ABSTRACT OF A REPORT ON THE VISION OF CHILDREN ATTENDING LONDON ELEMENTARY SCHOOLS.

By ARNOLD LAWSON, F.R.C.S. Eng.,

Ophthalmic Surgeon at the Children's Hospital, Paddington Green.

At the request of the Education Department an inquiry was held during 1897, by the present writer, into the condition of the eyesight of children attending London elementary schools. The report was forwarded to the Education Department in December, 1897. As the education of the masses is one of the leading topics of the day, and defective vision, especially as regards myopia, is frequently said to be on the increase, owing to the strain of the present system of higher education, this abstract of the latest report on the subject may not be without some points of interest even to those who do not make a special study of ophthalmology.

SELECTION OF SCHOOLS.

It was primarily a somewhat difficult matter to decide upon a satisfactory basis for the report, as it was obviously impossible to examine all the children at that time attending elementary schools. It was considered that the examination of 2,000 children would form a sufficient number upon which to base general conclusions, provided that the children were representative types of the different classes that attend elementary schools, and that the schools themselves presented notable examples of old and recent methods of construction.

To carry out this plan of action seven schools were selected, some national schools and some Board schools, which might be said to form fair examples of all the different types of buildings now in use. In this way the statistics of children attending large modern Board schools presenting the most recent methods of construction as regards light and ventilation, etc., might be compared with those of national schools older and ill-furnished in these respects.

Further, these schools were selected with a view of comparing the different classes of children. There is no doubt that, taken as a general rule, the children attending national schools are drawn from a richer and higher grade of society than those attending Board schools. Thus, in the two Board schools the children are largely drawn from the lowest class, and in a large number of cases are ill-nourished and poverty-stricken, whilst in some of the national schools the children are more usually well nourished and cared for. It was considered that in this way the report would be made as practical and typical of the general run of London schools and school children as possible, and that whilst comparing any influence of school construction on the vision of the attendant children one might also be able to draw inferences as to the influence of poverty and neglect in the causation of defective sight. The Jewish school was included in the list to give the foreign element in the examination. A large section of population is now drawn from other countries, and it is notorious that defective vision is very common amongst these immigrants, so that it was considered advisable to include one school where the children were largely Russian or German.

The following is the list of the selected schools:

1. Stephen Street, Lisson Grove, Board Schools.
2. Aldenham Street, St. Pancras, Board Schools.
3. St. Jude's National School, Gray's Inn Road.
4. St. Charles Roman Catholic National School, Ogle Street.
5. St. John's National School, Whitfield Street.
6. Christ Church National School, Hampstead.
7. Jewish Schools, Bayswater.

Of these schools, Nos. 1, 2, 6, and 7 were satisfactory as regards lighting and ventilation and sufficiency of room, whilst Nos. 3, 4, and 5 were faulty in these respects. In Aldenham Street Board School the method of construction is by far the best, whilst St. Jude's National School presents the most glaring deficiencies.

METHOD OF EXAMINATION.

A Snellen's test type was sent to the heads of each school with full directions as to use. A primary examination of all the children was undertaken by the head master and head mistress of each school, and the result of the examination of each child was recorded on cards printed for the purpose. The cards registered on the one side the school to which the

child was attached, its age, and sex, whilst on the other side was registered the vision $RV=x$ and $LV=x$. The cards, when filled in, were forwarded to me. The number of cards thus returned amounted to 2,014.

Those cards which registered $V=\frac{1}{2}$ in each eye were not further examined, and such children are returned as being of normal vision, whilst all children whose cards registered a deficiency of sight in one or both eyes are returned as being of subnormal vision, and were submitted to a further examination by myself. This examination consisted of testing the refraction of each eye by the retinoscope, checked by the use of test types and the ophthalmoscope. In the course of this examination I was enabled to add a further list of 128 children who were possessed of normal vision, but who, through some error, had been returned as subnormal in one eye.

TABLE I.—Normal Vision.

	Boys and Girls.	Per cent.	Boys.	Per cent.	Girls.	Per cent.
General Analysis:*						
Normal vision in both eyes ...	698	34.60	411	37.80	287	30.90
Defective in one or both eyes..	1,316	—	675	—	641	—
Totals ...	2,014		1,086		928	
Analysis in Schools:						
1. Stephen Street... ..	174	44.4	95	45.02	79	43.30
2. Aldenham Street	198	36.3	132	42.40	66	28.50
3. St. Jude's, Gray's Inn ...	88	31.5	45	31.80	43	31.10
4. St. Charles, Ogle Street ...	79	32.7	44	30.50	35	36.08
5. St. John's, Whitfield Street	59	23.5	30	27.40	23	19.10
6. Christ Church, Hampstead	57	31.2	34	39.50	23	24.90
7. Jewish School	43	33.8	25	40.00	18	27.60

* Number of returned cards, 2,014.

A glance at the above table will show that the total percentage of normal vision amounted to 34.6, being 37.8 in the case of the boys, and 30.9 in the case of the girls. The difference between the boys and girls is curious, as it appears in most examinations of this sort. On referring to the subjoined tables it will be seen that the difference lies entirely in the greater relative frequency of hypermetropia and mixed astigmatism in girls than boys. Myopia appears as frequently in boys as in girls.

Referring to the analysis of normal vision in separate schools, it will be seen that the two best lighted and constructed schools—Stephen Street and Aldenham Street—give a far higher percentage of normal vision than any of the other schools. I am not inclined, however, to attach any pathological significance to this fact. It simply emphasises the point that two of the schools are much beyond the others in the matter of lighting. Reference to the subjoined tables will show that the lower percentage of normal vision in the national schools is accounted for by the higher percentage of cases reported as hypermetropic. It is more than probable that the illumination of the test types was not so good as that provided at the Board schools, and that a greater acuity of vision was required to read $\frac{1}{2}$. Thus many cases of slight hypermetropia were discovered in the national schools which passed unnoticed at the better-lighted Board schools. Further, it will be seen later on that the Board schools do not show a smaller percentage of myopia than some of the other schools which are less well lighted and constructed.

DEFECTIVE VISION.

It would have greatly complicated the subjoined statistics if each eye were treated as a separate unit. The following method of classification was therefore adopted: All children exhibiting myopia in one or both eyes are classed as myopes; children exhibiting mixed astigmatism in one eye, and normal or hypermetropic refraction in the other, or mixed astigmatism in both eyes, are classed under the head of mixed astigmatism; whilst children hypermetropic in both eyes, or hypermetropic in one and normal in the other, are classed as hypermetropes.

Thus in all cases where the character of the refraction differs in the two eyes, the child is specified as belonging to the class exhibiting the more serious refractive error. Thus myopia is considered to be always the more serious refractive error. When myopia and mixed astigmatism occur in the same

child, the child is styled a myope, on the ground that when he has grown up he will probably be myopic in both eyes. So, too, in the case of hypermetropia and mixed astigmatism occurring together. Mixed astigmatism is considered the more serious error, as it not only causes greater defect in vision than hypermetropia, but also the eye of a child exhibiting mixed astigmatism will very probably ultimately become myopic.

Having thus explained the basis of these statistics, it remains to give a short account of the various errors of refraction, and their relative frequency to each other and the population in general.

General Analysis of Defective Vision.

Total number of cases of defective vision	1,316
Left before examination	251
Total number of examined cases from which tables are drawn	...

HYPERMETROPIA AND HYPERMETROPIC ASTIGMATISM.

TABLE II.—Showing the Various Errors of Refraction and the Relative Frequency of one Form of Error to Another (Cases 1,065.)

	Boys and Girls.	Per cent.	Boys.	Per cent.	Girls.	Per cent.
Hypermetropia	637	59.80	337	61.10	300	58.30
Hypermetropic astigmatism	235	22.06	122	22.10	113	21.90
Mixed astigmatism... ..	102	9.50	43	7.80	59	11.40
Myopia	91	8.50	49	8.80	42	8.10

TABLE III.—Showing the Relative Frequency of each Error in all Cases of Normal and Subnormal Vision (Cases 1,763.)

	Boys and Girls.	Per cent.	Boys.	Per cent.	Girls.	Per cent.
Hypermetropia	637	36.1	337	35.04	300	37.4
Hypermetropic astigmatism	235	13.3	122	12.60	113	14.1
Mixed astigmatism... ..	102	5.7	43	4.40	59	7.3
Myopia	91	5.1	49	5.09	42	5.1

TABLE IV.—Showing Number of Cases of Hypermetropia of 4 D and over.

School.	Hypermetropia.		Hypermetropic Astigmatism		Total.
	Boys.	Girls.	Boys.	Girls.	
1. Stephen Street	3	3	5	4	15
2. Aldenham Street	7	3	10	7	27
3. St. Jude's	2	4	3	9	18
4. St. Charles	1	2	3	1	7
5. St. John's	2	3	4	2	11
6. Christ Church	1	2	1	7	11
7. Jewish School	0	0	1	0	1
Totals	16	17	27	30	90
	33		57		

It will at once be seen that hypermetropia is by far the most common visual defect. Simple hypermetropia claims 637 cases out of a total of 1,065 examined cases of visual errors. It is very evenly distributed between boys and girls, there being 337 cases among the boys and 300 among the girls.

Besides these 637 cases of simple hypermetropia, there are 235 cases of hypermetropia complicated to a varying degree by astigmatism, 122 cases occurring in boys and 113 cases in girls.

Thus the total number of hypermetropes amount to 872 cases, forming 81.8 per cent. of all cases of subnormal vision, or, if the total number of children attending the schools be

taken, less the number that had left before the examination, we then find that hypermetropia occurs in 44.4 per cent. of all the children.

It is thus seen that only about 18 per cent. of cases of subnormal vision are other than hypermetropic, and reference to the statistical tables will show that this 18 per cent. is made up by cases of mixed astigmatism in 9.5 per cent., and by myopia in 8.5 per cent.

In the very large majority of cases the amount of hypermetropia was insignificant (± 1 D. or less) and in no way interfered with the health of the children or the general acuity of vision. In fact, a good many of the children might have passed as emmetropes had their primary examination been conducted with better illuminated test types (*vide supra*).

The report then goes on to deal with the disadvantages entailed by the higher grades of hypermetropic squint, ciliary cramp, headaches, and general reaction on the body health. Of the greatest importance is the mental effects that uncorrected hypermetropia in the higher grades produces. The child is only able to decipher the ordinary reading print with slowness and difficulty. Even distant objects cannot be made out with the distinctness and rapidity of other children, and the child becomes correspondingly slow in action and slow in thought. If such children are allowed to grow up without treatment this sluggishness of mind and action will become permanent. Treatment by suitable correcting glasses exercises the most beneficial effects. The sleepy languid manner disappears, and the health at once improves, with a general strengthening and bracing of the whole body that no amount of medicine would effect. These evil effects of hypermetropia are more frequent in cases complicated by astigmatism either as hypermetropic astigmatism or as mixed astigmatism.

Table IV was drawn up to show the number of cases of high hypermetropia which presented themselves during the examination. The limit ± 4 D. was taken because any defect over that amount is held to seriously disqualify a candidate for some of the public services, as the patient would not have more than half normal vision. Of the 90 cases in this table 8 cases suffered from hypermetropia of 7 D. or more, and only 3 or 4 wore any correcting glasses. Very many of them exhibited asthenopic symptoms of varying degree, and several had pronounced squints.

This table would seem to show that 10.03 per cent. of all cases of hypermetropia, or 4.4 per cent. of the general population, exhibit a hypermetropic error amounting to ± 4 D. or more.

MIXED ASTIGMATISM.

Mixed astigmatism claims 102 cases, 43 cases occurring in boys and 59 cases in girls. Asthenopic symptoms are very common in this class of refractive error, and its suitable treatment is especially important, as undoubtedly mixed astigmatism is frequently a transition stage, the child ultimately becoming a myope.

MYOPIA.

The relative frequency of myopia, and the influence, if any, of school life and school construction are important features of this report.

Myopia was found present in 91 cases, 49 being boys and 42 girls. As regards the relative frequency of myopia to other refractive errors, this would indicate that myopia occurs in 8.5 per cent., whilst if the total number of children of normal vision and the 1,065 examined cases of subnormal vision be reckoned, myopia may be expected in 5.1 per cent. of the population.

It must, however, be borne in mind that the children examined were all under 14 years of age, and it is very probable that a certain number of cases of mixed astigmatism and of children emmetropic at the time of examination would become myopic at a later date, and the percentage of myopia thus increased. Moreover it is certain that myopia is relatively more frequent among the highly educated classes than among the children of labourers and mechanics.

The importance of myopia must be considered from two aspects:

1. Its transmissibility through parents to the children. From this point of view every case of myopia must be regarded as the possible germ of several others.

2. The physical disabilities that myopia confers. There

disabilities increase with every unit of increase in the myopia. In extreme cases they may amount to the production of total blindness.

Myopia may be said to be of material importance, even when of the mildest type, on account of its tendency to increase. The smallest amount of myopia disqualifies for service in the navy, and myopia of -3 D. disqualifies for the army, for distant vision then only amounts to one-tenth of the normal.

TABLE V.—Cases of Myopia exceeding Three Dioptries.

School.	Numbers.	Sex.	Age.	Myopia.		Astigmatism.		State of Fundus.
				Right.	Left.	Right.	Left.	
St. Jude's	1	M.	11	-2 D	-6 D	1 D	4 D	L. progressive
	2	M.	13	-6 D	-6 D	2 D*	2 D*	Fair.
	3	M.	10	-6 D	-3.5 D	5 D	4.5 D	V. progressive.
	4	M.	12	-6.5 D	-6.5 D	1.5 D	1.5 D	Progressive.
	5	M.	10	-4 D	-3 D	1 D	2 D	Fair.
	6	M.	12	-9 D	Hyperm.	0	0.0	S. progressive.
Stephen Street	7	M.	10	-4 D	-2 D	?	?	Fair.
	8	M.	8	Emm.	-7 D	0	-2 D	C. progressive.
	9	M.	10	-10 D	-9 D	0	-4 D	Progressive.
	10	M.	10	-11 D	Hyperm.	0	0	R. progressive
	11	M.	10	Mixed Ast.	-7 D	0	0	L. progressive.
	12	F.	10	-6 D	-6 D	0	0	Fair.
	13	F.	9	-4 D	-4 D	1 D*	1 D*	Fair.
	14	F.	9	-9 D	-9 D	1 D*	1 D*	Progressive.
	15	F.	13	-5 D	-5 D	0	0	Fair.
	16	F.	10	-2 D	-4 D	0	0	Fair.
	17	F.	9	-9 D	-7 D	0	0	Very progressive.
	18	F.	10	-2 D	-5 D	0	0	Fair.
Aldenhams Street	19	M.	7	-1.5 D	-4 D	1 D	2 D	Progressive.
	20	M.	8	-2 D	-8 D	0	2 D	L. progressive.
	21	M.	12	-5 D	-5 D	0	0	Progressive.
	22	M.	12	-8 D	-7 D	4 D	3 D	Fair.
	23	M.	10	-7 D	-5 D	3 D	3.5 D	Progressive.
	24	M.	12	-10 D	-1.5 D	0	1 D	Very progressive.
	25	F.	11	-5 D	-5 D	0	0	Progressive.
Jewish School	26	F.	10	-16 D	-11 D	4 D	3 D	V. progressive.
	27	F.	9	-4 D	-3 D	0	0	Progressive.
	28	M.	13	-4 D	-4 D	0*	0*	Fair.
	29	M.	8	-14 D	-14 D	6 D	6 D	Progressive.
St. John's	30	F.	9	-13 D	-11 D	4 D	2 D	Very progressive.
	31	F.	11	-3.5 D	-3.5 D	2 D	2 D	Progressive.
	32	M.	9	-4 D	-4 D	1 D	1 D	Progressive.
	33	M.	11	-5 D	-4 D	1 D	0	Fair.
Christ Church	34	M.	9	-14 D	-9 D	0	0	Progressive.
	35	F.	12	-5 D	-11 D	2.5 D	0	V. progressive.
	36	F.	10	-8 D	-5 D	1.5 D	0	V. progressive
	37	F.	12	Mixed Ast	-6 D	0	0	L. progressive.

* Wears glasses.

The myopia in each case where astigmatism is noted is that of the higher meridian.

The above table shows that 37 cases of myopia were encountered exceeding -3 D. Four of these cases exhibited myopia exceeding -12 D., and 8 cases were myopic from -8 D. to -12 D. Several of these cases showed severe destructive changes in the fundus of the eye, and were of a pronouncedly progressive character.

Only 4 of these cases wore any correcting glasses or had previously been submitted to any examination or course of treatment. Many of them were children of the lowest class, badly nourished, neglected, and poverty-stricken in appearance.

As the danger of myopia varies with the progressive character of each case, so the tendency to progress is in proportion to the age at which the myopia makes its first appearance. It will be noted that several of the worst cases of myopia occur in quite young children.

With regard to the frequency of myopia as exhibited in the several schools, a few interesting facts came to light. If the statistics of myopia at Aldenhams Street School, as representing the school best equipped as regards lighting, space, and ventilation, are compared with those drawn from St. Jude's National School, decidedly the worst in the above

respects, it will be found that the percentage of myopia is higher, namely, 5.2 per cent., at Aldenhams Street than at St. Jude's, where it amounts to 4.2 per cent. On the other hand, the number of cases of myopia exceeding -3 D. at Aldenhams Street is less than half the number occurring at St. Jude's.

Thus myopia, though of greater degree in the worst-lighted and ventilated school, occurred actually more frequently in the school where good light and ventilation were all that could be desired.

The Jewish School furnishes much the largest number of cases of myopia in proportions to its numbers, the reason no doubt being that so many of the children are of foreign extraction—German, Polish, Russian, etc. If this school be omitted from the statistics myopia is found to exist in the other schools in the proportion of 4.2 per cent. only.

At St. Charles and St. John's Schools so many children had left before the examination was concluded that the results as regards myopia are not reliable.

Again, if the results obtained at Stephen Street are compared with those obtained at Christ Church, Hampstead, it will be seen that myopia occurs rather less frequently at the former (6.1 per cent.) than at the latter (6.5 per cent.). There is nothing very much to choose between the schools in the way of light space and ventilation, but the Hampstead children live in a much healthier situation, and are not so poor or neglected as many of the children of Lisson Grove, who attend Stephen Street School.

Thus, though the schools were carefully selected to give variety in types of old and recent construction, and also to provide children of every grade of society that attend elementary schools; the results do not show that school construction exercises any immediate influence on the production of myopia. Such influence as it may possess is insidious, and cannot be definitely manifested in a single examination. Periodical examination extended over several years and applied to several schools might clear up the point. As regards the influence of poverty and neglect, it was striking how many of the most progressive types of myopia were encountered in the poorest class of children. On the other hand myopia of a simple type seems to be as common in the better class children as in the less well-to-do.

TABLE VI.—Showing Analysis of the Various Errors of Refraction at each School and the Proportion of each Form of Error to the others.

Number.	School.	Sex.	Hypermetropia Cases.	Per cent.	Hypermetropic Astigmatism Cases.	Per cent.	Mixed Astigmatism Cases.	Per cent.	Myopia Cases.	Per cent.	Left Cases.	Total.
1	Stephen Street	Boys	63	54.3	32	27.6	9	7.6	12	10.3	—	116
		Girls	55	53.8	22	21.5	13	12.7	12	11.7	—	102
2	Aldenhams Street	Boys	94	60.6	31	20.0	15	9.6	15	9.6	24	179
		Girls	84	63.6	25	18.9	16	12.1	7	5.3	36	168
3	St. Jude's	Boys	65	67.7	18	18.7	7	7.2	6	6.2	—	96
		Girls	48	60.7	26	32.9	4	5.06	1	1.2	16	95
4	St. Charles	Boys	30	62.5	10	20.8	2	4.1	6	12.5	52	100
		Girls	19	63.3	4	13.3	3	10.0	4	13.3	32	62
5	St. John's	Boys	35	55.5	17	26.0	5	7.0	6	9.5	32	95
		Girls	22	50.0	16	25.0	11	17.1	5	7.8	33	97
6	Christ Church	Boys	27	64.2	12	28.5	2	4.7	1	2.3	18	52
		Girls	41	68.3	13	21.6	2	3.3	4	6.6	10	70
7	Jewish School	Boys	23	74.1	2	6.4	3	9.6	3	9.6	6	37
		Girls	21	44.6	7	14.8	10	21.2	9	19.1	—	47

Total number of examined cases, 1,065. The number of cases which had left before examination are not reckoned in the statistics of each school.

GENERAL SUMMARY.

1. Hypermetropia, with or without astigmatism, claims a very large proportion of all cases of subnormal vision.
2. The amount of myopia is small.
3. The conditions of some schools are very unsatisfactory as regards lighting space and ventilation. Though no

relation can be ascertained between visual defects, especially myopia, and the state of each school in these respects, it is highly probable that such deficiencies, by impairing the general health, increase the tendency to myopia. Any harm that can be produced cannot be gauged by a single examination, but can only be estimated by a series of periodical examinations extended over several years.

4. There are a very large number of children attending London elementary schools suffering from hypermetropia, squint, and myopia, who require, and who have never had, proper medical examination and treatment.

5. There should be some active supervision of the eyesight of children attending elementary schools.

6. This supervision should take the form of a regular periodical examination of the children's vision. I would suggest that every child after entering the school, or when it has arrived at a sufficient knowledge of its letters, should, on the earliest convenient occasion, have its vision tested, and that such an examination should be repeated before the child leaves the school. Moreover, at each of these periodical examinations any other child whom the teachers have reason to suspect of some defect of vision should also be re-examined. These examinations could be carried out with very little trouble and expense of time by the teachers themselves by supplying each school with an ordinary Snellen's test type, with a few necessary directions as to use. The results of such examinations should be recorded in each school in a book kept for the purpose. Such records would be of considerable scientific value.

7. The records of these examinations should be under the supervision of some responsible medical officer, whose duty it would be to see that suitable medical treatment is supplied to such cases as may need it by drafting them to hospitals, etc., for examination. Further, this officer should be responsible for the regular and proper conduct of these examinations at the schools, and should be prepared to report on any deficiencies in the school building and equipment that may come under his notice.

These suggestions are only intended as a rough basis upon which to formulate some complete and efficient plan for the supervision of the eyesight of children attending elementary schools. The advantages of some such plan lie in the settling of the vexed question of the deterioration of sight amongst school children; there would be no further occasion for scattered reports costing much time and labour; the influence of school buildings and equipment, and the methods of school work could be accurately determined; whilst remedies might be scientifically applied and practically tested.

THE NATIONAL ASSOCIATION FOR PROMOTING THE WELFARE OF THE FEEBLE-MINDED.

A MEETING on behalf of this Society was held at Stafford House on June 10th.

The Duchess of SUTHERLAND, President of the Association, occupied the chair, and set forth in an admirable opening address the objects for which the Society had been founded, namely (1) the improvement of the physical and mental condition of children so far deficient as to need special care though not actually imbecile; and (2) the kindly supervision of feeble-minded adults in suitable occupations so as to save them from degradation. The special classes for instruction of mentally-feeble children established by the London and other School Boards had shown how much might be done in the direction of education; but it was necessary to supplement these efforts by after-care in adult life, so that the Association was prepared not only to aid in the training of the children by boarding out in the vicinity of special instruction classes, etc., but also to give a helping hand to those who were so heavily handicapped in the struggle for existence as to tend, if unaided, to drift into the workhouse, the prison, or the criminal lunatic asylum. The Association had been instituted to co-ordinate previously existing isolated efforts of this kind throughout the country, and thus justified its title of "national." It had also established cottage homes of its own in the vicinity of London both for girls and for boys, and at Hendon was working a steam

laundry in connection with which older feeble-minded women were employed.

LORD HERSHELL moved a resolution to the effect that the existence of large classes of feeble-minded persons in the community was a matter of public concern, and pointed out that the establishment of the Association seemed to him justified by the fact that above the grade of recognised idiots or imbeciles there was a class of defective beings who without special guidance would be apt to drift into immorality and crime, and that it was a gain to the State to diminish the number of paupers and criminals.

SIR DOUGLAS GALTON, in seconding the resolution, referred to the scientific study of children which had of late helped on our knowledge of the necessities of the feeble-minded class.

SIR JAMES ORRINGTON BROWNE, in supporting the resolution, spoke of the progressive discrimination of idiots from lunatics, and of feeble-minded from idiots and imbeciles, expressing his belief that though efforts in favour of the last-named class had been most useful and beneficent, there was still room for further charitable organisation in aid of those most pitiable persons who seemed doomed, by inherent infirmity rather than by their own fault, to failure in the struggle for existence, and who were often painfully conscious of their own exceptional condition. He questioned the assumption that the infirmity was necessarily lifelong, as he thought much might be accomplished by early diagnosis, and the application in childhood of judicious mental hygiene. He pointed out that the decrease of infantile mortality that had taken place in recent years tended to the survival of the unfit, and consequently the number of defective children to be dealt with would probably increase rather than diminish, a result to which also would contribute the fever and fret, the strain and stress, of our modern civilisation.

MRS. GARRETT ANDERSON, M.D., moved, and Mr. DICKINSON, L.O.C., seconded a resolution commending the Association to generous public support; and Sir UGHTRED KAY-SHUTTLEWORTH, M.P., and Miss DENDY of Manchester afterwards spoke of the necessity of legislation on the lines recommended by the Departmental Committee on Defective Children which recently reported to the Education Department.

The office of the Association is at 49, Victoria Street, S.W.

THE LOCAL GOVERNMENT BOARD, SCOTLAND.

THE third annual report of the Local Government Board for Scotland, 1896-97, is, like its predecessors, an eminently business-like document. Brevity is its characteristic. Apart from the appendices, it falls within the compass of 36 pages, in the course of which are dealt with the subjects of Poor-law administration, audit, local government, public health, and vaccination.

The Board record, with a well-merited acknowledgment of his pre-eminent services to the country, the retirement, during the year, of Sir John Skelton, Chairman of the Board, who had been connected with the department, as Secretary and Chairman, for the long period of twenty-nine years. Sir John was emphatically a "strong" man, and his name will always be intimately associated with the vigorous growth of the Poor-law and public health systems of Scotland in the latter part of this century. It is matter for regret that he did not long survive to enjoy the repose he had so well earned.

The number of persons in receipt of relief at the end of the year was 99,503, of whom 87,221 were ordinary poor, and 12,282 lunatic poor. Of the ordinary poor, 88.41 per cent. were in receipt of outdoor relief, 11.36 per cent. were lodged in poor-houses (workhouses), while 0.23 per cent. are set down as vagrants. It is notable, as illustrating special and most praiseworthy characteristics of the Poor-law administration of Scotland, that 85 per cent. of all the children provided for by the Poor-law authorities were "boarded out"—33 per cent. with relatives, 53 per cent. with other persons; while 22 per cent. of the lunatic poor were resident in private dwellings. Taking the increase of the population into account, there has been a relative decrease in the ordinary poor between 1868 and 1897 of nearly 48 per cent. *Per contra*, however, lunatic