children, including 40 under School age, were inoculated.

Since the inoculations no fresh cases have occurred.

At Brampton there were 13 cases notified, 10 occurring between August and December 21st, with one death.

The Schick Test was applied to 210 children attending the Elementary Schools, and to 96 attending the Secondary School.

In the former 240 were inoculated, including 56 under School age. Of these 8 were inoculated only once, and 5 twice. Here 2 children, 1 having had one inoculation and the other 3 inoculations a month previously subsequently took Diphtheria.

In the latter 69 were inoculated, 7 without the Schick Test.

But the fact that one child got Diphtheria a month after having 3 inoculations does not in the slightest degree throw doubt on the efficacy of the inoculations, because immunity is not completely conferred until at the earliest three months after the third inoculation.

With the above noted exceptions no further cases of Diphtheria occurred up to the end of the year. At the time of writing this report, I understand from the Medical Officer of Health, that there has been one case in a child who received three inoculations. Enquiry into this case is being made.

An outbreak also occurred at Flimby during November and December, 1926. 24 cases occurred, but the outbreak was not of a virulent type, and only one case proved fatal. The epidemic died out during the Christmas holidays, had it continued it was proposed to apply the Schick Test to all children in the Flimby School. Some cases were removed

to the Workington Infectious Diseases Hospital on account of difficulty of isolation at home. In all, 23 swabs were taken, all of which proved negative.

VII.—FOLLOWING-UP.

The procedure known as "following-up" is of vital importance to the efficiency of the School Medical Service.

To most of us it seems almost incredible that parents who are told that one or more of their children has some physical defect, do not take immediate steps to have that defect remedied.

It is true that a large percentage of parents when told of such defect, are willing and anxious to have it remedied.

On the other hand there are parents who, owing to carelessness, apathy, or indifference, will put off having any treatment, but who, when the position is explained to them, will willingly co-operate with the School Medical Service, and have the necessary treatment.

Again there is the small minority of parents who will have nothing done in the form of treatment unless absolutely compelled to do so.

In circumscribed areas the process of following up is simple, and when, as in larger urban centres, you have all facilities for treatment, such as School Clinics, Infirmaries, Specialists of all kinds, as it were, at your finger tips, it is easy to obtain treatment for any and every case.

In large sparsely populated rural areas where there are no such facilities within 20, 30, or even 40 miles, where the nearest medical man is possibly ten miles away, where there are no Specialists and not even a School Clinic, the matter is far different, and it speaks well for the average parent in Cumberland that, in spite of all difficulties, so many cases obtain treatment.

The only solution of a difficult problem that I can suggest for efficiently carrying out treatment in rural areas, is that suggested in my last year's report, the provision of a motor van, fitted up as a complete travelling Clinic, and I hope that when the present financial stress is over, this will be one of the first directions in which our work will be expanded.

Now that the Clinics are firmly established, and have become so popular, the work of following up in urban areas where Clinics are available has become considerably easier. The Clinics, however, do not affect the rural areas, and the amount of work to be done by the School and District Nurses is reflected in the following table, which shows the conditions for which the homes were visited as well as the number of visits paid :—

Condition.	*No. of Cases.*	*No. of visits paid.*
Malnutrition	13 ..	29
Uncleanliness	200 ..	578
Skin Diseases	98 ..	254
Eye Conditions	477 ..	818
Ear ,, ...	155 ..	276
Nose and Throat	271 ..	475
Heart and Circulation ..	22 ..	63
Lungs (Non-tubercular)	132 ..	332
Lungs (Tubercular) ..	74 ..	206
Pretubercular	22 ..	74
Other Tubercular conditions	3 ..	15
Deformities..	13 ..	22
Glands	49 ..	118
General Cases	70 ..	172
	1599	3432

In addition to these, 349 visits were paid by District Nurses to 154 cases requiring dental treatment.

VIII.—MEDICAL TREATMENT.

The arrangements for treatment have been dealt with in previous reports, and are summarised in that for the year 1923, pp. 16-18.

The following tables give some indication of the amount and scope of the work undertaken at the School Clinics :—

Clinic.	*New Cases.*	*All cases. Visits.*
Cleator Moor	488	2414
Cockermouth	563	2131
Egremont	330	763
Maryport	560	2256
Millom	427	5027
Penrith	293	1576
Wigton	248	1190
	2909	15357

The following is a summary of the work done at the Clinics during the year :—

Condition for which Child attended.	*New Cases.*	*No. of Visits. All Cases*
Malnutrition	30	170
Uncleanliness	80	1200
Skin Diseases	686	4638
Ear Diseases	129	1190
Eye Diseases	244	1260
Nose and Throat	106	264
Enlarged Glands (Non-tubercular)	37	101
Heart and Circulation ..	113	675
Lungs (Non-tubercular) ..	181	696
Lungs (Tubercular or Suspected)	95	570
Tuberculosis (Non-pulmonary)	30	203
Nervous System	32	103
Deformities	30	68
Other Defects & Diseases ..	1039	3971
Goitre	33	187
Dental	44	61
	2909	15357

The following is a short summary of all the treatment carried out during the year :—

(*a*) *Minor Ailments.*

Referred for treatment.	Treated.
2248	1962

(*b*) *Tonsils and Adenoids.*

Referred for treatment.	Treated.
664	338

(*c*) *Tuberculosis Pulmonary.*

Referred for treatment.		Treated.
Definite..	40	25
Suspected	118	79

Non-Pulmonary.

41	30

On the 1st January, 1926, 10 children (3 boys and 7 girls) were under treatment for Pulmonary Tuberculosis in the Sanatorium.

Thirty-two children (17 boys and 15 girls) were admitted during the year.

Twenty-six (11 boys and 15 girls) were discharged during the year, and there were at the end of the year 16 children still in the Sanatorium.

On discharge, 25 were "very much improved," and in 1 there was "no material improvement."

Referred for treatment.	Treated.
(*d*) *Skin Diseases.*	
917	878
(*e*) *External Eye Diseases.*	
349	259
(*f*) *Vision and Squint.*	
814	925*
(*g*) *Ear Disease and Hearing.*	
272	201

* Included in this figure are 242 from 1925.

Included in groups (*b*) and (*g*), 104 cases were referred to Dr. Syme for his opinion, 41 were operated upon by him, 35 operations were performed in local Hospitals, and 28 cases were operated on privately.

In addition to those operated on by Dr. Syme, 161 cases of Tonsils and Adenoids were operated on in local Infirmaries.

(*h*) *Dental Defects.*

The report of the Dental Officer will be found in Appendix D.

The Dental statistics are given in Table IV., Group IV.

That the services of the Dental Officer are successful and much appreciated is evident from the numerous requests received for him to visit schools in all parts of the County.

The Dental Van continues to be the unqualified success which was prophesied it would be.

(*i*) *Crippling Defects and Orthopædics.*

The treatment of cripples has continued on the same lines as in the preceding year.

The present condition of the cripple scheme is indicated in the following tabular statements :—

TABLE A.

New Cases during 1926	178
No. on Register, 1/1/26	471
No. Removed from Register (owing to Cured, Left County, Dead, or Cancelled)	207
No. on After-care Register	442
Attendances at After-care Clinics	820
Seen by Consulting Surgeon (not included in above) ..	93
Appliances Provided and Renewed	109
Plasters Provided at After-care Clinics	36
Surgical Clogs Supplied ,, Boots ,, ...	86

In addition to the above the Orthopædic After-care Sister holds four Intermediate Clinics (at Workington, Cleator Moor, Maryport and Carlisle), and also visits the children at their homes.

The attendances at these Clinics for 1926 number ..	1000
No. of Visits paid to Homes for After-care work ..	490
No. of Plasters put up in the Homes	40
Cases in Hospital 1/1/26, and Admissions during 1926 :—	
Windermere	63
Oswestry	12
Stannington	1
Cumberland Infirmary	1
Silloth Convalescent Home	2
Discharges from Hospital :—	
Windermere	44
Oswestry	5
Cumberland Infirmary	1
Silloth Convalescent Home	2
Awaiting Admission to Hospital, 31/12/26 ..	37
X-rayed during 1926	29
Awaiting X-ray	5

TABLE B.

Defects under treatment or observation at the orthopædic clinics at the end of 1926 :—

Poliomyelitis	100
Surgical Tuberculosis	60
Rickets	72
Congenital Defects	41
Birth Palsies	26
Injuries	16
Osteomyelitis	8
Torticollis	8
Spinal Curvature (other than T.B.)	22
Spastic Paralysis	11
Flat Foot	13
Pseudo-coxalgia	7
Other Conditions	38
Talipes	16

The Chief difficulty which seems to have come to the fore this year is the number of children awaiting admission to hospital, and the difficulty of getting beds for them; this being due to the fact that more surgical tubercular cases have been notified this year, and the necessity of this type of case having to remain in hospital so long, as the following table shows :—

		Average stay.
Tubercular	Spine	.. 2 years.
,,	Hips	..1 year to 18 months.
,,	Knees	..6 months.
,,	Wrists	..6 months.

At the time of this Report going to press, there are 12 tubercular cases in hospital, and several more are awaiting admission.

Besides the above, there are other conditions which necessitate long treatment, some of these having to stay in hospital for a year, owing to the fact that they must remain in plaster, and could not be nursed at home ; and also because of the scattered nature of the cases, they could not be kept under as close observation as one would wish.

This, of course, would be remedied if some place could be provided where these children in plaster and on frames could be nursed without taking up the beds in hospital necessary for children requiring operations, and would also relieve the hospital beds in such cases of emergency, as the late epidemic of infantile paralysis, or urgent complicated tubercular cases.

This year, owing to the kindness of Miss Josephine Chance, a new scheme has been set afoot by the Girl Guides to assist in the transport of cripples who live in places remote from bus or railway to the Surgeon's Clinics, and it has proved to be of the greatest assistance.

Also the Thursby Rangers have undertaken to make all plaster bandages, which entail a great deal of work.

Miss Mounsey-Heysham has also started a post guide course in connection with the Girl Guides. This scheme will be of the greatest help to the children who are unable to take part in a more active life. Circular letters and other means are employed, and many who are too crippled to join in the regular routine, will be able to compete for badges, etc. Embroidery classes have been held (to which Mrs. Nixon, of Rockcliffe, has given her time very willingly) the children being gathered up and taken to centres by the Officers of the Girl Guides. It is hoped that some of the children may, in future, by taking advanatge of these classes, make a livelihood. There is a depot in the South of England where Cripples work, if up to standard, is accepted and sold. Through this agency, many cripples make a living. There have been several interesting rallies, to which the cripples have been taken by Officers of the Guides.

In regard to last year's report of clogs being converted for surgical use, it is proved, without doubt, this year that they are quite satisfactory. They have been supplied to the counties of Sussex and Worcester, and it is understood that Westmorland and Lancashire are also adopting them.

Of Miss Nelson's work as Orthopædic After-care Sister, I cannot speak too highly, her enthusiasm and energy in the cause of cripples have been unbounded.

When it is remembered that 1,000 attendances were made at the intermediate Clinics during 1926, and that she paid 490 visits to the homes of cripples in all parts of the County, and that at the present time she has nearly 500 cripples on the After-care register, it will be realised that her task is no light one.

IX—OPEN-AIR EDUCATION.

Beyond the fact that a few classes are held in the playgrounds in fine weather, there is no special accommodation for Open-air Education.

X.—PHYSICAL TRAINING.

The reports of Miss Fraser and Mr. Gray, the Chief Organisers, will be found in Appendices E. and F.

XI.—PROVISION OF MEALS.

Meals were provided at canteens opened in the following centres :—

Aspatria	Greysouthen
Brigham	Harrington
Broughton Moor	Little Clifton
Crosby	Lowca
Dearham	Maryport
Flimby	Oughterside
Frizington	Plumbland
Great Broughton	Seaton

The total number of meals supplied in the year ended 31st December, 1926, was 408,268. The average cost per meal was under 2¼d.

The number of children receiving meals varied from 356 to 1,345.

There were also some voluntary canteens open in certain areas.

On this subject Dr. Towers reports as follows :—

> " On your instructions I visited and reported on a large number of school canteens during the year, and reported individually on the features of each. In connection with the feeding of school children, it may not be out of place to mention here that in spite of industrial depression on an unprecedented scale, I have never found elementary school children so fit and well as they have been during the past twelve months. One has so frequently been asked by members of the public : ' How are the school children feeling this depression ? " : "Is there much distress ? " etc., that one feels that a very emphatic and definite reply is called for. In my opinion the children have *not* felt the depression, physically they have never been so well. I personally have seen no distress among them, and I have been watching for it.
>
> I think there can be no doubt that the feeding they have had at canteens has been so much above the feeding they usually get at home, as regards food value, that for the children at least the depression has been a blessing in disguise."

XII.—CO-OPERATION OF PARENTS.

Whilst it is true to say that a considerable number of parents are keenly interested in Medical Inspection, and are anxious to do all in their power for their children. it is equally true to say that large numbers will only obtain treatment when considerable pressure is brought to bear on them, *e.g.*, in 1,417 cases of eye defects, and ear, nose and throat conditions, 4,624 letters were sent, in addition at least one, and in most cases two visits were paid to the homes by Nurses.

It is, moreover, disappointing to find that even yet there are certain parents who object to any form of treatment, and particularly is this the case when they cannot observe for themselves any signs or symptoms of oncoming disease.

In spite of every endeavour to persuade parents that treatment is necessary in order to prevent certain conditions arising, many absolutely refuse to have anything done, and particularly is this so when it is suggested that a child should wear glasses. For instance, it is difficult to understand the mentality of a mother, who, when she was notified that her child had seriously defective eyesight, wrote back and said :— " In my opinion my child no more needs glasses than a duck wants an umbrella." However, such is the case, and so long as the amount of money available for treatment must be strictly limited, preference must be given to those parents who are anxious to have as mush as possible done for their children.

Time after time it has been found that glasses provided by the Education Authority have either been broken or lost, or purposely not worn, and so common has this become that during the year the plan was adopted of sending a list of children, who have been provided with glasses, to the head teachers, with a request that the children wear then at least in school.

XIII.—CO-OPERATION OF TEACHERS.

It is quite the exception—but unfortunately there are a few exceptions—to get anything but the utmost help possible from teachers, in fact many put themselves to considerable trouble in arranging for Medical Inspection, and in seeing that treatment recommended is carried out.

Such help is greatly appreciated by the whole of the Medical Staff.

XIV.—CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

Close co-operation exists between the medical and the attendance departments, the one being mutually helpful to the other.

Most of the Attendance Officers attend at the Medical Inspections, and often bring up habitual absentees for examination, similar cases are taken to the Clinics by the Attendance Officers.

At the present time the Attendance Officers are engaged bringing up-to-date the list of children who have never attended school, but who, on account of age, should do so.

XV.—CO-OPERATION OF VOLUNTARY BODIES.

The assistance given by the Girl Guides is already mentioned, has been of great value, and is much appreciated by the Medical Staff.

Again I have to record with appreciation the valuable assistance given by the National Society for the Prevention of Cruelty to Children in keeping under observation habitually verminous families, as well as, in some cases, securing necessary treatment for children whose parents would not or could not see reason.

XVI.—BLIND, DEAF, DEFECTIVE, AND EPILEPTIC CHILDREN.

During the year 21 deaf and dumb children, 6 blind children, and 1 epileptic were in institutions outside the County, at the charge, either in whole or part, of the Education Authority.

Some years ago a card index of all defective children so far as could be ascertained was compiled through the Attendance Officers, that list has been kept up to date so far as possible, by revision from time to time.

At the present time an enquiry is being undertaken by the Association for Mental Welfare, and two workers are for the time being employed, principally in the process of Ascertainment.

Up to the present there has been practically no supervision of mentally defective children not in Special Schools.

There are no Special Schools in the County.

There are no Nursery Schools.

XVII.—SECONDARY SCHOOLS.

There is nothing of great importance calling for comment in the inspection in Secondary Schools.

As in previous years all entrants and children with uncorrected defects have been examined, but in addition this year, all children of 15 years of age and over were examined as "leavers."

Altogether 512 children were examined, and of this number 271, equivalent to 53% showed no defect.

In 1920, when the whole of the children in the Secondary Schools were examined, 25% of them had no defect, and this called forth the remark: "A surprisingly high number of children had no defect of any kind."

In 1924, I reported that 43.6% had no defect, and this year I have to record the above figure of 53%.

I think it is a fair inference to draw, in fact the only one, that the result of treatment now carried out in the Elementary Schools, is reflected in the marked improvement of the children in the Secondary Schools.

Is is too much to hope that the precepts learned in Elementary and Secondary Schools will be carried out in practice throughout life, and that the ultimate aim of medical inspection will be achieved, viz., a marked improvement in the health of the nation?

The usual tables relating to Secondary Schools follow, these do not, however, include the Whitehaven Secondary School figures which will be found in Dr. Muriel's report (see Appendix G).

TABLE I.

Secondary Schools.

A general statement of the numbers examined, of the defects found, and of treatment obtained :—

	Referred from 1925.	1926. *New Cases.*
Number of children examined ..	342 ..	512
Number of re-examinations ..	10 ..	14
Children with no defects	12 ..	271
Number of children with defects referred for treatment ..	212 ..	167
Left or absent at the re-visit ..	2 ..	—
Children with all defects remedied	130 ..	38
Children with some defects remedied or treated	27 ..	3
Promised to obtain treatment ..	52 ..	113
Entirely Untreated	58 ..	—
Refused	— ..	—
Total number of defects referred for treatment	227 ..	180
Total number of defects treated or partially treated	154 ..	55

TABLE II.

	Referred for Treatment.		*Referred for Observation.*		*Treated.*		*Partly Treated.*		*Promised to obtain Treatment.*		*Refused.*		*Untreated.*		*Left or absent at re-visit.*	
	From 1925	*New 1926*	*From 1925*	*New 1926*	*From 1925*	*New 1926*	*From 1925*	*New 1926*	*From 1925*	*New 1926*	*From 1925*	*New 1926*	*From 1925*	*New 1926*	*From 1925*	*New 1926*
Defective Teeth	121	103	6	2	50	4	17	—	—	94	—	—	50	—	5	—
Very Defective Teeth	8	6	—	—	—	—	2	—	—	—	—	—	6	—	—	—
Uncleanliness	—	6	2	—	—	6	—	—	—	—	—	—	—	—	—	—
Malnutrition	2	5	3	2	2	6	—	—	—	—	—	—	—	—	—	—
Pulmonary Tuberculosis	—	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Pretubercular	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Bronchitis and Weak Chest	7	12	21	25	5	13	—	—	—	—	—	—	2	—	1	—
Organic Heart Disease	—	—	19	11	—	—	—	—	—	—	—	—	—	—	1	—
Functional Heart Disease	2	—	39	26	2	—	—	—	—	—	—	—	—	—	—	—
Anæmia	3	11	3	1	3	8	—	—	—	3	—	—	—	—	—	—
Defective Vision	108	52	31	20	92	21	—	—	—	29	—	—	17	—	6	—
External Eye Disease	10	6	3	1	3	6	4	—	2	—	—	—	—	—	—	—
Otorrhœa	—	2	6	—	—	2	—	—	—	—	—	—	—	—	1	—
Defective Hearing	8	2	6	—	8	—	—	—	—	2	—	—	—	—	—	—
Tonsils	3	3	—	9	1	—	—	—	—	3	—	—	3	—	1	—
Adenoids	5	2	—	—	1	—	2	2	2	—	—	—	—	—	—	—
Tonsils and Adenoids	4	2	2	—	2	—	—	—	2	2	—	—	—	—	—	—
Nasal Obstruction	—	2	2	4	—	—	—	—	—	2	—	—	—	—	—	—
Non-Pulmonary Tuberculosis	1	—	2	—	1	—	—	—	—	—	—	—	—	—	—	—
Spinal and Other Deformities	25	11	4	6	24	6	2	—	—	2	—	—	—	—	—	—
Nervous Diseases	—	1	—	2	—	—	—	—	—	2	—	—	—	—	—	—
Impetigo	2	8	—	—	2	8	—	—	—	—	—	—	—	—	—	—
Scabies	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Other Defects	39	20	20	27	33	14	2	2	—	5	—	—	4	—	1	—

Special Enquiries.

Further notes on Iodine, by Dr. Kenneth Fraser, are given in Appendix B.

Dr. Towers has also been making observations on the effects of Iodine treatment. His notes are given in Appendix C.

An enquiry on mid-day meals in Rural schools has been commenced, and will be reported on fully at a later date. In the meantime it is interesting to note that a very excellent form of mid-day meal has been established by the Head Teacher at Walton School. The tea and pastry meal, which is so common, has been replaced by cocoa, milk, or home-made lemonade in summer, with brown bread and butter, cheese, tomatoes, fruit, and so on. The whole school is gradually adopting this type of meal. The washing-up arrangements and the meal, as a whole, provide an excellant lesson in hygiene and dietetics. The head teacher was advised to endeavour to institute a soup kitchen during the winter months. This is likely to materialise.

The Head Teacher at Rhodds school is also considering the possibility of re-starting a soup kitchen, which was in operation during the war period.

Now that the Maternity and Child Welfare Work in the Penrith Urban District has been taken over by the County Council, the opportunity has been taken to note the physical condition of all entrants to school, with the object of ascertaining, after a few years, whether the incidence of physical defects is influenced by the work of a Maternity and Child Welfare centre.

Points of interest so far elicited by Dr. Mc.Murtrie are that 45% of entrants examined had defects, 28.6% were unvaccinated, 13.6% had dental caries, 10.7% suffered from skin conditions, and 10% were referred for treatment for uncleanliness. The total number examined was 140, and in age groups the proportion found healthy and having no defects was as follows :—

Age 3	61.5%
,, 4	61.4%
,, 5	49.1%
,, 6	45.0%
,, 7	83.3%*

* Only six children came in this age group, so the percentage figure is unreliable.

It is of interest to note that at the ages of 5 and 6 defects were found to be much more common than at the ages of 3 and 4.

MISCELLANEOUS.

(*a*) Exclusion of children from school on medical grounds :

47 children were excluded by the School Medical Officer for periods of one month and over, and 10 were excluded permanently.

(*b*) Examinations of Teachers (on appointment), Pupil Teachers, and Bursars :—

New Cases.	1926.
No. Examined	150
No. without Defects	104
No. with Defects	46
Defective Teeth	10
Defective Eyes	17
Other Defects	19

Cases referred from 1925.

No. of Cases	1
No. of Defects still Unremedied ..	1

April, 1927.

APPENDIX A.

XXIV.—*STATISTICAL TABLES*

For the Year 1926.

Table I.—Number of Children inspected.

Table II.—Return of Defects found.

Table III.—Numerical Return of all exceptional Children.

Table IV.—Treatment of Defects of Children.

TABLE I.

RETURN OF MEDICAL INSPECTIONS.

A.—Routine Medical Inspections.

Number of Code Group Inspections :—

Entrants.	*Intermediates.*	*Leavers.*	*Total.*
3325	2057	2548	7930

Number of other Routine Inspections :—

Nil.

B.—Other Inspections.

Number of Special Inspections	7968
Number of Re-inspections	2078
Total number of other Inspections	10046

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION In the Year Ended 31st December, 1926.

DEFECT OR DISEASE.	Routine Inspections. No. of Defects.		Special Inspections. No. of Defects.	
	Requiring treatment.	Requiring to be kept under observation, but not requiring treatment.	Requiring treatment.	Requiring to be kept under observation, but not requiring treatment.
(1)	(2)	(3)	(4)	(5)
Malnutrition	19	7	39	8
Uncleanliness	119	24	277	25
Ringworm :—				
Head	9	—	60	—
Body	6	—	44	—
Scabies	23	1	45	—
Impetigo	66	2	437	—
Other Diseases Non-Tubercular	36	18	191	21
Eye — Blepharitis	53	4	108	3
Eye — Conjunctivitis	5	2	34	3
Eye — Keratitis	1	1	2	—
Eye — Corneal Ulcer	—	—	—	—
Eye — Corneal Opacities	1	—	8	7
Eye — Defective Vision	378	304	364	608
Eye — Squint	27	12	45	22
Eye — Other Conditions	50	76	87	126
Ear — Defective Hearing	22	11	44	22
Ear — Otitis Media	34	30	129	39
Ear — Other Ear Diseases	7	3	36	1
Nose & Throat — Enlarged Tonsils	102	331	131	311
Nose & Throat — Adenoids	34	86	103	87
Nose & Throat — Enlarged Tonsils and Adenoids	99	98	113	75
Nose & Throat — Other Conditions	17	9	45	17
Enlarged Cervical Glands (Non-Tubercular)	8	72	31	68
Defective Speech	1	33	2	20
Teeth — Dental Diseases	152	16	175	8
Heart & Circulation — Heart Disease :— Organic	16	52	25	63
Heart & Circulation — Functional	2	361	9	305
Heart & Circulation — Anæmia	62	11	149	10
Lungs — Bronchitis	35	150	122	50
Lungs — Other Non-tubercular Diseases	14	420	82	409
Tuberculosis — Pulmonary, Definite	7	9	33	15
Tuberculosis — Pulmonary, Suspected	27	4	91	19
Tuberculosis — Non-Pulmonary— Glands	3	2	14	6
Tuberculosis — Spine	1	—	1	—
Tuberculosis — Hip	—	4	2	3
Tuberculosis — Other Bones and Joints	—	2	8	3
Tuberculosis — Skin	—	—	—	1
Tuberculosis — Other Forms	—	1	12	1
Nervous System — Epilepsy	—	2	3	4
Nervous System — Chorea	1	2	21	2
Nervous System — Other Conditions	9	12	21	12
Deformities — Rickets	4	3	12	5
Deformities — Spinal Curvature	—	1	4	3
Deformities — Other Forms	28	36	43	54
Other Defects and Diseases	51	34	725	183
Goitre	39	43	63	63
	1588	2289	3990	2682

TABLE II.

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

	Number of Children.		Percentage of Children found to require Treatment.
	Inspected.	Found to require Treatment.	
Code Groups :—			
Entrants	3325	563	17%
Intermediates	2057	447	21%
Leavers	2548	371	14%
Total (Code Groups)	7930	1381	17%
Other Routine Inspections	Nil.	Nil.	Nil.

COUNTY OF CUMBERLAND.

SCHOOL MEDICAL SERVICE.

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

			Boys.	*Girls.*	*Total.*
Blind (including partially Blind)	Suitable for training in a School or Class for the Totally Blind	Attending Certified Schools or Classes for the Blind	—	2	2
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	Suitable for training in a School or Class for the Partially Blind	Attending Certified Schools or Classes for the Blind	1	3	4
		Attending Public Elementary Schools	—	1	1
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
Deaf (including Deaf and Dumb and partially Deaf)	Suitable for training in a School or Class for the Totally Deaf or Deaf and Dumb	Attending Certified Schools or Classes for the Deaf	11	5	16
		Attending Public Elementary Schools	1	3	4
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	Suitable for training in a School or Class for the Partially Deaf	Attending Certified Schools or Classes for the Deaf	2	3	5
		Attending Public Elementary Schools	4	3	7
		At other Institutions	—	—	—
		At no School or Institution	—	1	1
Mentally Defective	Feeble-minded (Cases not notifiable to the Local Control Authority)	Attending Certified Schools for Mentally Defective Children	—	—	—
		Attending Public Elementary Schools	40	29	69
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	Notified to the Local Control Authority during the year	Feeble-minded	4	1	5
		Imbeciles	2	—	2
		Idiots	1	1	2
Epileptics	Suffering from severe Epilepsy	Attending Certified Schools (Special) for Epileptics	1	—	1
		In Institutions other than Certified Special Schools	—	—	—
		Attending Public Elementary Schools	4	3	7
		At no School or Institution	3	1	4
	Suffering from Epilepsy which is not severe	Attending Public Elementary Schools	1	—	1
		At no School or Institution	—	—	—
Physically Defective	Infectious and Pulmonary and Glandular Tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	—	1	1
		At other Institutions	2	2	4
		At no School or Institution	—	1	1
	Non-infectious but active Pulmonary and Glandular Tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	15	14	29
		At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
		At Public Elementary Schools	21	20	41
		At other Institutions	1	3	4
		At no School or Institution	—	—	—
	Delicate Children (*e.g.*, pre- or latent Tuberculosis, Malnutrition, Debility, Anæmia, etc.)	At Certified Residential Open Air Schools	—	—	—
		At Certified Day Open Air Schools	—	—	—
		At Public Elementary Schools	892	816	1708
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	Active Non-pulmonary Tuberculosis	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	5	6	11
		At Public Elementary Schools	15	14	29
		At other Institutions	—	—	—
		At no School or Institution	2	1	3
	Crippled Children (other than those with active Tuberculous Disease, *e.g.*, Children suffering from Paralysis, &c., and including those with severe Heart Disease)	At Certified Hospital Schools	9	9	18
		At Certified Residential Cripple Schools	—	—	—
		At Certified Day Cripple Schools	—	—	—
		At Public Elementary Schools	193	199	392
		At other Institutions	—	1	1
		At no School or Institution	3	—	3

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED DECEMBER, 1926.

TREATMENT TABLE IV.

GROUP 1.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS. FOR WHICH SEE GROUP 5).

Disease or Defect. (1)	*Number of Defects Treated, or under treatment during the year.*		
	Under the Authority's Scheme. (2)	*Otherwise.* (3)	*Total.* (4)
Skin.			
Ringworm—Scalp	51 ..	8 ..	59
Ringworm—Body	36 ..	3 ..	39
Scabies	37 ..	3 ..	40
Impetigo	387 ..	9 ..	396
Other Skin Diseases	183 ..	19 ..	202
Minor Eye Defects .. .. (External and other, but excluding cases falling in Group 2).	211 ..	48 ..	259
Minor Ear Defects	131 ..	10 ..	141
Miscellaneous .. .. .. (*e.g.*, Minor Injuries bruises, sores, chilblains, etc.).	760 ..	66 ..	826
Total	1796 ..	166 ..	1962

TABLE IV.

GROUP II.—DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS—GROUP I.

Defect or Disease.	*Number of Defects dealt with.*			
	Under the Authority's Scheme.	*Submitted to refraction by Private Practitioner or at Hospital, apart from the Authority's Scheme.*	*Otherwise.*	*Total.*
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint). Operations for Squint should be re-recorded separately in the body of the Report)	839	86	—	925
Other Defect or Disease of the Eyes (excluding those recorded in Group I	—	—	—	—
Total	839	86	—	925

Total No. of Children for whom Spectacles were prescribed :—

(a) Under the Authority's Scheme 797

(b) Otherwise 83

Total No. of Children who obtained or received Spectacles :—

(a) Under the Authority's Scheme 630

(b) Otherwise 63

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

Number of Defects.

Received Operative Treatment.			*Received other form of Treatment.*	*Total Number Ttreated.*
Under the Authority's Scheme, in Clinic or Hospital.	*By Private Practitioner or Hospital apart from the Authority's Scheme.*	*Total.*		
240	145	385	31	416

TABLE IV. GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were :—				
(a) Inspected by the Dentist :—				
	Aged.			
	5	169		
	6	191		
	7	182		
	8	154		
	9	141		
Routine Age Groups	10	170	Total	1544
	11	154		
	12	180		
	13	145		
	14	58		
Specials				84
Grand Totals ..				1628
(b) Found to require treatment ..				1264
(c) Actually treated				1547
(d) Re-treated during the year as the result of periodical examination				131
(2) Half days devoted to Inspection 19, Treatment 467			Total	486
(3) Attendance made by Children for treatment				
(4) Fillings .. Permanent Teeth 447, Temporary Teeth 1			Total	448
(5) Extractions Permanent Teeth 1437, Temporary Teeth 3430			Total	4867
(6) General anæsthetics administered for extractions				1849
(7) Other Operations Permanent Teeth 280, Temporary Teeth —			Total	280

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(1) Average number of visits per school made during the year by the School Nurses	3
(2) Total number of examinations of children in the schools by School Nurses	51086
(3) Number of individual children found unclean ..	761
(4) Number of children cleansed under arrangements made by the Local Education Authority ..	—
(5) Number of cases in which legal proceedings were taken :—	
(a) Under the Education Act, 1921 ..	—
(b) Under School Attendance Bye-laws ..	—

APPENDIX B.

FURTHER NOTES ON IODINE.

By KENNETH FRASER, M.D., D.P.H.,

Deputy School Medical Officer.

FURTHER NOTES ON IODINE.

The investigations into the merits of Iodine therapy, the results of which were published as a special report, and included under the title of "On Iodine" as an appendix to the report of the School Medical Officer for 1925, have been continued and expanded during 1926.

"On Iodine" has during the year been re-written to include full details as to dosage, methods of administration and results, and is being distributed to the medical profession by the Chilean Iodine Committee, with the permission of the Cumberland County Council.

Certain important new facts and results have come to light during the year, and, in view of the full report by Dr. Towers, it is only necessary to review these briefly. The most interesting point of a general nature, which is now apparent, is the impossibility of prophecying with certainty the results of Iodine administration in any given case. The number of successful cases treated has increased by leaps and bounds. The results are confirmed by all members of the medical staff throughout the County. In some cases—a few of which are quoted later—the results have been almost miraculous.

On the other hand there have been a few cases—*a very small percentage*—of absolute failure, and in one case it appeared as if positive harm had resulted. That is, of course, only one case among several hundreds treated, but, nevertheless, it emphasises the difficulty of prophecying.

It is, too, clear that different individuals respond differently to Iodine administered in different ways. Dr. Towers has prepared a large number of weight charts, some of which are published later, which proved conclusively that Iodine in the different forms of Collosol Iodine liquid, Collosol Iodine Pastilles, and Iodised Sweets, containing Sodium Iodide, covers the needs of the majority of Iodine starvation cases, although some cases respond best to one of these forms, and some to another for no apparent reason.

The use of Iodised sweets has been much extended. These contain minute doses of Iodine—one-fifth to one-tenth of a grain as Sodium Iodide. Administered one every fifth day, they have proved invaluable, especially in the form of Iodised butter scotch, in the treatment of many conditions.

Some investigations have been made into the disinfection of class-rooms by tablets containing Iodine in Naphthaline. There is considerable evidence that Iodine in the air prevents the spread of air-born epidemics. For example, workers in Iodine factories have been found to be immune in such epidemics, and, therefore, the assistance of the Crookes Laboratories was invoked to investigate the best method of impregnating the air of class-rooms with Iodine. Their chief chemist (Mr. Ward), and their consulting chemist (Sir William Pope), after prolonged experiment, reported that Iodine combined in a tablet of Naphthaline was the most practical method. It is proposed, therefore, to experiment fully with such tablets—in fact such observations have already begun.

Infants' Schools or Departments are used to eliminate in, for example, epidemics of Measles or Whooping Cough, the acquired immunity found among older children and other Infants' Schools or Departments, in the same town or area, are used as controls. The percentage of cases affected in the respective groups will be the basis of investigation. The tablets vary from 5% to 10% of Iodine.

The issue of Iodised tablets (Parke, Davies & Co.) to the school children of the Alston Rural District has been instituted. This area is the most goitrous in Cumberland, and there was a general desire on the part of the parents for this preventive measure. The distribution has been arranged by the Medical Officer of Health (Dr. Stobbs).

The water supplies of this area are being analysed by the Rowett Institute to estimate the Iodine content.

Turning now to results of treatment :—

Pulmonary Tuberculosis.

The remarkable effect of Iodine on pretubercular cases was noted last year. Further notes on such cases are given by Dr. Towers. Extremely good results have been recorded

in France and in the U.S.A. from the administration of very large doses of Iodine by the mouth in pulmonary tuberculosis. The claims have been so great as to appear exaggerated—one observer (Bourdreau) even claiming that Iodine in extreme doses is a specific in pulmonary tuberculosis.

Roy, in the " Indian Medical Gazette," December, 1926, recorded remarkable results in six cases of pulmonary tuberculosis from intramuscular injections of " Iodeal Viel," which is Iodine in a vegetable oil.

This treatment, combined with Calcium by the mouth, has been tried on one case of pulmonary tuberculosis. The case was one in which five medical men agreed that the prognosis was hopeless, and that an early fatal termination was to be expected. The case is still under treatment, but the following results were noted within four days of the first injection. The temperature, which for months had swung between 97° and 102°, steadied to between normal and 99°, and for two weeks remained steady at this point. The cough and spit completely ceased ; the appetite became extremely good, gastro-intestinal symptoms—vomiting and Diarrhœa—ceased, and all lassitude disappeared completely. These improvements have not in all respects been maintained throughout, but, in the main, they have. The lungs, on examination after two weeks, showed absence of all crepitations. At the time of writing the patient is progressing most favourably. This case was so advanced when treatment began that such remarkably good results could hardly have been expected, and, whatever the ultimate result in this case, the observations have certainly indicated that in early cases this line of treatment may be expected to give remarkable results. The importance of this, if it proves to be the case, is apparent without emphasis.

Nocturnal Incontinence (Bed Wetting).

Iodine, in the form of Iodised sweets or Collosol Iodine, has been so successful in this class of case that one can say with confidence that it is a specific cure, or practically so, for this frequent and troublesome condition in young children. This is, of course, in keeping with the opinion of Dr. Hertoghe, of Antwerp, who says : " In the greater number of cases children and adolescents, who are the victims of nocturnal enuresis, are thyroid inefficients."

Another member of the County Medical Staff (Dr. Simpson) has reported interesting results of Iodised sweets on a case of incontinence of foeces and urine very severe and of very long standing. At the time of writing the incontinence of foeces has not been affected, but the mother reports that for three days after each tablet of Iodised butter scotch is taken there is total absence of incontinence of urine, which, however, invariably returns for the fourth and fifth day—the Iodised tablets being given at the usual rate of one every fifth day.

Asthma and Chronic Bronchitis.

Many more cases of these conditions have been under treatment, and have practically, without exception, been completely cured. Most of them have had Iodised sweets only.

Boils.

The treatment of sufficient cases of boils has now been undertaken to enable us to say that Collosol Iodine is practically a specific remedy. I say " practically " because, although all cases treated have absolutely cleared up, it is possible that cases may be found which will not respond. Iodine in other forms has not been tried.

Skin Diseases.

The results in the treatment of Eczema and Septic Skin conditions continue to be most satisfactory. Several cases of Psoriasis have been under treatment with Iodised butter scotch plus the local application of a tar ointment. With one exception all the cases either were completely cured or were enormously improved. The exceptional case has already been referred to. The patient improved for a time, and then appeared to be actually much worse. The case is still under treatment, and no definite opinion can yet be given.

Exophthalmic Goitre.

One very remarkable case has been treated. This patient had all the typical symptons—Goitre, protruding eyes, tremors, and very rapid action of the heart. On Collosol Iodine, within four weeks, every vestige of the condition had disappeared. No other case of this disease has come up for investigation.

Worms.

One family, a mother and three children, who had all suffered very much from thread worms, for years, and on whom other treatment had been unsuccessful, were given Iodised butterscotch sweets every fifth day as usual. In two months the woman wrote to say: "The treatment for the worms for myself and the children has cleared them all away." Other equally successful results in similar cases have been obtained with Iodised butterscotch. One case on Collosol Iodine has been equally successful. The mother writes: "His general health has improved; he has gained 4lbs. in weight in five months. He has had no worms for several months."

Abdominal Tuberculosis.

One severe case with abdominal swelling, diarrhœa, and extremely thin and undersized, in fact almost emaciated, was reported on by the parent after some months of Iodine treatment: "Much better and heavier; the swelling has gone, also the Diarrhœa; there is a great improvement in every way. He had a very bad colour before, it has left him now."

Backward Children.

Many more of these have been under treatment with the best results. So much have some Head Teachers been impressed with these improvements in the work of backward children that they have offered to pay personally, or otherwise to obtain privately, the necessary sum to cover the cost of treatment in other backward cases.

In one remarkable case the Head Teacher writes: "From being an average girl, she is one of the brightest children in the school." This case was under treatment for an enormous goitre, which has completely disappeared.

Another case (Mongolian type), who was incapable of doing any school work at all, has improved so much that the Head Teacher writes: "Tremendous improvement, can read quite nicely and do simple sums."

Another case (also Mongolian) is reported by the parent, who had been told the case was hopeless: "Progressing most satisfactorily, wonderfully bright, speech improved."

Improvement in Physique.

Where it has been possible to obtain reliable records of weight, from cases in this area, the facts more accurately recorded in another area by Dr. Towers in his weight charts has been confirmed. One case gained a stone in six months.

Susceptibility to Cold.

This is an extremely common complaint of thyroid defficients, and the remarks of one adult patient—treated for goitre—are typical. She says: "I find I can withstand the cold weather much better than formerly with half the protection in the way of clothing I used to need."

General.

In general it may be said quite definitely that the claims made 12 months ago as to the value of Iodine therapy were not over, but under-stated. There is no doubt whatever that the result of another year's experience shows that Iodine treatment has a far wider application than was thought 12 months ago. The number of cases in this County, whose case records can be produced to substantiate this statement has now increased to several hundreds.

APPENDIX C.

IODINE TREATMENT

IN THE

CLEATOR MOOR

AND

MILLOM AREAS (1926.)

By ARTHUR H. TOWERS, M.B., Ch.B., D.P.H.,

Assistant School Medical Officer.

The following report on the effect of Iodine in some common defects found in school children, is the outcome of the investigation carried out last year by Dr. K. Fraser in his area. The effects obtained by Dr. Fraser were so uniformly successful, and in some cases so startling. that it was considered advisable to extend the investigation. At the request of Dr. Morison, therefore, I have treated some 40 odd cases at Cleator Moor and at Millom on the lines suggested by Dr. Fraser's report.

The Effects of Thyroid Deficiency.

In extreme cases, cretinism results, but in my experience, the true cretin is rare. Cretinoid condition is, however, extremely common. Slow growth, delayed ossification, protruberant abdomen, the square rickety forehead, dullness and mental lethargy, are phenomena familiar to anyone familiar with the type of children who attend a School Clinic, they are seen to perfection in " the child who will *not* grow up." (Vide Case No. 12).

In extreme cases post-mortem changes have been observed, which bear a striking resemblance to those of senile decay, *e.g.*, calcareous hardening of the arteries, etc. (Dale).

A dry, rough skin, hair scanty and tending to fall out, and an undue sensitiveness to cold, are other points highly suggestive of thyroid insufficiency.

Nocturnal incontinence of urine is a most troublesome and distressing feature of many cases brought to School Clinics, and has always proved highly unsatisfactory in treatment. Excluding those cases which are due to other grosser defects, *e.g.*, the presence of worms or adenoids, there remain a very large class in whom no cause can be found. Now, according to Hertoghe : " the vast majority of children and adolescents who suffer from nocturnal enuresis, are thyroid inefficients (*note inefficients* and not necessarily *deficients*). Acting on this dictum, several cases of this trouble were treated by the use of Iodine, and are included in the detailed list of cases appended to this report. Generally speaking, so successful have the results been, that I now adopt this method as a routine procedure in all cases of incontinence, first excluding, of course, the possibility of the above-mentioned grosser causes as ætiological factors.

Certain forms of skin diseases, notably those associated with lack of natural fatty substances, *i.e.*, the "scaby" conditions of dry skins, have done remarkably well on Iodine in my experience. Two cases of psoriasis have been treated, and both have done very well indeed. In one, a moderately severe case, it was a matter of great importance to the boy's parents that the condition should be healed, owing to the fact that the family was about to emigrate, and fears were entertained that with this eruption, the boy would be rejected by the Emigration M.O. However, when I last saw the boy, every trace of psoriasis had vanished. It is not surprising that results should be specially good in the case of dry skin lesions, as the very fact of the existence of a dry, scaly skin, and a scanty hair growth is highly suggestive of thyroid insufficiency. In this connection one cannot fail to bring to mind Sir Byrom Bramwell's well-known and classic experiments in the treatment of psoriasis with thyroid extract. It is highly suggestive that first those conditions for which thyroid extract has been regarded as a specific for years, should be the very cases that do best on Iodine. According to Swale Vincent, the significance of Iodine (*i.e.*, in the composition of the thyroid secretion) is problematic, though the beneficial effects of thyroid administered as a drug, seems to depend very largely on its iodine content.

Hertoghe, long ago (Practitioner, 1915), drew attention to the very close resemblance that exists between thyroid deficiency and nephritis. I have had a remarkable experience of the truth of this in the case of a school boy at Millom, whom I strongly suspected of Bright's Disease. He attended the Clinic regularly, but never once was I able to detect the slightest abnormality in the urine to corroborate this. This case forced itself on my mind on reading the above article, and I treated him with Iodine—in fact he is still under treatment—with very beneficial results. Incontinence, from which he suffered, has cleared up, a very distended abdomen raising a suspicion of abdominal tuberculosis, has receded very much, and his general health has improved markedly.

Intestinal Stasis.

This is a subject of immense interest and importance at the present time, owing to the profound toxic influence on the sufferer, and to its extreme prevalence, much more so than is generally realised. To suffer from Intestinal Stasis is to be making for the rocks of old age, irrespective of age in

years. Everyone has heard of the dictum that "a man is as old as his arteries," it is probably first as true to state "a man is as healthy as his bowel," and by "bowel" I imply the large bowel, the *fons et origo* of so much trouble.

Mc.Carrison, in one of his classic works, "Endemic Goitre," found that, in India, in certain localities, the drinking of certain waters prevented the onset of goitre, and that these waters were found to contain a certain small proportion of Iodine.

He states that the thyroid gland is rendered inefficient by the *toxins* (*not* the organisms themselves) of organisms present in the alimentary tract in cases of Intestinal Stasis, *i.e.*, that the thyroid gland suffers from the intestinal auto-intoxication. He terms these "goiteriginous organisms." Of all the substances employed to destroy these organisms, Iodine was found by far the most potent. The administration of Iodine in cases of thyroid inefficiency and simple goitre, may, and probably does, act in two ways :—

(*a*) by supplying Iodine to the thyroid, which is being starved by this substance ; and

(*b*) by reducing the number of goiteriginous organisms in the bowel, preventing thyroid degeneration.

The action of Iodine on the bowel is largely augmented by the administration of other intestinal antiseptics.

Causes of Thyroid Insufficiency.

In the vast majority of cases, the cause is heredity. Other causes are most of the infectious diseases and intoxications of all sorts. It is a well-established fact that the thyroid substance of debilitated persons is poor in Iodine content. The *seasonal* variation in iodine content, is most suggestive, being lowest during the winter months and highest during the summer period, *i.e.*, speaking generally, the Iodine content is highest when the body and mind are most healthy, and *vice versa*. It is not unreasonable to suppose that if we can keep the Iodine content high during a period when it normally falls, a benefit to general health will result.

Thyroid insufficiency in its most extreme form is found in myxœdema, and this is represented in childhood by idiocy of the cretinoid type, with arrested development and dwarfism, etc. (Leopold-Levi).

Relationship between Thyroid Deficiency and Excessive Dental Caries.

It is well established that the thyroid secretion has a profound effect on the metabolism of calcium salts. Insufficient or inefficient thyroid secretion results in rickets. Waller considers that in children an excessive degree of dental caries is an indication that the thyroid is at fault. This he explains by the fact that the main factor in dental caries is the absence of an adequate supply of calcium salts in the saliva, which is normally alkaline, and this should be sufficient to neutralise the acid products of fermentation. The primary stage in dental caries is decalcification of dentine by acids thus produced. The lower front teeth, from their position, are constantly bathed in saliva, and are markedly immune from caries, whereas the corresponding upper ones are exceedingly prone to caries.

It may be noted that the submaxillary saliva is richer in calcium salts than the parotid secretion, and in any general calcium deficiency the parotid juice suffers most, and tends to become acid, hence back teeth are the first, generally, to show caries.

These facts serve to show the relationship between dental caries and thyroid deficiency (Waller), and also, I think, helps to explain the wide divergence in the amount of dental caries seen in different districts, and in different children in the same district.

Waller has pointed out that the usual state of the thyroid in children is one of hyper-activity rather than insufficiency, as is evidenced by the characteristic hyper-excitability, restlessness and highly strung nervous system, these being, of course, physiological and not pathological. These traits are very similar to what is found in the adult in Graves' Disease, when the thyroid is in a state of pathological hyper-activity. The excessive thyroid secretion in children is obviously needed, and is used up for growth, etc. Further, the Iodine-content of the thyroid secretion in growing children is low. I have seen the argument employed that

this fact shows that the Iodine is an unnecessary constituent. From experience in the marked improvement in health under Iodine treatment, I think it is far more likely that Iodine is so necessary during growth, that the normal supply is utilised as soon as supplied, and that there is therefore little, if any excess.

The notes appended of cases treated relate entirely to children. No adults have been treated.

That the beneficial effects of an adequate Iodine supply in adults would be noted, cannot be doubted. It is especially important that the thyroid gland function properly in the case of expectant mothers, as during the gestation period there is an extra call on the thyroid, and any failure to respond to this call will inevitably result in injury to the health of the mother and that of the unborn child. " Cretinism is not due to the development of goitre in an individual, it may be an *effect*. Defective thyroid function in the mother is the essential factor in the production of cretinism." (Swale Vincent).

As will be seen from the list of cases appended, a great variety of cases have been subjected to treatment. Simple goitres, in the absence of any other defect, have not, as a rule, been selected, except in two cases, where a request was made by the parents that some treatment should be tried, if possible. It is interesting to note that in one of these cases, the fact that the child suffered from nocturnal incontinence, had not been mentioned until the treatment had been in progress some two months, and then it was mentioned casually, as it " had entirely stopped."

It should be borne in mind, in assessing the results, that the material selected for treatment was very poor indeed. In fact, as it was only possible to undertake this special treatment in a certain number of cases, as it has involved a considerable strain on available time, only the very *worst* cases of all were selected, including those who failed to respond to the ordinary routine methods of treatment.

In one or two cases it must be admitted that the result has been a failure, both as regards local condition for which treatment was instituted, and general improvement in health. It is curious that in the two most outstanding instances of

this, both were cases that I should have predicted as likely to prove brilliant successes. On the other hand, several cases in which I thought any line of treatment hopeless, have been amongst the most successful.

This brings up the question of *method* of treatment. In the earlier cases, *all* were treated on the same lines, starting with Collosol Iodine Liq., a dram three times daily, reducing to twice daily after seven days. Following on this Iodised sweets were given, either in the form of chocolate, butterscotch or pastilles. In the two former, one sweet was taken every fifth day, in the latter one pastille twice daily.

While a certain amount of success was obtained with the liquid iodine, it was not so marked, nor were the effects seen so soon as when sweets were used, and as a result of a year's experience, I am gradually discarding the use of liquid iodine, and pinning my faith to iodised sweets.

In one or two instances cases have responded in a most remarkable way to the pastilles ; while every other form of Iodine was, by comparison, a failure. There is apparently no reason why this should be, more particularly when it is borne in mind that in other cases this particular method of administration produced little, if any, effect. This only goes to show that a considerable amount of further experience will be necessary before things begin to fall into their proper places. At present I find it impossible to foretell which cases will respond to any one method, or whether they will respond at all.

No use was made of Tincture of Iodine in milk, a most perfect colloidal solution, though very good results have been obtained by this method, especially in cases of actinomycosis. This method appears to me to be impracticable in the case of School Clinics, owing to the impossibility of supervising each dose taken.

Nor has any use been made of Collosol Iodine Oil, which promises well in cases of ringworm and alopoecia. In a further report at the end of the present year, it is hoped that it will be possible to furnish some notes on these cases.

The experience gained during the past year has been to convince me of the great possibilities in the use of Iodine as a medicinal agent. Nevertheless I feel loth to make any attempt to claim too much, as I fear this will only bring the subject into disrepute. In the light of present limited experience, I feel it is more judicious to claim too little than too much.

PROGRESS NOTES ON CASES TREATED BY COLLOSOL IODINE AND IODISED SWEETS.

CASE 1.—GIRL, 6 YEARS.—S.S.

Came under treatment September, 1926—lethargy and "not thriving." Anæmia and marked pallor. Appetite very poor. Did not improve on routine treatment, Parrish's food, etc. Marked improvement under Collosol Iodine Pastilles, one twice daily, but lost ground again on changing to Iodised chocolate tablets.

CASE 2.—GIRL, 9 YEARS.—P.Y.

Has attended Clinic 2—3 years as a "pre-tubercular" child. Intense lethargy, nutrition very poor, weight showed very little change for two years. Slight thyroid enlargement. In June, 1926, was put on Collosol Iodine Liq., changed to Iodised butter scotch 5—6 weeks later. By October she looked very well, appetite reported really good, and marked increase in weight. No appreciable change in thyroid or physical signs in chest. In January, 1927, had slightly lost weight again, but otherwise improvement well maintained.

[*Note.*—There is reason to doubt whether directions are carried out as well as might be.]

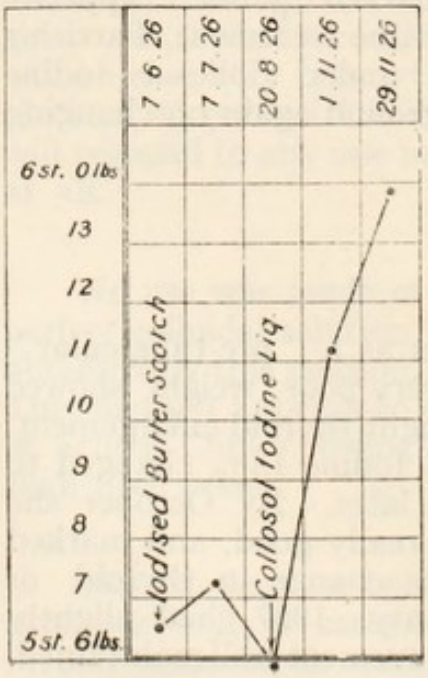
CASE 3.—GIRL, 13 YEARS.—S.A.

A very typical case of thyroid insufficiency, viz.: (a) moderately enlarged thyroid, (b) very backward physically and mentally, (c) very poor nutrition, (d) bed-wetting (not due to gross causes).

Commenced on C. Iodine Liq. in June, 1926, and subsequently changed to C.I. Pastilles and Iodised sweets. Undoubtedly did best on two former, progress slowed up on latter. Thyroid receded considerably, now scarcely appreciable, bed-wetting practically ceased—though not entirely. Appetite good, weight increased, and mother reports her "much more wide awake."

Case 4.

(ENURESIS)

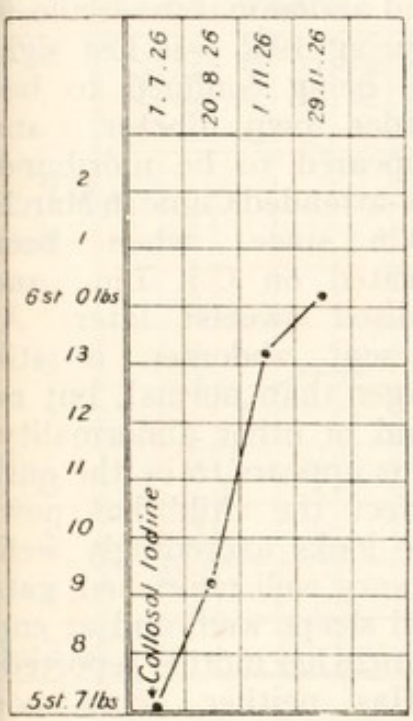


GIRL, 12 YEARS.—E.B.

Came under notice in June, 1926, for bed-wetting. Very considerable thyroid enlargement. Physically a fine specimen, but gets tired easily. Did equally well on iodine in any form, and all were given. Weight increased rapidly, bed-wetting *entirely ceased*, and thyroid slightly (only) reduced.

Case 5.

(HYPERTHYROIDISM)



GIRL, 13 YEARS.—M.P.

Pure case of thyroid enlargement with excitability, and rapid pulse, 116—120. Lethargic at times, easily tired, appetite poor. Treated on C.I. Liq., and subsequently by iodised sweets. Size of thyroid not appreciably altered, but pulse rate slowed to 96. Eats and sleeps well. General condition much improved; not lethargic now.

Note.—Very rapid increase of weight.

CASE 6.—BOY, 12 YEARS.—D.I.

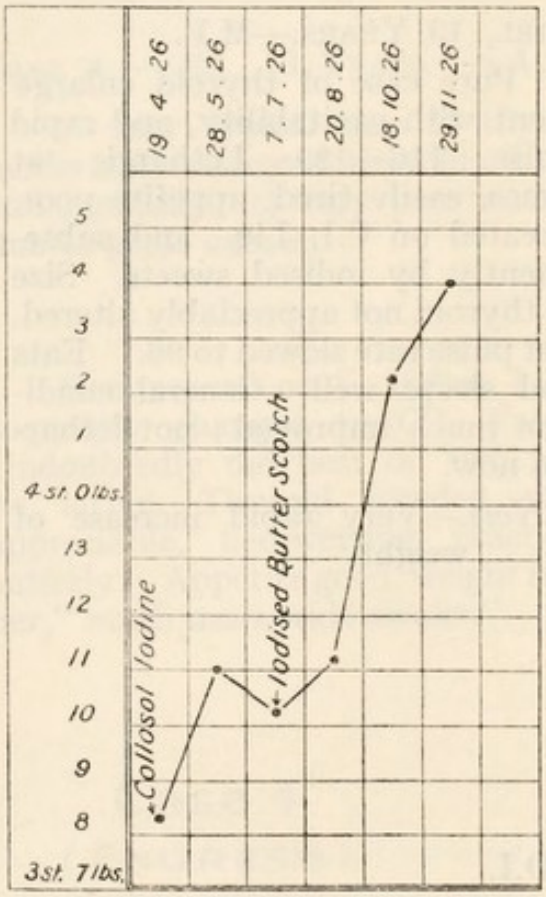
Brought under notice by Head Teacher for irregular attendance—absent for months at a time. Boy looked very ill indeed; very white and anæmic, "pasty," malnutrition. History of rheumatic fever, heart irregular, pains in joints, very bad in wet weather, when he cannot go to school, having a 2½ mile walk. Was excluded till end of July, and treated first by C.I. Liq., and later by iodised sweets.

Started school again in August, and up to end of October had only been absent one half-day.

Weight increasing steadily rather than fast, is now a healthy colour, appetite and nutrition much improved. Pains in knees only now and intermittent—not continuous as before. Heart regular. Looks and states *feels* perfectly fit, except for occasional pains.

Case 7.

(MALNUTRITION)



GIRL.—11 YEARS.—E.F.

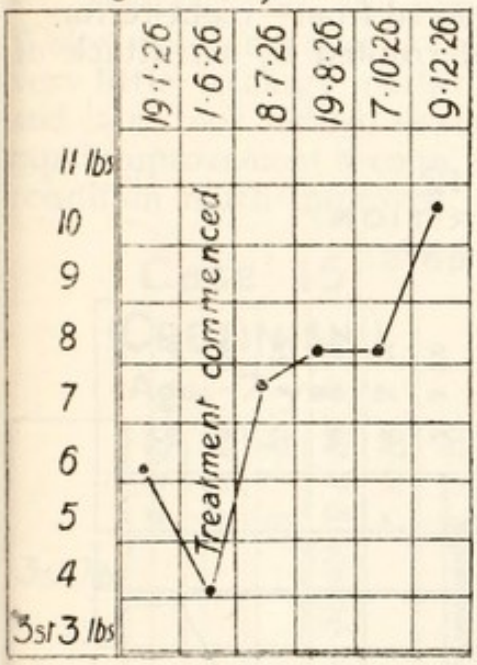
Has attended for past three years for malnutrition and abdominal tuberculosis. During 1925 was lost sight of, being confined to bed under own doctor, and appeared to be moribund. Re-attended Clinic in March, 1926; since when been treated on C.I. Liq., and iodised sweets later. At present abdomen is still larger than normal, but no fluid or other abnormality. This appears to be the only defect the child has now, she looks exceedingly well, is very well nourished, eats and sleeps well, and at end of 1926 her mother reported: "Has neither aches nor pains, and has never been better in her life. Has attended school regularly for past 9 or 10 months, missing only two half-days for "biliousness." Considering the child was almost moribund, a most remarkable case.

CASE 8.—BOY, 9 YEARS.—F.O'N.

Case of phthisis. Boy lives with grandmother. Would not entertain Sanatorium Treatment. Has attended Clinic for some years. Started course of C. Iodine treatment in April, 1925, C.I. Liq. at first, and iodised sweets later. Still many coarse crepitations at bases, but general health very satisfactory; weight increasing steadily, etc.

During 25 months preceding iodine treatment, his gain in weight was 11-lbs.=·44-lbs. per month. During 7 months of iodine treatment, gain in weight has been 6-lbs.=.85-lbs. per month.

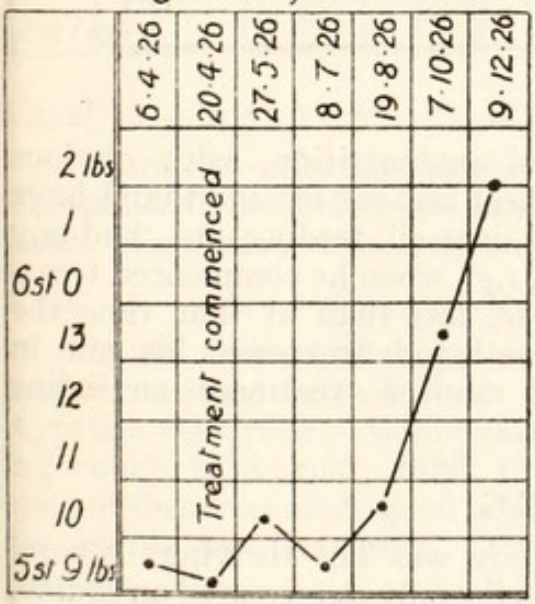
Case 9
(PHTHISIS)
Age. 12 years.



BOY.—H.D.

Case of phthisis. Been attending Dispensary for two or three years. Failed to progress, though no evidence of active disease. Treated on iodised sweets as from 1/6/26. Mother states now that he is the best he has ever been, and doing grand."

Case 10
(GOITRE & DEBILITY)
Age. 12 years.

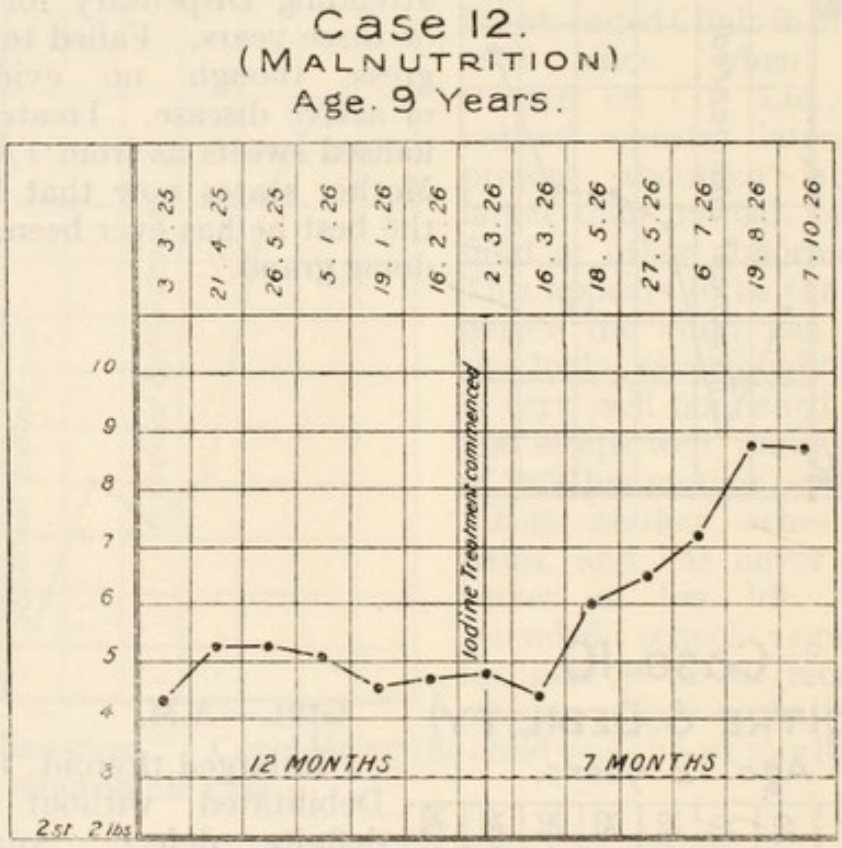


GIRL.—A.M.

Enlarged thyroid, 13½in. Debilitated without any definite defect. Anæmia and appetite poor. Weight variable. Lethargy marked and overgrown. Improvement slow under C. Iod. Liq., but faster when on iodised sweets. Thyroid has gone down 1-in., weight has increased markedly. Feels much more full of energy. Inclined to be drowsy at times, and still looks white. A very definite improvement.

CASE 11.—BOY, 6 YEARS.—J.T.

Very marked case of Enuresis, which *has entirely ceased*. Treatment on Syrup. Ferri Iodi was tried, but had to be abandoned, owing to intense headaches it produced. Iodised sweets were substituted. Also suffered from " night-terrors," which have ceased. Progress interrupted by an attack of Chickenpox in May—June.



CASE 12.—BOY, 9 YEARS.—R.G.

Case of weak chest and malnutrition, with obvious thyroid deficiency. The smallest boy for his age that I have ever seen. No amount of cod liver oil, feeding, etc., had any effect on his stature or weight, *e.g.*, when he commenced treatment on 16/3/26, he was $\frac{3}{4}$-*lb. less* than at that time the preceding year. In 17 months before treatment his gain in weight was $2\frac{3}{4}$-lbs.; while 7 months treatment on iodine increased his weight over 4-*lbs.*

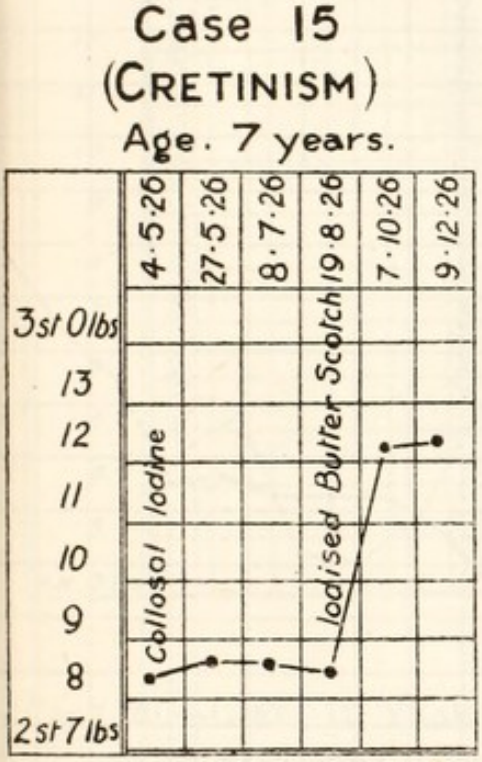
CASE 13.—BOY, 8 YEARS.—T.G.

No definite defect, but boy was not thriving; general debility, lassitude, etc. This is the only case treated on Iodide,

i.e., Syrup Ferri Iodi entirely. Condition very much improved, and a marked increase in weight.

CASE 14.—BOY, 7 YEARS.—J.L.

Pretubercular, and very subject to attacks of bronchitis. White, pale and anæmic, nutrition exceedingly poor. Eats very little, lethargy marked. Commenced with C. Iod. Liq., and later took iodised sweets, the latter producing the more rapid improvement seen in so many cases. Present general condition much improved.



GIRL.—G.W.

The nearest approach to cretinism, and the most perfect example of thyroid deficiency. Small thyroid enlargement, very dry, scaly skin, sparse hair, very small stature, very slow mentally. Has chronic blepharitis. Has improved considerably, and head teacher reports that she is putting up a much better effort at school. Progress is very slow. Commenced with Liq. Col. Iodi, and later iodised sweets.

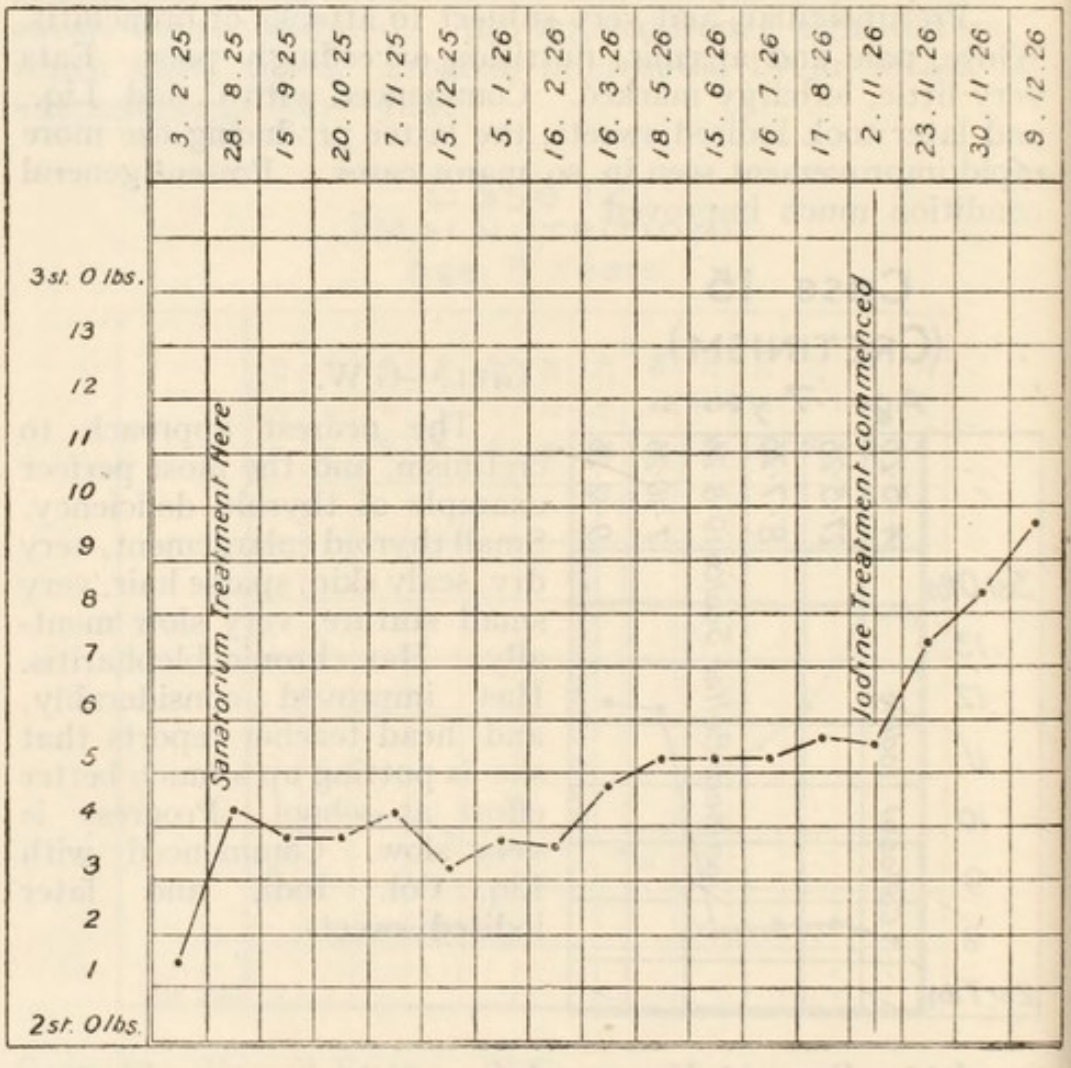
CASE 16.—BOY, 11 YEARS.—C.G.

Psoriasis—affecting thighs and knees. Moderate case. Treated with iodised sweets in conjunction with local applications. Condition cleared up completely.

CASE 17.—BOY, 7 YEARS.—R.Ll.

Small, undersized boy, history of catching cold easily, and occasional attacks of pleurisy. Weight irregular. Appetite very poor. White and anæmic. Listless. Whooping cough in August, 1926, Chickenpox in November. In spite of these has made good progress. Further, had operation for hernia in December. Treated on iodised sweets all through.

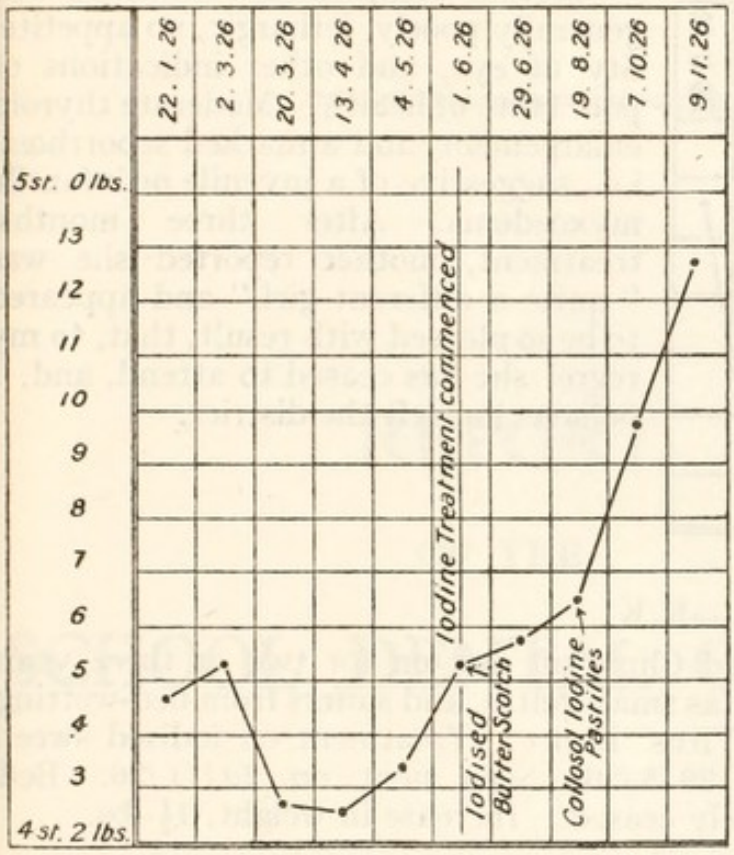
Case 18.
C.B (PHTHISIS).



CASE 18.—BOY, 9 YEARS.

Case of phthisis. Father died recently from this disease. Repeated attacks of broncho-pneumonia. During 1925 spent six months in Sanatorium, but active disease persisted in both lungs. Present condition is very much improved. Right lung appears to be healed, or at least quiescent. His resistance appears to have increased very much. Mother states she notices a great improvement. Appetite good, and sleeps uninterruptedly.

Case 19.
(DEBILITY)



CASE 19.—GIRL, 12½ YEARS.—C.W.

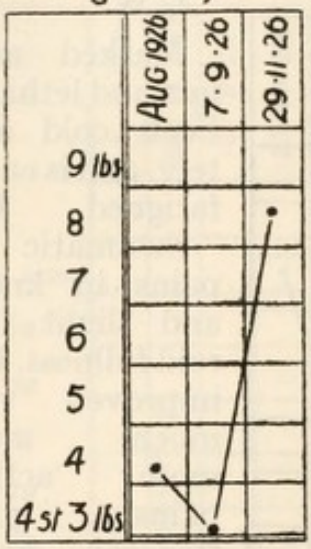
Marked anæmia and lethargy Feels cold acutely, and is easily fatigued. Has "rheumatic" pains in knees, and slight thyroid fullness. Has improved very much, much more active, pains gone. General condition pretty good. This case started on iodised sweets but latterly improved most rapidly on C. Iodi. Pastilles.

CASE 20.—GIRL, 12 YEARS.—L.B.

An adopted child, born under handicap of being illegitimate. Guardian states has always been delicate, and "difficult to rear." Repeated attacks of St. Vitus' Dance and rheumatism. Constipation marked, very easily fatigued and lethargic, and no appetite. Has small goitre. N.B.—Mother also had a goitre, and family comes from Derbyshire.

Has improved very much under C. Iodi. Liq., pastilles and iodised sweets (as usual, most marked increase of weight is when taking sweets). Appetite vastly improved, thyroid very much reduced. Guardian states it "has made a new girl of her." (N.B.—Syrup Ferri Iodi was tried, but had to be abandoned owing to sickness and headaches it produced). A very difficult (but satisfactory) case.

Case 21
(HYPOTHYROIDISM)
Age 11½ years.



GIRL.—M.Q.

Mother complained that child was generally poorly, lethargic, no appetite. Sty of eye, and other indications of poor state of health. Moderate thyroid enlargement, and a marked seborrhœa, i.e., suggestive of a juvenile or infantile myxoedema. After three months' treatment, mother reported she was "quite a different girl," and appeared to be so pleased with result, that, to my regret she has ceased to attend, and, I believe, has left the district.

CASE 22.—GIRL.—K.K.

Has attended Clinic off and on for two or three years for "P.T.B." Has small goitre, and suffers from bed-wetting. Inclined to St. Vitus' Dance. Treatment on iodised sweets commenced on 28/5/26. Seen next on 29/11/26. Bed-wetting completely ceased. Increase in weight, 1½-lbs.

CASE 23.—BOY, 11 YEARS.—D.E.

Very white and "pasty." Overgrown. Frequently "faints." Mother's description of "faint" suggests epilepsy. Treated on Syrup Ferri Iodi, which had to be abandoned owing to sickness it produced. Subsequently given iodised sweets, on which he has done very well. "Faints" have ceased, weight gone up 2½-lbs. in two months.

NOTE.—Many other cases are still under treatment, the majority of which have only recently started treatment, and have not yet been reviewed, and are therefore unsuitable for report purposes at present.

APPENDIX D.

REPORT

OF THE

SCHOOL DENTAL OFFICER

For the Year ended 31st December, 1926.

By F. E. GILLIERON, L.D.S.,

School Dental Officer.

APPENDIX D.

REPORT OF THE SCHOOL DENTAL OFFICER.

I beg to tender my Report for the year ended December 31st, 1926.

At the beginning of this year the dental staff were working in Millom on a three days per week basis at the School Clinic in Lapstone Road.

We found our services very much required in this area, which, from a numerical point of view, is second only to Maryport. Whilst at Millom we were able to treat a number of children from the surrounding rural schools, such as Bootle, Hycemoor, The Hill, &c., by picking up batches of five or six children, and bringing them into Millom by car. Treatment occupied us here for one year on the above basis. The necessary time was much extended by the time taken in travelling from Headquarters. Of three days devoted per week to Millom, the double journey occupied one whole day. It is obvious that it is neither economical nor practical to treat areas so far distant from Carlisle as a base. For this reason the appointment of an Assistant Dental Officer to reside in West Cumberland is, as has been pointed out, a necessity if the scheme is to be continuous. After leaving Millom the outfit was removed to Whitehaven to undertake a new line of treatment, namely, to bring in to various large centres, the children from the surrounding areas suffering from dental defects of more than ordinary importance, Pyorrhœa, Dental Abscesses, and Aural Sepsis generally. At Whitehaven these urgent cases were brought in from Parton, Lowca, Sandwith, Cleator Moor, Frizington, Arlecdon, Moor Row, St. Bees, and Distington. The experiment worked well and fully justified itself. Appointments were naturally rather more erratically kept than is customary under our usual routine methods, nevertheless, many extremely unhealthy mouths were cleared up, which would otherwise have remained untreated, owing to the inability of the parents to meet the fees of private dentists. This line of treatment is being extended to other areas as cases accumulate by reference from the School Medical Inspections.

The same scheme was carried out in other areas not supplied with clinics by means of the dental van. Such a scheme was started at Brampton, children being drawn

from Hallbankgate, Lees Hill, Hethersgill, Irthington, Talkin and Spelter Works, &c. Unfortunately the epidemic of Diphtheria led to the abandonment of this scheme in this area, as the School Medical Officer was of opinion that children undergoing a course of preventive inoculation should not be subjected to surgical manipulation.

The following towns or villages were visited with the dental van during 1926, and routine dental treatment was carried out :—

Skirwith	Keswick,	Crosthwaite
Ousby	,,	St. John's
Melmerby	,,	Brigham
Brampton	Scotby	

I am particularly indebted to the Head Teachers of Skirwith, Crosthwaite Boys', and St. John's Girls' and Infants' for their assistance. These Head Teachers did their utmost to get every child to attend for treatment. There is no doubt that the mainspring of the success of a dental scheme is the co-operation of the Head Teachers. The degree of this co-operation will make the percentage of children treated vary between 40% and 98% in the schools adjacent, and in all respects similar. I appeal to all Head Teachers to assist to the utmost of their power in our campaign for healthy mouths.

F. E. GILLIERON, L.D.S.,
School Dental Officer.

APPENDICES E AND F.

REPORTS

ON

PHYSICAL TRAINING

For the Year ended 31st December, 1926.

APPENDIX E.

REPORT ON PHYSICAL TRAINING FOR THE YEAR ENDING DECEMBER 31ST, 1926.

The progress of Physical Training in the County has been greatly assisted by the sympathetic consideration of the Committee with regard to Playing Fields.

There has been a very marked development of Folk Dancing, and now that a Branch of the English Folk Dance Society has been formed in Cumberland, a very high standard should be reached.

STAFF.

The Staff consists of :—

1 Chief Woman Organiser.

2 Assistant Organisers, who also teach in the Secondary Schools.

1 Instructress for Secondary Schools.

I am glad to report that no changes have occurred in the personnel of the Staff during the year.

TEACHERS' CLASSES.

	No. Enrolled.	*Teacher.*
Cleator	37	Miss M. Ostle.
Whitehaven	23	,, ,,
Aspatria	29	,, M. Fraser
Silloth	17	,, ,,
Keswick F.D, Class ..	26	,, N. Hall.
Keswick P.T. Class ..	15	,, ,,

The attendance at these classes is wonderfully good, when it is remembered what a number of stormy nights there are in Cumberland during the Winter, and that many of the Teachers have to travel quite long distances by cycle or on foot, when no bus is available.

Accommodation.

There is still very little accommodation for Physical Education in bad weather. The number of " Halls " available is extremely limited. A certain amount of good work can be done in the class room by an efficient and resourceful teacher, but the lack of space is a very serious handicap, and considerably limits the scope of the lesson.

Playgrounds and Playing Fields.

Many playgrounds have been put in order, but there still remains much to be done in this direction, and in some schools the rough, uneven surface of the playground considerably reduces the effectiveness of an energetic Physical Training lesson.

It is pleasing to note the large increase in the number of Schools that have obtained the use of fields for Organised Games. The efforts of Head eachers in this direction have been strongly supported by the Committee.

Organised Games.

The majority of Schools in Cumberland now play Net Ball, and the standard of play has greatly improved. Net-ball Leagues have been formed in a number of districts, and it is hoped that later we shall be able to arrange inter-district matches for the Championship of the County.

The winners of the District Net-ball Leagues are :—

	Winning School.
1. Carlisle Rural District Schools Net-ball League	..Great Orton
2. Penrith ,, ,, ,,	..Greystoke.
3. Whitehaven ,, ,, ,,	..Cleator Council.
4. Maryport ,, ,, ,,	..Maryport Council.
5. Cockermouth ,, ,, ,,	..Dovenby
6. Aspatria ,, ,, ,,	..Aspatria Council.

Thanks are due to Lady Mabel Howard, Sir Wilfred Lawson, Mr. Mc.Gowan and Mr. Brown, who attended the final matches, and presented the Cups to the winning teams in the different districts. Great enthusiasm has been shown by Teachers, scholars and parents.

Aspatria and Maryport Leagues have no trophies at all, the children are trained to play for the game only, and it is pleasing to note that the competition is quite as keen as in the other districts, where cups are competed for.

Sports.

A very large number of Schools have held " Sports Days " during the year.

Maryport and District Inter-School Sports.

Held for the second year, on June 9th, on the Netherhall Ground. The excellent standard of organisation and sportsmanship were again fully maintained, and reflected the greatest credit upon the teachers concerned. Maryport Council School gained the highest number of points, and so holds the Shield for the year.

The display of Country Dancing given by a number of girls from each School, on the lawn, at the end of the afternoon, was very creditable to Miss Dorothy Benson and Miss Robinson, who were responsible for their training.

Keswick and District Inter-School Sports.

Inter-School Sports have been held for several years for girls only in Keswick, but this year the teachers decided to combine, and had a Sports Day for boys and girls. Their efforts resulted in a very successful sports meeting, and it is hoped that this will become an annual affair.

Cockermouth School Sports.

This Annual Sports Meeting arouses great interest in the district, and on July 15th, the competition and enthusiasm were as keen as ever.

Swimming.

The Culgaith Open-air Swimming Bath continues to be a source of pleasure and healthy recreation to present and past scholars.

The water in the Wigton Swimming Baths was decidedly chilly during the coal strike days, but in spite of this a good attendance was kept up by the girls from the National School.

Visit of Miss Perry, H.M.I.

Miss Perry, H.M.I., spent a week in the County early in November, visiting Schools in Maryport, Frizington, Keswick, Penrith and Aspatria districts. Unfortunately the weather was as bad as it could be, and in some of the schools it was impossible to see any outside work.

Folk Dancing.

A great stimulus has been given to Folk Dancing in the County by the formation of a Cumberland Branch of the English Folk Dance Society. Centres affiliated to this Branch have been formed in a large number of districts, and there is a large and enthusiastic membership.

Classes have been held in several districts, and two members of the Maryport class, Miss Dorothy Benson and Miss Russell, gained Advanced Certificates for Country Dancing at the Vacation School of the English Folk Dance Society in Scarborough.

Secondary Schools.

Physical Training in the Secondary Schools maintains a good standard, and progress is being made. Miss Hall reports that the work at the Keswick School is steadily improving, and that the Juniors are particularly promising. A competition is to be held at the end of the Easter Term. Miss Wisnom reports that excellent progress is being made at the Thomlinson Girls' School since more time has been given to Physical Training.

MARGARET FRASER.
Chief (Woman) Organiser.

APPENDIX F.

REPORT OF THE CHIEF (MAN) ORGANISER OF PHYSICAL TRAINING.

I beg to submit my report on Physical Training for the year ended 31st December, 1926.

The dictum " alertness of body brings alertness of mind," seems to be proved by the atmosphere in the schools of Cumberland where Physical Training is treated as a subject of real necessity to the mental and physical well-being of the children. By their upright carriage, their general posture, and their ready and cheerful response to all commands, these children prove that their work in the playground helps them to tackle their schoolwork with a clear mind, and a realisation that they are there to take the best of what their teachers can give.

The success of Physical Training seems to depend less on environment and conditions than on regularity of practice with capable and energetic teachers. Unfortunately during the first three months of the year the weather was more than usually severe, resulting in more confinement to the classrooms. These conditions should not be allowed to deprive children of the exercise which is so essential. In such weather classroom exercises should never be neglected.

Staff.

Mr. J. P. Walker secured an appointment at Harrogate, and left us at the end of March. Mr. Iceton, from Pontefract Grammar School, has taken up Mr. Walker's work, and is also organising the Elementary Schools in the Cockermouth district. Mr. Smith continues teaching at Millom, Workington and Whitehaven Secondary Schools, and organises the Elementary Schools in the Millom district.

Playing Fields.

An increase in the number of Playing Fields has taken place during the year, and it may soon become an exception to find a progressive School which has no playing field of its own.

Swimming.

At Wigton swimming instruction has gone on as usual. One cannot help but admire the careful tuition and attention given to all the children by the Local Instructor, Mr. Bell. The following children attended the Baths for instruction :—

School.	*Boys.*	*Girls.*
Wigton National School	30 ..	34
Wigton R.C. ,, ..	29 ..	33 .

County Schools Football Association.

The final game in the " Knock-out " Competition took place on Friday, 26th March, in the Cricket Field, Whitehaven, between Maryport National and Cleator Moor St. Patrick's. Maryport were victorious, and the shield was presented by Jas. Mc.Gowan, Esq., C.C. The National School also won the Maryport School League. Great Broughton were at the top of the Derwent Valley League Table, and Brigham Boys won the Keswick Competition.

Rugby Football.

At Millom all the Elementary Schools and the Secondary School took part in a very keen local competition ; while Ellenborough, Dearham, Little Clifton, Seaton and Hensingham Schools made a modest but promising beginning this year.

Cricket.

Specially good efforts to organise Cricket were made at Millom, Keswick and Broughton Moor. It would be helpful if some of our Secondary Schools would consider the Oxford Scheme, and give the free use of their fine fields to the Elementary Schools.

Sports.

The following Schools organised Sports Days :—

School or Schools.	Date.	No. of Competitors.
Maryport Schools ..	9th June, 1926 ..	400
Gilcrux	..17th ,, ,, ..	80
Keswick Schools ..	..23rd ,, ,, ..	450
Millom Schools ..	..25th ,, ,, ..	300
Brampton Boys' ..	.. 8th July, ,, ..	100
Cockermouth Schools	..15th ,, ,, ..	450
Raughton Head ..	..16th ,, ,, ..	60
Beckermet ..	..17th ,, ,, ..	120
Broughton Moor ..	.. 4th Aug., ,, ..	120
Blackford	..28th ,, ,, ..	70
Dearham	.. 1st Sept., ,, ..	250
Bassenthwaite ..	.. 8th ,, ,, ..	60
Bewcastle Park ..	..11th ,, ,, ..	44
Haverigg Schools ..	..18th ,, ,, ..	200
Rockcliffe ..	..25th ,, ,, ..	80

These meetings have now become Annual "Outings" for both children and parents. The Director, G. B. Brown, Esq., M.A., received a splendid ovation from the large crowd present when presenting the prizes at Cockermouth. Exhibitions of Folk Dancing were given at Dearham, Maryport, Gilcrux and Bassenthwaite.

Demonstrations.

At Millom School Sports, on June 25th, the Secondary School Boys, under the direction of Mr. Smith, gave a smart exhibition of Physical Training.

At Bassenthwaite School Sports Mr. J. Reay introduced a typical playground lesson into the programme, which was highly appreciated by the parents present; while at the Brampton Boys' Annual Concert, two of the most popular items were short exhibitions of Physical Training and Games under the direction of Mr. Reay.

Cumberland and Westmorland Wrestling.

To create a fresh interest in Wrestling, H. Hough Watson, Esq., of Braystones House, Beckermet, presented a Handsome Challenge Shield to be competed for by the Elementary Schools of Cumberland. The competition took place at Braystones, on Empire Day, and took the form of a team competition, teams being composed of five boys of ages ranging from 10 to 14 years. The following schools entered teams: Dearham, Broughton Moor, Great Broughton, Crosthwaite, Keswick Brigham, Hensingham, Montreal, Cleator Council, Egremont Bookwell, St. Bees, Beckermet, Calderbridge, Wasdale, Gosforth, Ennerdale, Haile and Waberthwaite. The competition was won by Wasdale. Calderbridge and Bookwell took second and third places. This is the first School Team Wrestling contest that has been held in Cumberland, and much enthusiasm was shown by the spectators. Keen and clean wrestling was shown by the boys. All signs point to this meeting becoming a very popular athletic gathering, in fact, a miniature Grasmere. Mr. Harrison, of Beckermet School, acted as Hon. Secretary.

Secondary Schools.

Physical Training goes on fairly well, but unless a more reasonable amount of time is devoted to it, first-class results cannot be expected. It is suggested that three periods per

week in the junior and middle Schools, and two periods per week in the senior School should be alloted to Physical Training.

Millom.

The introduction of a Male Expert at Millom has created a new interest in Physical Training at the Secondary School.

Whitehaven.

On Thursday, June 10th, the Annual School Competition was held. All the classes did good work, the outstanding Forms being Upper V., Upper IVa. and VI., and they took the places of honour in the order named.

Brampton.

Very successful School Sports were held on the 22nd of July, competition being very keen.

Evening Continuation Classes.

	On Roll.	Teacher.
Penrith	10 ..	Mr. Hargreaves
Whitehaven	20 ..	Mr. F. Smith
Cockermouth	14 ..	Mr. J. J. Iceton
Dearham	27 ..	Mr. E. D. Smith
Maryport	25 ..	Mr. E. D. Smith
Seaton Camerton	15 ..	Mr. W. Barwise
Harrington, No. 1 ..	15 ..	Mr. Kirkpatrick
Harrington, No. 2 ..	19 ..	Mr. W. L. Smith

With the exception of Penrith and Whitehaven, all these classes are greatly handicapped through lack of suitable apparatus and accommodation.

Teachers' Classes for Men Teachers.

The following classes were held during the year :—

	On Roll.	Teacher.
Carlisle	30 ..	Mr. W. S. Gray
Cockermouth	19 ..	Do.
Aspatria	7 ..	Do.
Whitehaven	17 ..	Mr. F. Smith
Workington	26 ..	Mr. J. J. Iceton

A very successful class was held in Norman Street Infants' School, Carlisle, finishing on the 6th of February. The attendance was good. The average distances travelled by the students to and from this class was 18 miles, teachers coming from such remote places as Bewcastle, Colt Park, Renwick, &c., teachers in many cases giving up the whole of their Saturday to attend. Although there are very few male teachers in the Cockermouth district, the average attendance of 14 made it possible to have quite a good Refresher Course. As an experiment, a class was formed of all the available male student teachers in the Aspatria district, and a short course in Physical Training and Games in the Drill Hall was arranged. This type of course did good work, and might become a permanent feature of the training of Student Teachers. At Workington and Whitehaven the somewhat erratic attendance prevented these classes from being really effective, although the teachers that did attend regularly entered into everything with much enthusiasm, and therefore gained considerable benefit from the instruction given.

W. S. GRAY,

Chief (Man) Organiser.

APPENDIX G.

WHITEHAVEN COUNTY SECONDARY SCHOOL.

MEDICAL REPORT FOR THE YEAR 1926.

To the Governors of the Whitehaven County Secondary School.

LADIES AND GENTLEMEN,

During the year 1926, I have made 293 systematic examinations of pupils in addition to attending to various casualties and making special examinations on request.

Of these 293 examinations 111 were primary examinations, the rest being re-examinations of old pupils.

First Examinations.—Out of the 111 first examinations, 43 can be passed as normal, which is a higher percentage than I have ever been able to return before. I should add, however, that I have not included dental defects, but have put these in a separate classification.

There are no less than 69 pupils who have some defect in their teeth of greater or less extent. This includes only what can be seen by the naked eye—a Dentist's mirror would probably detect a great many more.

Fourteen of these new pupils have had their teeth attended to before entering school. No doubt this is largely due to their having come from the Elementary Schools where a School Dentist is engaged.

Tonsils.—42 Pupils have enlarged tonsils, and two have had their tonsils removed before entering school.

Of the 42, several are only slightly enlarged, but I have noted them, so that one can mark the advance, or otherwise, on future examinations.

No less than 18 of these enlarged tonsil cases are associated with some deficiency in general physical development, which, no doubt, has a great deal to do with the presence of this defect. Ten of the cases give no history of any sore throat, cold or other trouble to warrant urgency in having the tonsils removed. On the other hand eight give definite history of having colds, or being subject to sore throats, etc.

General Physical Development.—38 pupils show deficiency under this heading, and will benefit greatly by receiving drill and special physical training.

As reported above, 18 of these have, in addition, enlarged tonsils, and another four have some error in eyesight. These are associations which are, naturally, to be expected.

I may here, perhaps, be allowed to digress, and express my opinion of the value of drill and general physical training given at the school. The effect of this is most marked and obvious when one is able to examine the pupils, as I have done, when they enter and when they leave school. Some of this may, of course, be due to ordinary physical development, but there can be no doubt but that without the school drill, the round shoulders, etc., would continue to a large extent, and the bad effects therefrom probably continue throughout life.

Eyes.—12 pupils are defective in eyesight and need spectacles. Where no spectacles are being worn, the parents have been notified of this defect, and advised to have the eyes attended to—in one case especially, it was obvious the spectacles being worn were very unsatisfactory.

Circulatory System.—No less than 6 out of 8 cases of heart defects are organic in nature, and all these have some histroy suggesting a rheumatic or choreic origin.

The remaining two cases are functional, and cases of slightly enlarged hearts due probably to temporary over-strain. They have been kept under observation.

One of the above cases of organic heart disease was only revealed by this school examination. It was one of those cases which give very slight previous symptoms, and the Rheumatic Fever causing the heart lesion had been considered as a slight febrile condition, and negligible. The finding of this enabled the child to receive immediate treatment, and must, I am sure, have relieved the pupil of much suffering and danger.

Lungs.—No definite lung defects were to be found, but the cases reported under the headings of General Physical Development must be kept under observation.

Goitre.—Only one case of enlarged thyroid was observed, and this was only slightly enlarged. Most of the new pupils are young for this to show itself.

Skin.—No contagious skin lesion was found. There were two cases of ichthyosis, and one of acne.

Miscellaneous.—There were two cases of stammering, and one pupil had had an operation for removal of appendix, and another for cure of double hernia.

Re-examinations.—Out of 182 re-examinations no less than 97 can be passed as normal, not counting, as in the first examination, those with Dental trouble. This is the highest percentage of normal cases I have ever been able to report, and is very satisfactory. To my mind this corroborates my remarks, already stated, *re* improvement in physique through systematic drill, etc.

Teeth.—98 out of 182 examinations show defective teeth. This seems an enormous number, but I am sure it is an absolute minimum. 53 of these cases have had their teeth wholly or partly attended to as a result of their attention having been drawn to the necessity for treatment. Of the remaining 45 only 10 or 12 have had previous notice, and not paid any attention to it.

Six cases of Pyorrhea have been specially noticed.

Tonsils.—There were 51 cases of enlarged tonsils. Of these 27 have been marked as only slight, and probably, therefore, do not need surgical treatment. Their progress will be noted in future examinations. Fourteen of the cases give no history whatever of having sore throats, or being subject to colds, *i.e.*, do not give symptoms to suggest the necessity of having them removed, and only four give a definite history of having the above-named suggestive symptoms.

Seven have actually had their tonsils removed, and three previously reported enlarged are now normal.

Eyes.—There were 30 cases of eye defects. Thirteen have received attention in the way of spectacles, and 14 need attention in this respect, three of these being especially necessary. There were two cases of blepharitis and one of nystagmus, two with corneal opacities due to old healed ulcers, and in one case there was complete blindness in one eye.

General Physical Development.—Twenty cases. Of these 20, eight have been marked as improved since last examination. Eleven as apparently in *statu quo*, and the twentieth is a freshly developed case, having been previously reported as normal.

In addition to the above, there were six cases reported now as normal who had been reported in previous examinations as being defective.

Heart.—Three cases of definite organic valvular disease of the heart were noted. In each case, however, the heart was doing its work quite satisfactorily. Four cases of functional cardiac disorders were noted due to temporary overstrain or anæmia.

Lungs.—Two cases of doubtfully weak lungs noted on previous examinations are now found to have improved, and to be normal. One case of asthma of probably nasal origin was also noted.

Goitre.—Six cases were noted, four of which were only slight on previous examination, a fifth had definitely improved, and the sixth one, which was very marked, was receiving treatment.

Five cases previously noted were marked as having become normal.

Skin.—Eight cases of skin trouble were noted, varying in type, but none of these were infectious or contagious. Where treatment was necessary, the cases were referred to their family medical attendant.

Miscellaneous —There were 12 cases of anæmia noted, two cases of stammering, and one of defective hearing.

Looking back over the several years I have now been reporting on the health of the School, I cannot help noting a very marked and general improvement in the physique and general conditions during the last one or two years. The dental question seems to me to be the most serious one and it is very noticeable, even in these cases, how large a number have been attended to as a result of attention having been called to the necessity for treatment.

G. BERTRAM MURIEL, B.A., M.B., B.Ch. Cantab.,
M.R.C.S., Eng., L.R.C.P. Lond.

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