

APPENDICES.

APPENDIX 1.

STATISTICS as to the attendance of children between three and five at Public Elementary Schools in England and Wales, in relation to population and to Total Number of Scholars, during the years 1891-1907.

A	B	C	D	E	F
Year*	Total Number of Scholars in Public Elementary Schools.	Estimated † Total Number of Children in England and Wales between the ages of 3 and 5.	Number of Scholars between the ages of 3 and 5.	Percentage of Scholars between 3 and 5 (Col. D) to Total Number of Children of that age (Col. C).	Percentage of Scholars between 3 and 5 (Col. D) to Total Number of Scholars (Col. B).
1891	4,838,152	1,377,818	458,267	33.26	9.47
1892	5,017,723	1,384,238	513,875	37.12	10.24
1893	5,134,797	1,390,659	522,704	37.59	10.18
1894	5,206,304	1,397,080	522,976	37.43	10.04
1895	5,305,756	1,403,501	528,344	37.64	9.96
1896	5,433,224	1,409,922	566,702	40.19	10.43
1897	5,513,447	1,416,342	587,139	41.45	10.65
1898	5,586,962	1,422,763	611,805	43.00	10.95
1899	5,664,429	1,429,184	621,959	43.52	10.98
1900	5,696,837	1,435,605	622,498	43.36	10.93
1901	5,777,623	1,442,026	615,607	42.69	10.66
1902	5,903,991	1,448,446	610,989	42.18	10.35
1903	6,002,940	1,454,867	614,888	42.26	10.24
1904	6,053,685	1,461,288	608,389	41.63	10.05
1905	6,070,296	1,467,709	583,268	39.74	9.61
1906	6,022,955	1,474,130	497,645	33.76	8.26
1907	6,003,772	1,480,550	459,034	31.00	7.65

* The figures as to scholars may be taken as relating, on the average, to the conditions existing in January of each year. The figures as to population relate to the early part of each year.

† The estimates for the Census years 1891 and 1901 are those given in the General Report of the Census of 1901. The estimates for the other years are obtained by increasing each preceding year's figures by an amount equal to one-tenth the difference between the figures for 1891 and those for 1901. It is recognised that this is not a scientific method of estimating the population; but it appears to be sufficiently accurate for the present purpose, since it would require a very large error in Column C to affect appreciably the percentages in Column E. It may be mentioned that a different method of arriving at the estimated population in the years 1901-6 has been found to give approximately the same results.

APPENDIX 2.

STATEMENT as to the age at which Compulsory Education begins
in certain Foreign Countries.

NOTE.—The following facts are taken mainly from the statement published by the Board of Education in 1906 (Cd. 2968). The Committee cannot be sure that the material is in every case completely up-to-date, though they have no reason for believing that it is not.

Country.	Age at which compulsory attendance at the Elementary School becomes compulsory.
AMERICA* (United States)	<p>There is no uniform rule for all the States. The following is a summary of the various State systems:—</p> <p>In 14 States the age for compulsory attendance is 7; in 2 States it is 8; in 14 States there is no compulsory attendance at all; in 1 State (Virginia) no information is given.</p> <p>(It should be remembered that in America <i>free</i> attendance at the public schools is allowed at an age much below that laid down for <i>compulsory</i> attendance. The following is a summary of the <i>free</i> attendance ages in the various States:—</p> <p>In 1 State the age for free admission is 4; in 12 States it is 5; in 30 States it is 6; in 2 States it is 7; in 4 States the age for free attendance is not limited by law; in 1 State no information is given.</p> <p>It must also be remembered that the Kindergarten system is growing rapidly in America. In 1898 there were 143,720 children below school age in American Kindergartens; in 1902 the number had risen to 205,432, and in 1905 to an estimated total of 300,000. It appears to be the rule that children are admitted to the Kindergartens for the two years previous to the age at which the public school is allowed to receive them. As a rule, therefore, they would be admitted to the Kindergarten at the age of 3 or 4.)</p>

* The figures relating to attendance at Public Schools in America are taken, not from the Board of Education's statement, but from Table 3 on page lxxix. of the "Report of the Commissioners of Education for the Year 1903," published at Washington in 1905. Those relating to attendance at Kindergarten are from page 715 of the same volume.

Country.	Ages at which compulsory attendance at the Elementary School becomes compulsory.
BELGIUM - - - -	No compulsory attendance. (For the provision made for younger infants see pages 39, and 131-170.)
CANADA :	
Ontario - - - -	From the age of 8 years.
Quebec - - - -	No compulsory attendance.
Nova Scotia - -	Compulsory attendance left to local option. If adopted, attendance is required between the ages of 7 and 12 years.
New Brunswick - -	Compulsory attendance.
Manitoba - - - -	Compulsory attendance left to local option. If adopted, it may be enforced on children of not less than 7 years of age.
North-West Territories -	Previous to 1905 from the age of 7 years. (In 1905 two new provinces, Alberta and Saskatchewan, were erected out of the North-West Territories. The Board of Education had received no Ordinances regarding these two provinces when their statement was published in 1906.)
British Columbia - -	From the age of 7 years.
Prince Edward Island -	From the age of 8 years, but the compulsory clause in the School Act has never been enforced, consequently attendance is entirely voluntary.
FRANCE - - - -	On the completion of the 6th year. (For the provision made for children below this age see pages 40, and 171-206.)
GERMAN EMPIRE - - -	There is no uniform rule for the Empire. The age for compulsory attendance, however, is nearly always the completion of the 6th year. The following are the principal exceptions :-- Wurtemberg, on the completion of the 7th year. Brunswick, ditto. 5th year. Lippe, ditto. 7th year. (For the provision made for children below the age of compulsory attendance see pages 40, and 207-248.)

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Country.	Ages at which compulsory attendance at the Elementary School becomes compulsory.
HOLLAND - - - -	On the completion of the 7th year.
JAPAN - - - -	From the age of 6 years.
SWITZERLAND - - - -	Attendance in about half the cantons is compulsory at the beginning of the School year subsequent to the attainment of the child's 6th birthday. In the other half, the compulsory age is one year later.

APPENDIX 3.

MEMORANDUM BY DR. HALDANE ON THE AIR OF SCHOOLS.

The experiments referred to by the Consultative Committee were made by the late Prof. Carnelley and myself during the winter of 1886-87 in the available schools of Dundee, including all the Board schools and various other denominational and private schools. The results were published in the "Philosophical Transactions of the Royal Society," Vol. 178 (B), pp. 61-111. A further series was made by Prof. Carnelley in the Board schools of Aberdeen and the counties of Aberdeen, Fife, and Perthshire. The results (which were edited by myself after Prof. Carnelley's death) appeared in the "Journal of Pathology and Bacteriology," November, 1893.

The samples of air were taken during occupation, with the windows just as we found them, their position being noted from outside before our entry, of which no warning was given. In each case the proportion of carbon dioxide (CO₂) was determined, as well as the number of bacteria per litre of air (by Hesse's method).

Although CO₂ itself, in the proportion of less than 1 per cent. (100 volumes per 10,000 of air), is quite harmless, yet the proportion of CO₂, which is easily determined, gives the most reliable measure of the quantity of fresh air supplied per person in an occupied room; hence much importance is rightly attributed to determinations of the CO₂, and particularly to the excess found over the proportion (3 to 4 volumes per 10,000) in

the outside air. The following table shows the proportion found, together with other data for comparison:—

	Number of Rooms Examined.	Cubic Space per Person.	Per-centage of Win-dows Open.	Temperature		CO ₂ in Volumes per 10,000 above the proportion in Out-side Air.	Micro-Organisms per Litre of Air.
				In-side.	Out-side.		
Natural Ventilation by Windows and Fires:—							
Dundee - - - - -	39	168	22	55·6°	38·8°	15·1	152
Aberdeen - - - - -	42	138	28	58·5°	44·3°	15·3	136
Suburbs and Country Towns	46	160	32	60·5°	49·8°	13·7	103
Country - - - - -	45	148	24	60·1°	51·3°	13·1	76
Fan Ventilation:—							
Dundee - - - - -	25	164	3	62·0°	38·0°	9·3	17
Aberdeen - - - - -	12	155	—	55·3°	42·3°	9·3	20
Night:—							
One-roomed dwellings, Dun- dee.	29	212	—	55·0°	34·0°	6·6	60
Two „ „ „	13	249	—	53·5°	35·5°	5·5	46
Four or more roomed dwell- ings, Dundee.	18	1,833	—	54·5°	40·5°	3·3	9
Hospital wards, Dundee - -	8	1,800 (about)	—	59·0°	—	2·3	6
From Report to Home Secretary on Factory Ventilation, 1902; analyses by myself:							
Factories and workshops, day	36	under 300 (average 233)	—	—	—	7·9	10·2 (40 rooms only) excluding dusty rooms.
„ „ „	33	300-400	—	—	—	7·1	
„ „ „	28	400-600	—	—	—	6·4	
„ „ „	27	600-1,000	—	—	—	6·8	
„ „ „	25	1,000-1,500	—	—	—	5·7	
„ „ „	24	1,500-2,000	—	—	—	5·5	
„ „ „	24	2,000-5,000	—	—	—	3·6	
Standard proposed by Du Chaumont - - - - -			—	—	—	2·0	
„ „ „ by Factory Ventilation Committee as maximum legal impurity.			—	—	—	8·5	
Maximum impurity permitted by Factory Act in humidified spinning and weaving sheds.			—	—	—	5·5	

It will be seen at once from the above table that the air supply per person in elementary schools with the customary means of ventilation is relatively very small, the gaseous impurity being much greater than even in the lowest class of houses during the night, and much greater than in factories and workshops during the day. The air also smelt much worse than in factories and workshops. In most cases the rooms were too cold (during winter), and I hardly think that, as a rule, more windows could have been kept open. More recently I examined the air of a country school during summer, with the windows wide open. The CO_2 was nevertheless as high as 12 to 14 volumes per 10,000, and the air smelt stuffy. There was no through draught of air, as the windows, as usual, were all on one side of the room.

With regard to the rooms ventilated by fans, I should remark that the apparatus used at that time was very imperfect, and much better results could now be obtained at the same cost.

In view of the bad ventilation of ordinary elementary schools I think it would be desirable to have fresh observations made on schools of better design as regards ventilation, in order to see whether it is possible to get satisfactory results without fan ventilation, and what results can be obtained with fan ventilation of modern design.

As regards the number of bacteria in the air of elementary schools the results were also very bad for schools, as will be seen from the table. In the outside air of Dundee we found an average of less than 1 micro-organism per litre during winter.

It should be noted that these bacteria are simply bacteria of all sorts, capable of growing on nutrient jelly at ordinary temperatures. Few, if any, of them are germs of disease. They are simply a rough measure of the particulate dirt floating in the air. We found that they increased in the most marked manner with the age of the school, its general dirtiness, and the dirtiness of the children. The floors were of deal boards, washed at uncertain intervals, and evidently got dirtier and dirtier month by month. In the clean lecture rooms of University College, Dundee, we found about 3 or 4 micro-organisms per litre during crowded lectures. Indeed, sometimes there were fewer micro-organisms during the lectures than just before these rooms were occupied by the audience. Even when a class of rather dirty children were brought from a neighbouring school into one of these lecture-rooms, the number of micro-organisms remained comparatively small. There is thus no direct connection between the proportion of micro-organisms and the proportion of CO_2 . The former is simply an indication of dirt, while the latter varies with the air supply. As regards the micro-organisms, far more could be done by cleanliness than by ventilation. The floors and walls should be capable of being properly cleaned, and the children themselves, and their clothes, kept clean and tidy. It would be interesting to have some fresh observations on this matter from a really clean and tidy school.

Dr. M. H. Gordon (working for the Local Government Board) has recently introduced a method of determining the micro-organisms coming directly from the mouths and throats or skin of persons present in a room. No observations by this method have, however, hitherto been made in the air of schools. Such observations would, I think, afford valuable information as to the risks of infection in school and the influence of ventilation and other measures in diminishing these risks.

Considering that by all ordinary standards the air of elementary schools is commonly very impure, I suggest that it would be desirable that the Board of Education should initiate further inquiries with a view to ascertaining what *practicable* steps can be taken to improve matters, and what improvement is actually attained in well-designed and well-conducted schools. It certainly seems anomalous, to say the least, that elementary schools should be allowed to remain as the classical example of bad ventilation, and that children should thus be taught by practical example to tolerate foul air.

APPENDIX 4.

Letter from T. E. Thorpe, Esq., on the Ventilation of Schoolrooms.

Government Laboratory,

Clement's Inn Passage, W.C.

2nd May, 1908.

Dear Sir,—

I shall be pleased if I can be of any assistance to the Consultative Committee of the Board in connection with the question of the proper ventilation of infants' rooms in Public Elementary Schools.

With respect to the question you put to me, there is, in my opinion no doubt that such an amount of carbonic acid as could be present under the conditions in which such rooms are ordinarily used, is *of itself* of comparatively little importance. There is no evidence to show that air containing even far larger quantities of pure carbonic acid than could possibly be present under such circumstances is hurtful even when breathed for comparatively long periods. Persons engaged in bottling aerated waters, for example, are constantly surrounded with an atmosphere containing relatively large quantities of carbonic acid, and there is no evidence to show that their occupation is unhealthy from this cause. I agree that temperature, relative humidity, and the presence of putrescible organic matter as well as micro-organisms are—so far as air is concerned—the main factors which affect the health, and consequently the mental powers, of school children.

At the same time, I think the quantitative estimation of the amount of carbonic acid in the air of a schoolroom affords a

simple, quick, and effective measure of the excellence of the ventilation of such a room, since the rise of temperature, the increase in humidity, the organisms, and other forms of organic matter, are produced concurrently with the carbonic acid, and their influence may be indirectly gauged from a knowledge of the amount of carbonic acid as a product of respiration.

Yours very truly,

T. E. THORPE.

The Secretary to the Consultative Committee.

APPENDIX 5.

TABLES showing the attitude of the various Local Education Authorities in England and Wales towards the School Attendance of Children under Five.

(See notes on opposite page.)

GENERAL SUMMARY.

A Status of Authority.	B Total Number of such Authorities.	C Number which replied to the Committee's Inquiry Form.	D Number which retain all children 3-5.	E Number which partially exclude children 3-5.		F Number which wholly exclude all children 3-5.
				(i.) Excluded where accommodation deficient or to effect reduction of staff.	(ii.) Exclusion not determined by accommodation or staff.	
1. Administrative Counties (including London).	62	62	16	30	13	3
2. County Boroughs.	73	73	36	15	15	7
3. Boroughs	137	135	80	15	23	17
4. Urban Districts	54	51	21	14	11	5
5. Isles of Scilly	1	1	1	-	-	-
Total	327	322	154	74	62	32

NOTES.

In attempting to classify the Local Education Authorities into general divisions, it has been found that in some cases there are special circumstances which make it difficult to determine to which category an Authority properly belongs. It is believed that on the whole the tables give a fair idea of the practice of the Authorities; but in exceptional cases an Authority's policy may not be quite accurately indicated by its position in the tables. These cases are dealt with in the following notes, to which careful reference should be made.

Column D: In a few of the areas included in this column, there has, at some time, been a certain amount of exclusion of children under five from individual schools. It is possible that such exclusion may be necessary again; but it does not appear to be in operation at present, and in any case is both slight and temporary. It is therefore disregarded.

There are other cases where, although it does not appear that any exclusion has taken place up to the present, there are definite indications that in the future there may be exclusion.

In six other cases, while no definite regulations have been made for the exclusion of children under five, it is stated that their attendance is discouraged.

Column E: The aim in dividing this column into two parts has been to show on the one hand those places in which the exclusion that has been made has been actually determined by the available accommodation or by the desire to save expenditure on staff, and on the other hand those places where the Authority's action has not been so determined. It should be pointed out, however, that in the former column are certain Authorities who, though they only exclude children under five where the accommodation is deficient or where admission would involve additional expenditure on staff, give other reasons to support their policy; while in the latter column are included some Authorities who, though their policy is clearly based on educational, hygienic, or similar grounds, give the possible need for increase in the accommodation if younger infants were admitted as an additional reason for their action.

Certain Authorities in Column E have not given very definite reasons for their practice. These have been placed in the second column unless it has been reasonably clear from the nature of the exclusion or from the views expressed by the Authority that lack of accommodation was probably the determining factor.

Deficiency of accommodation in Column E (i.) should be understood to mean deficiency as regards either the amount or the suitability of the premises, certain Authorities having refused admission to children under five, although the schools were not full, because they considered the accommodation available was not suitable for younger infants.

In some of the areas, the extent of the exclusion is very small. In 12 of those included in Column E (i.) it applies only to a few schools, and is either due to a temporary insufficiency of accommodation, or is intermittent, occurring only when the pressure on the accommodation is greatest. There are also other places contained in Columns E (i.) and (ii.) where the amount of exclusion is very small, but is neither temporary nor intermittent, so far as can be judged. Thus, in 7 places children under five are excluded from only one school, and in 2 places from only two schools, and in 1 place from only three schools. It should be pointed out with regard to all these places that it is quite possible that there may be even less exclusion than appears, for although certain schools in the area refuse admission to certain children, there is nothing to show that these children, or at any rate some of them, do not as a matter of fact gain admission in neighbouring schools.

Of the areas included in Column E (ii.), in 2 it is the general practice to admit children under five, and in 12 others it is the general rule to exclude them. There is, however, a certain amount of exclusion in the one case and a certain amount of admission in the other, due to measures taken in the interests of school organisation. In one of the two places first referred to children are nominally admitted at the age of three, and in the other at four; but since children under five are only admitted during the first month of the school year in the first case, or the first week of any term in the second case, it follows that some of them cannot enter school until several months after their third (or fourth) birthday. On the other hand, in the 12 places where children are nominally not admitted until the age of five, they are allowed to enter school at the beginning (or during) the term, quarter, half-year or year in which they will attain the age of five. Consequently there are some who can get in before their fifth birthday.

NAMES OF THE AUTHORITIES BELONGING TO THE
SEVERAL CATEGORIES.

**1. List of Local Education Authorities which retain
all Children between Three and Five in Public
Elementary Schools. (Column D.)**

Total Number - 154.

Administrative Counties (16).

Brecknockshire.	Monmouthshire.	Rutlandshire.
Carnarvonshire.	Montgomeryshire.	Sussex, East.
Denbighshire.	Norfolk.	Warwickshire.
Dorsetshire.	Peterborough, Soke of	Yorkshire, East Riding.
Durham.	Radnorshire.	Yorkshire, West Riding.
Herefordshire.		

County Boroughs (36).

Bath.	Dudley.	Oxford.
Blackburn.	Exeter.	Plymouth.
Bolton.	Grimsby.	Portsmouth.
Bournemouth.	Halifax.	Rochdale.
Bradford.	Hastings.	Smethwick.
Burnley.	Huddersfield.	Southport.
Burton-upon-Trent.	Ipswich.	Stockport.
Bury.	Leeds.	Swansea.
Canterbury.	Manchester.	West Bromwich.
Cardiff.	Middlesbrough.	West Ham.
Chester.	Norwich.	Worcester.
Devonport.	Oldham.	York.

Boroughs (80).

Accrington.	Doncaster.	New Windsor.
Ashton-under-Lyne.	Dukinfield.	Ossett.
Aston Manor.	Durham.	Penzance.
Banbury.	East Retford.	Peterborough.
Barnsley.	Eccles.	Pontefract.
Barnstaple.	Falmouth.	Poole.
Berwick-upon-Tweed.	Faversham.	Pudsey.
Beverly.	Harrogate.	Ramsgate.
Bexhill-on-Sea.	Hartlepool.	Rawtenstall.
Bridgwater.	Harwich.	Ryde.
Bridlington.	Hereford.	Scarborough.
Brighouse.	Heywood.	Shrewsbury.
Bromley.	Hyde.	Stalybridge.
Burslem.	Ilkeston.	Sutton Coldfield.
Bury St. Edmunds.	Jarrow.	Swindon.
Carlisle.	Keighley.	Taunton.
Carmarthen.	Kendal.	Tiverton.
Chelmsford.	Kidderminster.	Torquay.
Cheltenham.	Loughborough.	Tunbridge Wells.
Chorley.	Margate.	Wakefield.
Clitheroe.	Middleton.	Wenlock.
Colne.	Morecambe.	Weymouth.
Congleton.	Morley.	Whitehaven.
Crewe.	Neath.	Widnes.
Darwen.	Nelson.	Wrexham.
Deal.	Newbury.	Yeovil.
Dewsbury.	Newport (Isle of Wight).	

Urban Districts (21).

Aberdare.	Farnworth.	Radeliffe.
Abertillery.	Felling.	Rhondda.
Aldershot.	Hendon.	Shipleigh.
Beckenham.	Ince in Makerfield.	Swinton and Pendlebury.
Chadderton.	Kettering.	Tipton.
Ebbw Vale.	Llanelli.	Tunstall.
Enfield.	Penge.	Wolstanton United.

Isle of Scilly (1).

Isles of Scilly.

2. List of Local Education Authorities which partially exclude Children under Five from Public Elementary Schools. (*Column E*).

Total Number - 136.

(i.) Authorities which exclude only in cases where the accommodation is deficient, or a reduction of staff is thus made possible. (*Column E (i)*).

Number - 74.

Administrative Counties (30).

Anglesey.	Glamorganshire.	Shropshire.
Bedfordshire.	Gloucestershire.	Somersetshire.
Buckinghamshire.	Huntingdonshire.	Suffolk, East.
Cambridgeshire.	Kent.	Suffolk, West.
Cardiganshire.	Lincolnshire, parts of	Westmorland.
Carmarthenshire.	Kesteven.	Wight, Isle of.
Cheshire.	London.	Wiltshire.
Derbyshire.	Merionethshire.	Worcestershire.
Devonshire.	Northamptonshire.	Yorkshire, North
Ely, Isle of.	Oxfordshire.	Riding.
Flintshire.	Pembrokeshire.	

County Boroughs (15).

Birkenhead.	Derby.	Reading.
Birmingham.	Gloucester.	Salford.
Bootle.	Hull.	Sheffield.
Coventry.	Leicester.	Sunderland.
Croydon.	Preston.	West Hartlepool.

Boroughs (15).

Bacup.*	Haslingden.	Merthyr Tydfil.
Batley.*	Hemel Hempsted.*	Reigate.
Cambridge.	Longton.*	Salisbury.
Chesterfield.	Lowestoft.	Winchester.
Grantham.	Luton.	Worthing.

Urban Districts (14).

Acton.	Gorton.	Rowley Regis.
Barry.	Hindley.	Tottenham.
Coseley.	Mountain Ash.*	Twickenham.
Edmonton.	Oldbury.	Walthamstow.*
Finchley.	Pontypridd.	

* All children under four are excluded.

(ii.) **Authorities whose action is not determined by the amount of existing accommodation or by expenditure on staff.** (*Column E. (ii).*)

Number - 62.

Administrative Counties (13).

Cornwall.*	Lancashire.	Nottinghamshire.
Cumberland.*	Leicestershire.	Staffordshire.
Essex.	Lincolnshire, parts of	Surrey.*
Hampshire.	Holland.*	Sussex, West.
Hertfordshire.	Middlesex.*	

County Boroughs (15).

Blackpool.*	Hanley.*	Rotherham.*
Brighton.	Liverpool.	St. Helen's.*
Bristol.	Newport (Mon.).*	Tynemouth.*
Gateshead.*	Northampton.*	Walsall.*
Great Yarmouth.*	Nottingham.	Warrington.*

Boroughs (23).

Boston.*	Glossop.*	Mansfield.*
Chepping Wycombe.*	Guildford.*	Newark.
Colchester.*	Kingston-upon-Thames.	Newcastle-under-
Darlington.*	Lancaster.*	Lyme.*
Ealing.*	Leigh.*	Pembroke.*
Eastbourne.*	Macclesfield.*	Royal Leamington Spa.
East Ham.*	Maidenhead.*	Southend-on-Sea *
Gillingham.*	Maidstone.	Workington.

Urban Districts (11).

Barking Town.*	Heston and Isleworth.	Waterloo-with-
Bilston.*	Ilford.*	Seaforth.*
Chiswick.	Stretford.	Willesden.*
Fenton.*	Wallasey.*	Wood Green.

3. List of Local Education Authorities which wholly exclude children under five from Public Elementary Schools. (*Column F.*)

Total Number - 32.

Administrative Counties (3).

Berkshire.	Northumberland.	Lincolnshire, parts of Lindsey.
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County Boroughs (7).

Barrow-in-Furness.	Southampton.	Wigan.
Lincoln.	South Shields.	Wolverhampton.
Newcastle-upon-Tyne.		

* All children under four are excluded.

Boroughs (17).

Bedford.	King's Lynn.	Stockton-on-Tees.
Chatham.	Lewes.	Stoke-upon-Trent.
Dover.	Mossley.	Wallsend.
Folkestone.	Nuneaton.	Wednesbury.
Gravesend.	Richmond.	Wimbledon.
Hornsey.	Rochester.	

Urban Districts (5).

Cannock.	King's Norton and	Leyton.
Erith.	Northfield.	
Gosport and Alverstoke.		

APPENDIX 6.

THE COMPARATIVE COST OF CRÈCHES AND PUBLIC
ELEMENTARY SCHOOLS.

It is not easy to give figures showing the relative cost of Crèches and Public Elementary Schools. The following facts, however, show that the Committee's view that schools are cheaper than crèches is probably correct.

The total amount expended by local education authorities on elementary education during the year ending March 31st, 1906, was £22,529,408.* The average number of scholars in attendance at public elementary schools for the year 1905-6 was 5,303,229.† In other words, the cost of educating each unit of average attendance during this period was approximately £4 5s.

The Committee cannot give any general corresponding figures for the cost of crèches during the same period. The following figures, however, are taken from the accounts of four quite independent crèches in widely different parts of London, and may fairly be taken to support the Committee's generalisation.

A. A crèche in the eastern district of London.—The number of attendances made at this crèche during the year 1907 was about 6,200, with an average daily attendance of 26 children. The total expenditure amounted to a little over £650. The annual cost, therefore, per unit of average attendance was exactly £25.

B. A crèche in the W. district of London.—The number of attendances made at this crèche during 1907 was about 6,800 with a daily average attendance of 30 children. The total expenditure for the year was just under £400. The annual cost, therefore, per unit of attendance was about £13 7s.

* See "Statistics of Public Education in England and Wales, 1905-6-7," [Cd. 3886], page 335.

† *Ibid.*, page 19.

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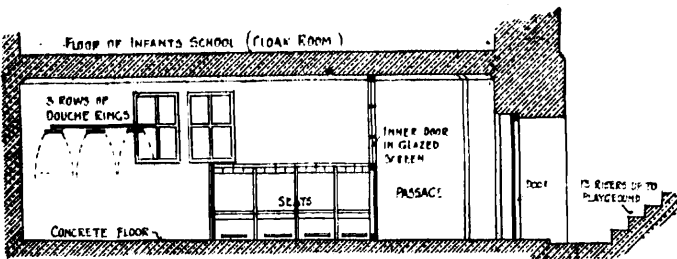
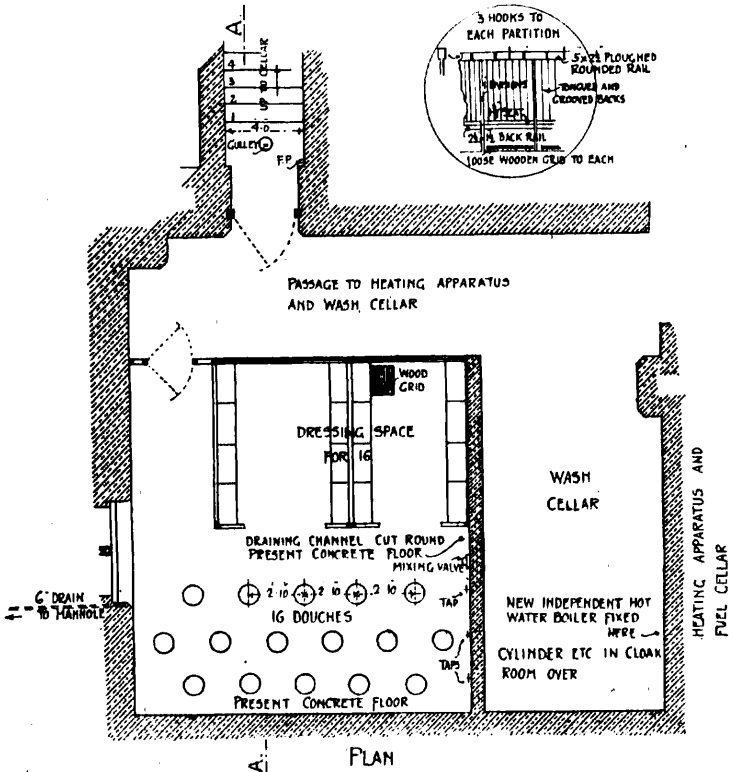
C. A crèche in the eastern district of London.—The total number of attendances made at this crèche in 1907, was about 5,700. The daily average attendance was 28. The total expenditure is given as £500 on an average of a good many years, and the annual cost, therefore, per unit of average attendance was £18.

D. A crèche in the S.E. district of London.—The total number of attendances at this crèche in 1907 is not given, but the daily average attendance is returned at 50. The total expenditure was £250, and the annual cost, therefore, per unit of average attendance comes out at £5.

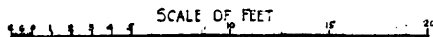
In comparing these figures with one another and with the average annual cost per child in public elementary schools, the following facts should be borne in mind. In none of the four crèches referred to is any charge made for administration, nor is there any teaching either paid for or given, except to a limited extent in Crèche B. The whole of the administrative labour is given voluntarily, and the staff consists for the most part of probationers whose salaries are naturally very small. Again, considerable numbers of presents in kind are given by benefactors, including clothing, bedding, food of all sorts, coats, equipment generally, and toys. Owing to these various causes the actual cost of maintaining the crèches, high as it is compared with the schools, is considerably less than it would be if they were maintained by a public body, who might not secure the sympathetic help of the charitable.

On the other hand, it must be remembered that the children receive practically all their food for the day at all the crèches, and this of course raises the general expenditure on maintenance. It should be noted also that in the crèches of which the Committee possess any particulars, the parents pay a fee of about 3d. a day for each child. The full cost per child, therefore, as calculated above, does not fall upon the funds of each charity.

A special word must be said about the exceptionally small cost per child at Crèche D. This crèche is managed by a lady of independent means, who acts as superintendent and matron, and charges nothing for her services. She also works it in connection with a soup-kitchen and a mother's meeting and is able therefore to reduce the cost of food and clothing. The premises, also, while clean and comfortable, have no bathing arrangements, and generally are far below the level of the other crèches referred to. It is therefore owing to exceptional circumstances that the expenses at this crèche are so low.



SECTION A A.



PLAN OF ABLUTIONARY BATHS AT TYERSAL SCHOOL, BRADFORD.

(For particulars see next page.)

APPENDIX 7.

School Baths.

The only school baths which, so far as the Consultative Committee are aware, are actually installed in Public Elementary Schools in this country are at Bradford. The Committee understand, however, that it is intended to provide similar baths shortly in one or two new schools in London. On page 263 will be found plans of one of the Bradford baths which have been prepared for the Committee from sketches kindly supplied by the Bradford Local Education Authority. The total cost of installing these baths was £80, namely £62 for the plumber's work, and £18 for the joiner's work. At two other Public Elementary Schools in Bradford (Feversham Street School and Wapping Road School) a special system of douche baths has been installed at a cost of about £60 in each case, and at a fourth school (Bowling Back Lane) ablutionary baths are to be put in shortly. In addition to providing baths at these four schools, the Local Education Authority have made arrangements with the Baths Committee of the City Council for school children to receive ablutionary baths at 10 bathing centres in the town; that is to say at baths which are open to the general public as well as to school children. Generally speaking, the accommodation at each of these places consists of douche and slipper baths sufficient to deal with 20 children at once. The manner in which these bathing arrangements are fitted in with the ordinary school work may best be seen from the following letter which contains the instructions given to the various head teachers of the Bradford Public Elementary Schools:—

City of Bradford Education Committee.

Education Office,
Manor Row.

Dear Sir, or Madam,—

10th July, 1907.

I beg to inform you that the Committee have had under consideration the question of the dirty condition in which many children attend school, and with a view of effecting some improvement in this direction, have arranged for the ablutionary baths at the several district and school baths to be at the disposal of head teachers each morning in accordance with the arrangements detailed below. The carrying out of these arrangements will no doubt cause some inconvenience in the working of the school, but, notwithstanding this, the Committee feel that they will have the hearty co-operation of the head teachers in the

matter, and that any inconvenience caused will be more than justified if any of these children can by these means be trained to decent and cleanly habits.

Accommodation at the Bath will be reserved on morning each week from 9 to 9.30 for boys, and on morning at the same time for girls from your school. On these mornings any children in the school who are, in your opinion, in need of a thorough washing should be sent to this bath immediately school opens under the charge of a teacher. They can be marked "present" before they go.

As there is only accommodation for the number stated above in the ablutionary baths it is necessary that you should make such arrangements with the other head teachers in the block as will ensure that not more than that number of children are sent together from all departments of your school.

One teacher only, and not one from each department, need go with these children, and you should, therefore, make arrangements with the other departments on this point also.

Though accommodation at the baths can only be reserved for children from your school on the mornings previously stated, it is probable that if you have any specially urgent cases on any other morning you will find that such children can be attended to if they are sent to the baths.

It is not intended, of course, that the same children shall necessarily be sent for these baths each week, but that only those in need of an ablutionary bath shall receive one.

These arrangements will commence with the week beginning on Monday next.

Yours faithfully,

(Signed) THOS. GABBUTT.

Secretary.

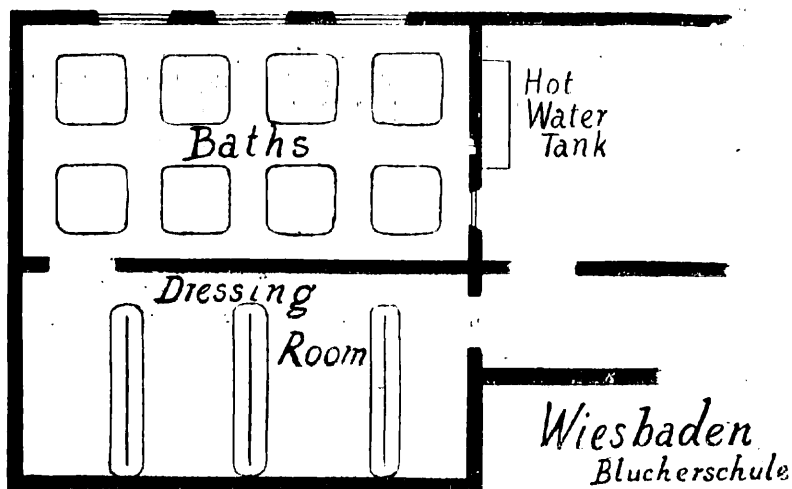
P.S.—These arrangements are not intended to alter in any way the arrangements now in operation in respect to the attendance of children at the baths for swimming lessons.

For further information about school baths, reference may be made to a chapter on the subject in Mr. Felix Clay's "Modern School Buildings," and to the "Report of the Education Committee of the London County Council submitting a Report of the Council's Officers on Bathing Arrangements in Schools in Germany and Holland." This Report may be purchased, either directly or through any bookseller, from P. S. King and Son, 2 and 4, Great Smith Street, Victoria Street, Westminster, S.W.; price 6d., post free 7½d. It contains many illustrations of baths actually in use in Germany and Holland, with full details as to the bathing arrangements at each of the towns which the Council's Officers visited. It does not appear that any particular form of bath stands out as yet as obviously the best, but the Committee think it may be of interest to quote, as an

instance of a successful installation of one type of bath, the detailed notes of the Council's Officers on the arrangements at Wiesbaden.

“WIESBADEN.—Visited on May 30th. *Blücher School*, a large new school, of beautiful exterior, with pollarded trees in the playground. The interior highly finished, even the doors being decorated. The floors throughout oiled. Dual desks, three different sizes, in each room. Ventilation with hot air, moistened at inlet with sprays.

“The school bath in basement; dressing room opens directly into bathroom. It is provided with forms and wooden partitions with pegs for clothes. Bathroom concrete, with two rows of four troughs about 4 feet wide, dripping boards round and between troughs, which are 6 inches or 7 inches deep, and contain a board to stand on. Four boys are douched back to back in each trough. The attendant controls the water mixing apparatus in an adjoining room, and looks through a window into bathroom. Douche begins at about 95 deg. Fahr., and ends in summer about 75 deg. Fahr., in winter about 65 deg. Fahr. Thirty-two boys bathe at once. Soap, brush, and a dry towel each is provided; they wear no bath clothes.



“All the schools in Wiesbaden are provided with douche baths.*

“The girls wear caps and a loin cloth, the boys bathe naked. The two lowest classes are not bathed. *The installation cost about £150 in this school.*

“As regards results, Dr. Kuntz reports: ‘In school bathing much depends upon the interest and energy displayed by the

* NOTE.—The figures are not drawn to scale; but merely taken from note-book diagrams; dimensions where noted are recorded in the text.

class teachers. The general results have been very satisfactory. All the class teachers and medical officers affirm that the appearance of the children is fresher and healthier, and that the air in the schoolrooms is greatly improved, especially in older schools, where the ventilation is less efficient than in the more modern ones. The condition of underlinen, stockings, etc., has improved to a remarkable extent. The children show a distinctly increased capacity and zest for learning after bathing. We have very little vermin in our schools, only about 1.8 per cent. Although this is due principally to our thorough system of school medical inspection, the baths have no doubt contributed in some degree to this result.

'I wish you could succeed in London in giving your school children the benefit and the enormous profit in health which regular shower baths afford.'

"This expression of opinion is valuable coming from Wiesbaden, the pioneer of the movement for thorough medical inspection of schools in Germany."

For information about other types of baths in Germany and Holland, reference should be made to the L.C.C. Report itself.

APPENDIX 8.

MORTALITY OF INFANTS AND YOUNG CHILDREN PER 1,000 BIRTHS, 1891-1900
BOTH SEXES.

A. SCOTLAND *

Causes of Death.	Ages at Death.							
	Under 3 months.	3-6 months.	6-12 months	Total under 1 year.	1-2 years.	2-3 years.	3-4 years.	4-5 years.
I. COMMON INFECTIOUS DISEASES.								
Small-pox	0·02	0·00	0·01	0·03	0·00	0·00	0·00	0·00
Chicken-pox	0·01	0·01	0·03	0·06	0·02	0·01	0·00	0·00
Measles	0·12	0·31	3·31	3·74	6·15	2·47	1·14	0·68
Scarlet Fever	0·04	0·06	0·35	0·45	0·91	0·93	0·80	0·62
Diphtheria and Croup	0·19	0·16	0·93	1·28	2·18	1·56	1·23	0·95
Whooping Cough	1·45	1·54	4·05	7·05	5·42	2·06	1·08	0·65
Total	1·83	2·08	8·68	12·60	14·67	7·03	4·26	2·91
II. DIARRHOEAL DISEASES.								
(<i>i.e.</i> , Simple Cholera, Diarrhoea, Dysentery, Enteritis, Gastro-Enteritis, Gastro-Intestinal Catarrh).	5·67	4·92	5·70	16·29	3·46	0·68	0·30	0·19
III. WASTING DISEASES.								
(<i>i.e.</i> , Premature Birth, Atelectasis, Congenital Defects, Starvation, Want of Breast Milk, Debility, Atrophy, Inanition).	32·99	2·24	1·37	36·60	0·84	0·21	0·08	0·05
IV. TUBERCULOUS DISEASES.								
(<i>i.e.</i> , Tubes Mesenterica, Tuberculous Meningitis, Acute Hydrocephalus, Phthisis, Scrofula, and other forms of Tuberculosis).	0·87	1·56	3·37	5·80	4·61	0·33	1·57	1·25
V. ALL OTHER CAUSES								
ALL CAUSES	64·37	23·86	39·71	127·93	43·61	17·55	10·37	7·31

* The figures in this Table were kindly supplied to the Committee by the Registrar-General for Scotland.

APPENDIX 8—continued.

MORTALITY OF INFANTS and Young Children per 1,000, 1891-1900, Both Sexes—continued.

B. ENGLAND AND WALES.*

Causes of Death.	Ages at Death.							
	Under 3 months.	3-6 months.	6-12 months.	Total under 1 year.	1-2 years.	2-3 years.	3-4 years.	4-5 years.
I. COMMON INFECTIOUS DISEASES.								
Small-pox - - -	0.03	0.01	0.01	0.05	0.02	0.02	0.01	0.02
Chicken pox - - -	0.01	0.02	0.04	0.07	0.03	0.01	0.01	0.00
Measles - - -	0.08	0.25	2.81	3.14	5.50	2.25	1.25	0.74
Scarlet Fever - - -	0.02	0.04	0.23	0.29	0.70	0.85	0.84	0.66
Diphtheria and Croup -	0.06	0.09	0.52	0.67	1.52	1.52	1.66	1.45
Whooping Cough - - -	1.10	1.42	3.29	5.81	3.82	1.44	0.77	0.40
Total - - -	1.30	1.83	6.90	10.03	11.59	6.09	4.54	3.27
II. DIARRHOICAL DISEASES (i.e., Diarrhœa (all forms) Enteritis, Gastro-Enteritis, Gastritis, Gastro-Intestinal Catarrh).								
	7.63	9.10	10.32	27.05	4.62	0.71	0.31	0.18
III. WASTING DISEASES. (i.e., Premature Birth, Congenital Defects, Injury at Birth, Want of Breast Milk, Starvation, Atrophy, Debility, Marasmus).								
	37.57	4.25	2.62	44.44	1.15	0.21	0.07	0.04
IV. TUBERCULOUS DISEASES. (i.e., Tuberculous Meningitis, Tuberculous Peritonitis, Tuberculosis Mesenterica and other tuberculous diseases).								
	1.40	2.52	4.00	7.92	4.14	1.78	1.06	0.82
V. ALL OTHER CAUSES.								
	26.08	14.63	23.18	63.89	20.86	7.21	4.14	2.93
ALL CAUSES -	73.98	32.33	47.02	153.33	42.36	16.00	10.12	7.24

* The figures in this Table are taken from Table H in the "Supplement to the Sixty-fifth Annual Report of the Registrar-General of Births, Deaths, and Marriages in England and Wales, 1891-1900, Part I."

APPENDIX 9.

MEMORANDUM by Mr. E. J. BROADFIELD, J.P., of Manchester, for many years Deputy Chairman of the Manchester School Board.

I am strongly of opinion that, in towns at least, to keep children away from school before the age of five years would be disadvantageous and in many cases disastrous. The conditions of home life vary, of course, and where the mothers can look after their children and direct their teaching they may well wait at home until that age; but before the Assisted Education Act was passed thousands of Manchester children rambled at their own sweet will, and many of them were led by older companions to the markets and fell into pilfering habits. Their parents were often indifferent, and rather than pay the school fees many of them accordingly let them wander uncared for all day. They fell into careless, impudent, and evil habits before they went to school, and the majority of the children sent to the Industrial Schools were from this neglected class. But when the Assisted Education Act virtually made all the infant schools free, parents were far more willing to send the children to them, and there was at once a considerable increase in the number of attendances. The consequence was that instead of the poor children being trained in the gutter and falling into the hands of youthful scoundrels they went to school, and most of them became at once interested in the work and play. The advantage was, of course, all the greater where the schools were roomy and airy, and where the teachers were (as was nearly always the case) sympathetic and kindly. Habits of punctuality and regularity were therefore formed in these infantile years, and the number of children charged with theft and other delinquencies sensibly diminished, as will be seen from the following averages:—

Taking the cases of committals in the Manchester Police Court, the average of the four years previous to the time the Assisted Education Act came into operation, including the years of its passing, was 146. The average of the succeeding fifteen years, during which the population increased within the two census periods (1891-1901) from 505,368 to 606,824, was only 123. Or, if we compare the year 1888 with last year, we have 145 then against 73 in 1906.

The returns of the averages of committals to the Day Industrial School are still more striking. The school was opened in January, 1889, and the average number of committal cases for the first three years, including 1891, was 214. The diminution began immediately the infant schools became free. The number in 1890 was 250, in 1892 it was 139, and the average for the last fifteen years was 137. Or, to compare again the total of 1888 with that of last year, we have 239 against 158.

It should be added that during the interval there has been a considerable increase in the number of school attendance officers, and a corresponding increase of active watchfulness.

APPENDIX 10.

THE WISHES OF THE PARENTS.

The Consultative Committee thought it would be interesting to discover, if possible, what view was taken of the school attendance of younger infants by the parents most concerned. In order to arrive at this information, they proceeded in two ways. They sent a set of questions to a few representative working-class parents, whose names were supplied to them by Mr. Mansbridge and Mr. Shackleton, two of their members, and they also asked Mr. Parr, the Director of the National Society for the Prevention of Cruelty to Children, to make inquiries in different parts of the country by means of his Inspectors.

In answer to the inquiry which the Committee addressed direct to representative working-class parents, they received fifteen replies. Practically the whole of the writers were of opinion that the majority of children under five were best at school. Three of them mentioned that the home was the right place for such children, provided it was a good one; only one thought that under all circumstances such children should stay at home. As regards the question of infection, twelve out of the fifteen parents stated that it was not their experience that school attendance increased the danger; in fact, a few of them thought it minimised it, on the ground that teachers were more quick to notice suspicious cases and advise their isolation than most mothers were. Three parents, however, definitely stated that in their opinion school attendance increased the liability to attack. As regards the happiness of the children, the parents are practically unanimous in saying that children under five keenly enjoy their school life.

As regards Mr. Parr's investigations, a summary has already been given on page 114 of this Report. A few remarks may be added here as to the reasons given by parents for their preference in connection with school attendance. Those who send their children to school say that they do so for the following principal reasons:—The children are kept warm, clean, and safe; they are kept out of the street and from learning bad habits; they are learning good manners and obedience; they are out of the way; their absence allows their mother to go to

272 *School Attendance of Children under Five Years of Age.*

work; they are happier; they cannot get into mischief; they learn what they cannot learn at home; their boots and clothes last longer; they are "learning a little"; they are better for the company of other children. Those who keep their children at home under five give the following reasons:—It is better for their health; they learn nothing at school; they develop better in fresh air; they are less liable to catch illnesses at home; they do not get at school the sort of attention they need; it is too much trouble to get them ready for school; they are best with their mothers; school injures both body and mind; "five is plenty young enough"; children below five get "worried and cross and ill" at school, and repeat their lessons in their sleep; they have to have better clothes; too much "trouble and expense."

It should be understood that the Consultative Committee are now giving the views of parents exactly as they received them, and are neither endorsing nor rejecting them. Indeed, to draw any conclusions from them would be very difficult for many reasons. It is not as if the better class of parents took one view and the worse ones the other. It is clear from Mr. Parr's information about the individual parents, whose views he gives, that no such division exists. It is found that many careful parents keep their younger infants at home, while others equally careful send them to school. On the other hand, careless parents sometimes send their children to school simply to get rid of them, whereas others equally careless keep them at home to save the trouble and expense of keeping them clean and tidy. There is only one fact which emerges with any clearness, and that is that the majority of parents who send their younger infants to school say that they do so because they are then out of danger, and are learning good habits.

In conclusion, the Committee would like to quote a letter written by a working-men's representative to a member of the Committee:—

Boiler Makers and Iron and Steel Ship Builders,
Executive Council,
June 12th, 1907.

DEAR ———

. Since seeing you I have made some inquiries about the contents of your letter, and I find that the children are excluded from the schools [in Newcastle] principally upon the theory that it is wrong to tire a child's brain before it is five years of age. I quite agree with that contention, but do not think it is sufficient to prevent children under five from attending, as there does not seem to me any need to press lessons upon them—rather give them some interesting and even amusing occupation. I and others certainly think that there are a large number of children whose

parents either cannot or will not give them proper attention, with the result that children of working mothers and of neglectful mothers now roam the streets, forming evil habits that may mark their after-life; and I certainly am of opinion that the children, and also the city, would be better off if these children were still allowed to attend child schools.

Faithfully yours,
D. C. CUMMINGS.

APPENDIX 10a.

THE EFFECT OF THE EXCLUSION OF YOUNGER INFANTS UPON THE ATTENDANCE OF OLDER SCHOLARS.

The statement is sometimes made that if younger infants are excluded from school, their elder brothers or sisters will be kept at home to look after them. It would certainly seem antecedently probable that this would be the case. But there are two points to be considered in this connection. In the first place, it should be noted that the objection only holds in those cases where the presence of a younger infant at home would necessitate the presence also of a person who would otherwise be absent. It would not, or as a rule need not, hold for instance in cases where the mother was at home, or where the existence of still younger children necessitated the presence in any case of an elder person. In the second place, it is to be noted that in actual practice the exclusion of younger infants has not in certain places been found to have any appreciable effect upon the attendance of older scholars. Of all the Local Education Authorities who have adopted this policy, about six consider that it has interfered with the attendance of the older classes. About twenty say that it has not injured the attendance of older children to any serious extent, or that it is used merely as an excuse that often will not bear investigation. A few say that their new system has not been at work long enough for them to judge. The remainder claim that it has had no effect whatever upon the average attendance of elder children. In Gloucestershire the point was referred to the School Attendance Officers, who gave it as their unanimous opinion that the exclusion of younger infants had not affected the older classes at all. Walsall, which excludes all children under five, claims to have the highest average attendance of older scholars in the Kingdom. Other places, such as Eastbourne and Erith, say that the high level of the average attendance of their older scholars, which ranges from 92-94, shows that the exclusion of younger infants has not had

a bad effect. Still other places, such as Berkshire, Great Yarmouth, and King's Lynn, say that the average attendance of their older children has steadily improved since the younger infants were excluded, and Ipswich claims that in the year following the adoption of the new policy, the average attendance of the older children created a record for the Local Education Authority.

It may be added that a few Authorities who exclude younger infants as a rule have met this special difficulty by admitting those children under five whose exclusion would necessitate the absence of an elder sister. The admission of younger infants to places in which special provision is not made for them certainly does not, as a general rule, seem to be a desirable plan; but it may be better to make exceptions in individual cases rather than cause the absence of older children, provided always that proper precautions are taken to prevent the attendance of the younger ones from being injurious to themselves or from interfering with the work of the older scholars.

(Appendices to Belgian Report.)

APPENDIX 11.

TOWN OF BRUSSELS.

INFANT HYGIENE.—INSTRUCTIONS TO MOTHERS.

(Drawn up by a Committee of the Belgian National League for the Protection of Infancy.)

Every year more than 30,000 children die in Belgium before they have reached the age of one year. This excessive infant mortality is due, in great measure, to ignorance and to prejudices upheld by custom.

The spread of a knowledge of the elementary rules of infant hygiene is one of the best means by which to check the disastrous results of the faulty methods generally employed in the up-bringing of infants. The mistakes most commonly made are with regard to the feeding of young children; gastro-enteritis (sickness and diarrhoea) is the illness which claims most victims among very young children. Maternal love does not make up for want of knowledge; to be a good mother is a thing which has to be learnt. Many mothers make their children ill without meaning to do so, through ignorance.

The Belgian National League for the Protection of Infancy has thought it a duty to draw up some elementary and practical advice, to be diffused widely among the public. These notes on the care of infants are in the form of short directions to young mothers. They will be useful in enabling them to avoid serious mistakes which may bring on their children deterioration of health, illnesses, permanent physical defects, or even death.

Some General Principles.

Cleanliness is one of the first conditions of a child's health. An infant's skin is very sensitive, and soon comes out in a rash or in sores if proper care is not taken immediately to remove soiled linen. If, in spite of attentive care, a rash appears on the buttocks, thighs, legs or heels of the baby, the cause must nearly always be sought in the defective action of the digestive organs.

Air and light are absolutely essential to a child's life and health. Too much heat indoors, especially if the air is close, is as harmful to a child as too great coldness of the open air. The bodily warmth of infants should always be kept up (without excess) by clothes which are soft and not too tight; wool and flannel are usually suitable for infants' clothing in our climate.

Some Advice.

At the moment of birth the head of an infant is often ill-formed; there is no need to rub or press it, it will take shape gradually. If the breasts of the new-born infant are swollen, nothing further must be done than to anoint them with camphorated vaseline—rubbing is always harmful. A child should never be rocked; the ancient custom of rocking has an irritating effect on the digestion and nervous system. No medicine should be given to a baby, not even the mildest purge, without a doctor's advice. From the very first a child should be accustomed to food and sleep at regular hours.

The eyes and ears should be attended to very carefully by the parents. Purulent ophthalmia is frequently the cause of blindness; many a blind man might have had his sight if his parents had consulted a doctor in time

Discharge in the ears often causes meningitis ; if there is matter in the ears they should be seen to at once. Piercing the lobes of the ears is a barbarous and useless custom. The wearing of earrings has never prevented ailments of the eyes ; on the other hand, it has often produced inflammation, ulceration of the skin, and abscesses of the glands.

The mother ought, as much as possible, herself to take charge of her child. The doctor is always the best guide to mothers in bringing up their children. Neighbours should never be consulted about any ailment. As soon as the mother notices that her child is ailing, her duty is to call in a doctor and follow his orders implicitly.

Children should be vaccinated, if possible, during the first three months of life.

There is no need to teach a child to walk ; when it feels strong enough it will take the first steps of its own accord.

Children should be bathed in tepid water (35 centigrades) ; a bath either too hot or too cold is harmful.

It is a good thing to weigh an infant regularly every week. This affords valuable information as to the state of health and the growth of a baby.

There is a small operation often practised, which is useless and often harmful : the severance of the net or vein of the tongue. It is an elastic substance, and very rarely prevents sucking or, later on, speech in a baby.

The use of indiarubber teats is a bad habit. These teats are often contaminated with microbes, and may carry infection.

Feeding of Infants.

The principles of the healthy feeding of infants are of the highest importance, and special attention should be paid to them, as it is with regard to these that most mistakes are made.

Mother's milk is the best form of food for infants. No other sort of food is to be compared with it. Every mother who is strong enough ought to nurse her child. Breast feeding should, as far possible, continue for fifteen months. The breast should be given at regular intervals and at the same hours every day. The child should have nothing in the intervals, even if it cries.

If the child is asleep at the usual time for its meal, it should be wakened and given the breast. If regularity is maintained from the very first in the hours of feeding and intervals between meals, in spite of crying and sleep, the child will certainly become accustomed very soon to obey a will stronger than its own.

Every woman who is nursing should abstain from alcoholic liquors, heady wine and strong beer ; a very light beer is the most that should be allowed with meals.

If the mother has evidently too little milk to feed her child sufficiently, either temporarily or altogether, mixed feeding must be resorted to ; that is, the child must be given a certain quantity of animal milk to supplement the insufficiency of the maternal breast. It is a mistake to suppose that milk from different sources cannot be mixed. This mistake is one that even in these days prevents the spread of the practice of mixed nourishment.

Artificial feeding is that which has to be resorted to when the milk of the mother or wet-nurse is unavailable for the infant. For artificial feeding, cow's milk is generally used, with good reason. It is easily procured, it is plentiful and cheap, and is to be had everywhere. Ass's milk, mare's, goat's, or sheep's milk may also be used sometimes. It is absolutely necessary, in having recourse to artificial feeding, to ensure in every possible way that the milk is of good quality. Milk which has been passed through a separator should never be used for feeding young children. In Belgium, the regulations for the sale of milk allow the retailing of partially and wholly skimmed milk. According to the bye-laws on the subject, the former when offered for sale must be in jugs which have a brown stripe round the neck, and the thin milk, from which all the cream has been taken, in jugs with a blue stripe round the neck. These two kinds of milk should never be used for *infants*.

It is for the doctor to decide whether the milk is to be given pure, or whether it is to be diluted or sweetened. Dilutions should always be made with water that has just been boiled, and according to the doctor's directions. Before giving the milk to the child it is well to be certain, by tasting it, that the liquid has no disagreeable smell or taste.

Noxious germs which may contaminate milk and produce illness (gastro-enteritis, tuberculosis, typhoid fever, etc.) may be mitigated or destroyed by different practices, such as pasteurisation, boiling, heating by steam and sterilisation.

Pasteurisation is a method which consists in bringing a liquid to about 70 degrees Centigrade, and then cooling it very rapidly.

Milk is sterilised by bringing it to a temperature of 110 degrees Centigrade. Milk which has only been pasteurised, boiled or steamed, should be consumed within twenty-four hours. Although sterilised milk will keep longer, it is advisable in feeding an infant not to use very stale milk. Whatever milk is used, it should be kept in clean vessels, protected from dust, and in a place that is cool and free from smells.

All heating processes (pasteurisation, boiling, sterilisation) should be carried out as soon as possible after milking, or they may have no effect. Milk is usually given to an artificially-fed child by means of a bottle. The simpler these are the better. Bottles of annealed glass are very commonly sold, thin but strong enough to resist variations of temperature, with rounded corners inside and out; these bottles, fitted with a plain india-rubber teat, are very suitable as feeding-bottles. All feeding-bottles with tubes are very dangerous, and should be entirely forbidden.

Milk should be given warm to the child (35 degrees Centigrade). The most perfect cleanliness is requisite for everything that touches the milk meant for the baby. The hands, the receptacles, the bottles and teats should always be scrupulously washed before coming into contact with the milk. The success of artificial feeding of infants depends on the exact and minute observance of these hygienic prescriptions.

Weaning.

Weaning is the period of the child's life which extends from the moment that other food is added to the milk diet until such time as milk becomes quite a secondary food.

This period extends over a long time. Weaning should never be sudden; milk should remain the staple nourishment up to the age of 2½ or 3 years. In the days when food from the breast was the universal rule, the word *weaning* was used to mean the cessation of giving the breast. When a child is weaned from the breast, mother's milk should be gradually replaced by animal milk. The substitution should take place slowly and by degrees; the longer it takes the less risk there is for the infant; it should extend over several months.

When it is necessary to leave off breast-feeding suddenly (a matter about which the doctor ought always to be consulted) food from the breast will be replaced by animal milk. When the child has reached a certain age (8 months at least) one, and then a second, meal of milk may be replaced by light farinaceous food (boiled).

Solid food given prematurely is extremely dangerous.

Before the first incisors appear starch foods are rarely necessary.

Much sorrow might be spared to young mothers and much illness to infants if the hygienic rules of feeding in infancy were put in practice and scrupulously observed.

Signed for the Committee by DR. A. DEVAUX (President),
Inspector-General of Public Health.
DR. EUGENE LUST (Secretary).

APPENDIX 12.

LEAFLET ISSUED BY THE SOCIÉTÉ PROTECTRICE DES ENFANTS
MARTYRS.

LAITERIE MATERNELLE

(1, PLACE DE LA DOUANE, BRUSSELS.)

We advise Mothers :—

(1.) To put the basket containing the feeding bottles of milk into a cool place (for example, a cellar) immediately it is delivered, and, during extreme heat, to place the bottles in a bucket of cold water, which should be renewed several times a day.

(2.) Not to uncork the bottle till it is required for feeding.

(3.) To taste the milk from each bottle, by pouring some into a spoon, before giving it to the child ; the milk should have no bad taste, nor should it possess the slightest trace of acidity.

(4.) To keep quite dry the teats which are put on to the bottles when giving milk to the baby. After having used the teat, it should be washed in plenty of water and till the next meal kept dry in a closed vessel (glass or china for choice), so that no dust can reach it.

(5.) To feed the babies at the same hour every day.

(6.) To give the milk very slowly without minding if a little air gets into the milk during the meal ; this mixture, on the contrary, makes the milk more digestible.

(7.) To take the child on their knees while feeding it with the bottle ; this process should last about ten minutes.

(8.) To rinse the empty bottle which has contained milk at once, taking care also to rinse the stopper at the mouth of the bottle in plenty of running water.

(9.) After the rinsing to fill the bottle with clean water and leave it thus till it is called for by the carman.

APPENDIX 13.

SYLLABUS ON THE CARE OF INFANTS.

BRUSSELS.

The following is a translation of the authorised syllabus on the care of infants for the *écoles ménagères* of the *Ville de Bruxelles*,* drawn up by Mme. Clays, *Directrice de l'école Bischoffsheim*.

THE CARE OF INFANTS AND INFANT HYGIENE.

COURSE OF THE ECOLE MÉNAGÈRE.

Baby Garments.

The garments of babies must be: (1) warm, (2) ample, in order not to impede the function of any organ and not to embarrass the movements in any way.

There are two methods of clothing babies: the *French method* and the *English method*.

These two methods include the same garments for the upper part of the body—a chemise, a flannel or cotton vest, a vest of piqué or some other material, a triangular kerchief and a robe (these garments are fastened at the back).

The *French method* includes for the lower part of the body: a linen diaper and a wool or soft flannel swathing band in which the baby's legs are wrapped and enclosed.

Old-fashioned baby-clothes.—Formerly these *baby-clothes* were completed by a flannel band which was rolled firmly round. In certain countries even the child's head was made immovable by means of a piece of linen which was fixed to the clothes on each side of the neck. This is still used in the southern provinces of our country.

Popular error.—The child's body will be warmer and straighter if it is tightly bound in its clothes.

The *English method* includes for the lower part of the body: (1) linen diaper folded into a triangle, a pilche of flannel of triangular shape, woollen stockings, and little woollen shoes.

The point of the diaper and that of the pilche are brought together by a pin between the baby's legs, in order to leave them complete liberty.

The *English baby-clothes* are the better, because they allow the child to move and to develop freely.

The *French baby-clothes*, if they are well applied, have the advantage of preserving the baby's warmth better; their use may also be recommended during the night and during the first days which follow the child's birth, especially in winter.

Cap.—If it is used, the cap should be made lightly, either of muslin or in crochet. It is wiser to accustom the child to do without it.

Cleanliness.

Care of the skin.—The different parts of the child's clothing must be frequently renewed; the chemises and the vests at least once every two days; the swaddling band every time that it has been soiled, at night as well as in the day.

* *Ville de Bruxelles.*—*Économie Maternelle. Hygiène de l'Enfance (Cours de l'École Ménagère).* Brussels, 1904.

Each time that the child has soiled its swaddling band, that part of the body must be washed, dried with a soft linen and then powdered with powder of amydon or lycopodium.

It is the only way to avoid the chapping and excoriations which cause the child so much suffering.

Washing and baths.—A general rapid washing should be done every day over all the parts of the body ; it is preferable to replace it by a very short bath in tepid water of 30° to 35° C. during the first months ; the temperature of the water should be lowered gradually. The temperature of the room in which the bath is taken should be from 15° to 16° C.

Refined soap must be used for the child's toilet : marshmallow or glycerine soap.

If the child's skin is irritated, he (she) should be given baths of amydon water or bran baths.

Cure of the head.—The child's head should be the object of special care ; it must be washed every day with tepid water, well dried, then brushed with a fine brush. Inflammation of the head—milk-scab, incrustation—is frequent with babies and causes them much suffering ; this inflammation must be attended to without delay in order to avoid the risk of grave difficulties.

Popular error.—It is not permissible to cure scalp eruptions lest convulsions or meningitis should be induced.

NOURISHMENT.

Milk is the first and the only nourishment proper to a baby ; everything in a child's mouth shows that it should suck, not eat. Nothing can replace milk for the child, but, of all milk, that which suits it best is the mother's.

When the mother is ill and cannot nurse her child, when her occupations do not permit her to do so by day as well as by night, she has recourse to *artificial feeding*, unless she can give the child a nurse, which is preferable.

In *artificial feeding* the child is given the milk of an animal ; cow, ass, sheep, goat, by means of a bottle.

Cow's milk is generally used in our towns ; it differs from that of the woman, but by the addition of water and sugar its composition approaches that of mother's milk.

	Fluids.	Nitric Matter.	Fat.	Sugar.	Salts.	Total.
Mother's milk	- 87.39	2.48	3.90	6.04	0.19	100 parts
Cow's milk	- 87.41	4.41	3.26	4.22	0.70	100 "

The milk is diluted by adding :

During the first month	-	-	-	-	$\frac{1}{2}$ litre* of boiled water.
„ second and third months	-	-	-	$\frac{1}{3}$	„ „ „
„ fourth month	-	-	-	$\frac{1}{4}$	„ „ „

Afterwards cow's milk should be given undiluted.

Milk ferments rapidly, it can also contain dangerous microbes which communicate diseases to children ; therefore it is necessary only to give well-boiled milk.

The feeding-bottle which is easiest to keep clean should be used ; bottles consisting of a bottle closed by the india-rubber teat, without a tube, are the best.

Careful usage of the bottle.

1. Only boiled milk to be used ;
2. The milk should be pure, not skimmed ;
3. The addition of water and of sugar to be made in the required proportions ;
4. The milk in the bottle should be tepid, 35° to 37° C. ;

* 1 litre—1.76 pints.

5. The bottle should only contain the milk for one meal, the surplus must be thrown away ;

6. After each meal the bottle must be well cleaned in all parts by means of a brush and hot boiled water.

Feeding with a bottle demands special supervision and careful understanding, for the majority of diseases of the digestive passages—thrush, infant cholera, enteritis—generally attack children brought up by hand, and are a frequent cause of mortality.

These illnesses can also be caused by inappropriate food.

In order to simplify artificial feeding, by diminishing the causes of mortality, the *Société protectrice des Enfants Martyrs* has instituted a *laiterie maternelle*, rue des Comédiens, 25, at Brussels. The milk sold there is humanised or sterilised milk, which approaches very closely to mother's milk, and is purified from the injurious germs which it may have contained. This preparation is made on the spot under the supervision of Dr. Lust. The new milk steriliser of this doctor has been adopted here as feeding-bottle. Deliveries are made for cash ; ten centimes the bottle.

A distribution of milk at reduced cost, ten centimes a day, or free, is made daily to poor mothers who are prevented from nursing their babies themselves, or especially to mothers whose children are already suffering from bad feeding, sickness, diarrhœa.

Popular errors.

1. To believe that when a child is brought up by hand it is necessary always to give it the milk of the same cow.

2. To believe that barley water is a food which suffices for the needs of a baby and that it can advantageously replace milk.

3. To believe that a child should be fed with pap from the time its first teeth appear.

Number of meals.

Whether a child is nursed by its mother or fed with a bottle, it is necessary to observe strict regularity in the times of feeding.

First half-year.

First three months.—By day, feed once every two hours ; at night, once every four hours.

Following three months.—By day, once every three hours ; at night once every six hours.

Second half-year.

By day, one meal every three hours ; replace one by soup ; at night, food once only, to be completely suppressed finally. We disapprove of the use of any kind of indiarubber teats which are given to children between meals. This bad custom forces a child to make efforts in sucking which are often tiring.

WEANING.

During the *first six months* the child can only take milk, any other nourishment, being badly digested, is injurious. It is only during the *second half-year*, and while continuing the use of milk, that the child should be given either pap or light soups, consisting of farinaceous foods prepared with milk. These paps and soups should be prepared fresh for each meal.

To begin with, the milk meal must be replaced by one of soup during the day and, in proportion as the teeth become more numerous, the number of these soups will be gradually increased and the number of milk meals must be reduced.

After the age of one year, while maintaining milk as the principal nourishment, the child could be given eggs, bread soaked in meat juice, and, eventually, meat chopped fine.

Until at least two years of age, milk should remain the child's principal food.

Rules for Weaning.

It is important :

1. Never to wean a child who has no teeth ;
2. Never to wean a child who is teething ;
3. Never to wean a child during the course of an indisposition or of an illness ;
4. Never to wean a child during the very hot weather ;
5. Never to wean a child suddenly.

TEETHING.

Teething is a cause of digestive trouble for a child, that is why nursing must not cease at the moment of cutting the teeth.

The first teeth appear in the following order :—

Front teeth -	4 to 6 months.
Side teeth -	4 „ 9 „
First small double teeth -	4 „ 12 „
Eye teeth -	4 „ 15 „
Second small double teeth -	4 „ 18 „

GUM RINGS.

The child's first toy, the teether, is often intended to soothe the irritation of the gums caused by teething.

A bone or india-rubber ring serves this purpose very well ; orris or marsh-mallow roots, which easily turn sour, must be avoided. Coloured or angular shaped rattles must not be used, as they might cause serious accidents.

SLEEP.

Children have an imperative need of sleep, especially during the first days. Babies should be allowed to sleep as much as they wish ; towards the age of six months a child's sleep can be regulated.

Sleep generally follows feeding ; a child should sleep in a cradle, and not in the arms or on the knees of its mother.

The child, in its cradle, should always be laid on its side in order that, if sickness occurs, the liquid flows easily and does not enter the respiratory channels.

The child must not be allowed to sleep with anyone (asphyxia), must not be accustomed to rocking, and use must not be made of narcotics, which have often caused deplorable accidents.

It is necessary to accustom a child to get up early and to go to bed at the hour when, from fatigue or by habit, it goes to sleep immediately.

After the child's sleep, the cradle should be aired.

GOING OUT.

Pure air, like nourishment, is a food which sustains life.

A child must have air baths by being exposed as often as possible to the open air ; in this way it will be submitted to the influence of full light, which is as necessary for it as air.

A child can be taken out without harm in hot weather (summer) at the end of a week ; in mild weather (spring, autumn) at the end of a fortnight ; in cold weather (winter) at the end of a month.

PERAMBULATORS.

Perambulators are not good for quite little children, whom they expose to tiring and sometimes dangerous jolting ; the arms of the mother or the nurse are much more suitable for them until they have the strength to sit up and to change their position.

WALKING—EXERCISE.

Under our conditions of climate and race, a well-nourished child begins to walk when it is a year old. All methods intended to force the act of walking must be avoided, straps or reins, wicker-baskets, wooden carriages ; nothing is more inclined to deform the legs, the pelvis, and the spine. It is preferable to assist the baby in its first attempts by supporting it under both arms.

When it is necessary to lift a child over an obstacle, care must be taken to hold it with open hands, under the arms, otherwise there is a risk of dislocating its shoulder or wrist.

The child should be made to do some well regulated gymnastic movements favourable to its development.

VACCINATION.

Vaccination is the best preventive of small-pox.

Except in the case of an epidemic of small-pox, a child can be vaccinated from the age of two months.

From the third to the tenth day which follows vaccination the child cannot go out, because it is then more sensitive to variations of temperature.

Baths will be suppressed during the same time. The vaccinated part must be protected by a little shield with cotton wool.

* * * * *

DANGEROUS REMEDIES.

Certain very dangerous substances are sometimes used by ignorant mothers.

Such are : decoction of poppy seeds, laudanum, to induce sleep ; an emetic to produce sickness. These remedies have often caused accidents, sometimes fatal accidents.

Nor must mustard poultices be applied to the calves of a child's legs if it is threatened with convulsions ; it is well known that the pain caused by the mustard poultice may itself provoke convulsions with little children.

If the child is not in good health, it is best to submit it to a doctor for examination, for it may be attacked by serious illness without the symptoms being apparent.



APPENDIX 14.

NUMBER OF ECOLES-GARDIENNES UNDER STATE INSPECTION.
1905.

PROVINCE.	COMMUNALE.	ADOPTED.	NO. OF SCHOOLS.	CHILDREN.	CHILDREN AT PRIMARY SCHOOLS.	NO. OF SCHOOLS.	TOTAL POPULATION.
Antwerp - - -	42	170	212	31,311	115,905	545	559,746
Brabant - - -	116	243	359	43,670	163,327	998	828,324
West Flanders - -	18	336	354	33,324	103,792	716	750,230
East Flanders - -	71	361	432	53,009	138,110	817	923,495
Hainault - - -	399	290	689	49,524	137,471	1,338	997,165
Liège - - -	113	115	228	20,224	100,971	920	695,668
Limbourg - - -	6	85	91	6,855	35,571	381	523,292
Luxembourg - - -	41	98	139	6,836	31,591	666	878,728
Namur - - -	93	174	267	3,396	43,073	763	621,091
	899	1,872	2,771	258,149	869,811	7,144	6,777,739

SUMMARY— 46 Crèches for population of 479,488 under 3 years.
2,771 Ecoles-Gardiennes, containing 258,149 children out of population of 446,084 (3-6).

APPENDIX 16.

TOTAL COST OF ECOLES-GARDIENNES IN BELGIUM.

I.—ECOLES-GARDIENNES COMMUNALES AND ADOPTED.

	Francs.
State - - - - -	748,355
Provinces - - - - -	67,614
Communes - - - - -	2,145,477
Charitable Bureaux - - - - -	48,727
Various Sources - - - - -	34,573
School Contributions - - - - -	30,217
Surplus - - - - -	<u>59,446</u>
Total - - - - -	<u>3,134,409 francs.</u>

II.—ECOLES-GARDIENNES (PRIVATE) WITH GRANT.

	Francs.
State - - - - -	560,716
Provinces - - - - -	11,659
Communes - - - - -	<u>23,653</u>
Total - - - - -	<u>596,028 francs.</u>

Jardin d'enfants No. _____
 (No. _____)
 Écoles primaires { No. _____
 No. _____

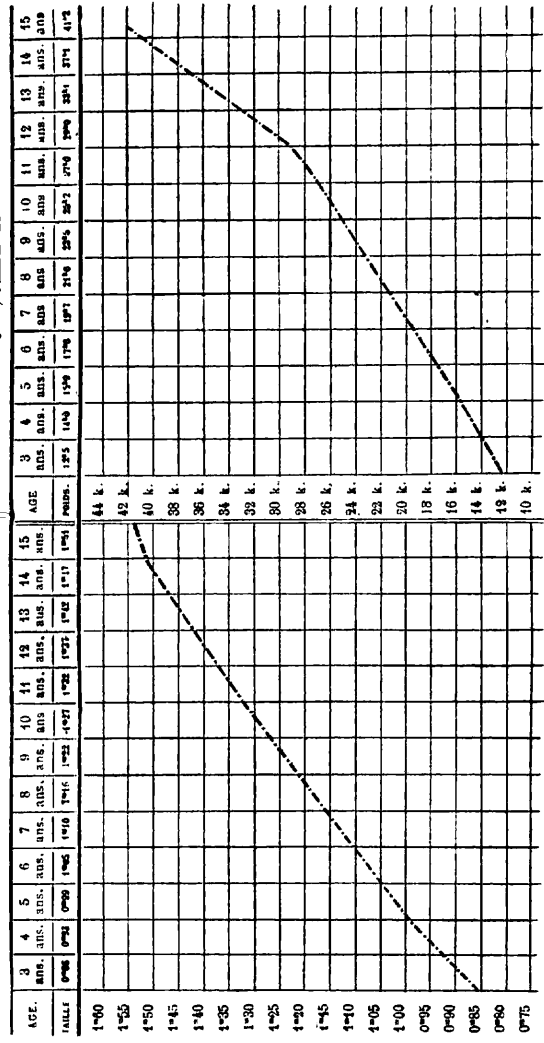
APPENDIX 17.
 (See page 154.)

CARTE SANITAIRE SCOLAIRE.

VILLE DE BRUXELLES.
 ENSEIGNEMENT PRIMAIRE,
 GARÇONS.

Nom et prénoms : _____
 Lieu et date de naissance : _____
 Vacciné le _____ Renvacqué le _____

Domiciles : { A) _____
 B) _____
 C) _____
 D) _____



N.B. — In the original the dotted line is printed in red in order that it may not be confused with the line drawn for each child. (See page 154.)

OBSERVATIONS GÉNÉRALES :

N.B. — Les moyennes adoptées sont celles de Quetelet.

Le Directeur,

APPENDIX 18.

RULES FOR THE EXAMINATION OF TEACHERS IN ECOLES-
GARDIENNES, JUNE 17TH, 1898.*A.—Written Examination.**Part I. Principles of Morality and Right Living :*

Duty towards God.—Importance and necessity of these duties ; their object.

Duty towards Self.—Necessity of self-preservation ; condemnation of suicide ; cleanliness ; hygiene ; gymnastics ; temperance. Love of work ; happiness it produces, order, economy, saving, moral benefits of saving. Duty of self-instruction and improvement. Power of “self-help” ; prudence, respect for truth, reverence for the given word, courage, personal dignity.

Duty towards the Family.—The family the foundation of society ; family happiness. Marriage and its duties ; obligations on those who marry to know the duties to be fulfilled. Rights and duties of parents towards their children ; paternal and maternal love. Duties of children towards their parents, filial love the first duty including all others, respect, obedience, help. Shameful conduct of children who refuse to help their parents. Duties of children towards one another. Mutual interdependence of the family. Duties of teacher and pupils ; need for teacher to possess love of little children ; her mission. Duties of master and servant.

Duty towards Mankind.—Duties of justice. These are included in this fundamental maxim : “Do not unto others what you would not they should do unto you.” Respect for the life of others ; condemnation of murder. Respect for the liberty of others ; personal freedom, slavery, serfdom. Respect for property ; origin of property ; binding character of promises and contracts ; theft, fraud. Duty of restoring things wrongly acquired and of repairing the wrong done to another. Respect for the honour and reputation of others. Calumny, defamation and slander. Respect for beliefs ; liberty of conscience, tolerance.

Duties of Charity.—The duties of charity are summed up in the maxim : “Love thy neighbour as thyself, and do unto others as you would they should do unto you.” The duties of charity are binding on each of us according to the measure of our possessions. Charity should help poor children to develop their physical, intellectual, and moral faculties, and prepare them to earn their own living. Begging. Devotion and sacrifice.

Civic Duties.—Love of country ; respect for the Constitution ; obedience to laws ; respect due to public authorities ; duties of those in authority. Defence of country ; obligation on every citizen to contribute both service and money. Political duties. Courage.

“*Savoir-vivre.*”—Politeness ; rules to be observed in the varying circumstances of life.

Part II. Pedagogy and Method :

Education in general, and in Ecoles-Gardiennes. The object, importance and organisation of education. Special object of infant education. Rôle of the family and of the school in early training. Mission of a teacher in an Ecole Gardienne—qualities necessary for success.

Physical Education.—Its object and importance in Ecoles-Gardiennes. Duties and responsibilities of a teacher in an Ecole-Gardienne in respect of school hygiene, gymnastic exercises and infant games.

Intellectual and Moral Training.—Simple distinction between the three important mental faculties : understanding, feeling and will. Way in

which these act and react on one another ; necessity of cultivating them harmoniously. Danger of overworking or wrongly working young minds. General principles of education which result from these observations.

Understanding.—That which is understood by outward perception ; conscience, reason. How the teacher of the Ecole-Gardienne should work at training the senses. How she should arouse and direct attention, the spirit of observation and reflection. How she should cultivate judgment and reasoning power. Memory and imagination ; means by which the teacher in an Ecole-Gardienne can encourage the regular working of these faculties.

Feeling.—Ways in which the feeling for and love of Truth, Beauty, Right, God, show themselves ; what the teacher should do to brighten, direct and strengthen these feelings.

Inclinations and Tastes.—Ways to encourage those that are good and to fight against those which tend toward evil.

Will.—What is meant by will-power and personality. The meaning of command and obedience. How to inspire the child with the feeling of responsibility. Influence of practice and example in the education of young children.

General Method.—Fundamental principles of the methods of elementary teaching. Explain carefully the following : The teacher of the Ecole-Gardienne endeavours above all to develop the spontaneous and free activity of the child. She makes her teaching thoroughly intuitive ; she brings before the childish intelligence the real object, before giving its name. She passes from that which is near to that which is far, from the simple to the composite, from the concrete to the abstract. She tries to induce associations of ideas and to make the children realise the link which unites work, games, and connected exercises. She often returns to the same idea, but presents it in a different form. She is careful in her use of the Socratic form as well as the dogmatic. She early accustoms the child to express quite simply, but correctly, the result of its observations, as well as its thoughts and feelings.

Special Method.—Exercises and gymnastic games ; their object in the Ecole-Gardienne ; time to be devoted to them ; the nature and order of exercises and games. How to direct them and get them carried out.

Training in Thought and Expression, and Recitation.—Object, nature and choice. How to proceed.

Songs learnt by Ear.—Style of songs to be used. Plan to follow in teaching them. Conditions of good performance.

Manual Occupations based on the Froebel System.—The nature and object of these occupations (folding and cutting of paper ; weaving ; plaiting ; designing ; little sticks, tablets, cubes, rectangles ; gardening). Tools necessary for each of these. Fundamental principles to be observed in directing them. How to proceed.

First Elements of Reading, Writing, and Spelling.—Choice of a method. Simultaneous teaching of reading, writing, and spelling. Articulation. Progressive order of lessons. Methods to be employed in teaching. Essential conditions of reading books. Rules to be observed in reading. What the teacher should do to make the reading and writing lessons a rational preparation for the lessons of the primary school.

Arithmetic.—Advantages of combining mental arithmetic with written work. Selection and employment of intuitive methods. Logical order of exercises. Method.

Part III. Mother Tongue.—Composition (descriptions, narratives, letters, essays on themes drawn from natural objects ; industry and commerce ; on moral duties ; the duties of a teacher and the ordinary relations of life).

Part IV. Elements of Arithmetic and of the legal system of weights and measures. Exercises on the first four fundamental rules applied to whole numbers and to decimals. Solution of problems dealing with

the system of weights and measures in domestic economy. Questions of simple interest, of discount, averages and proportion. Savings banks and investments.

Part V. Geography.—Elementary ideas of the world and its general divisions; Orientation; longitude and latitude; day and night; the seasons; phases of the moon; eclipses; comets. Size and position of the five divisions of the world, and the chief oceans; chief lines of navigation.

Belgium.—Limits, chief natural divisions; productions, industry and commerce; principal railways and navigable channels; short account of each of the nine provinces, tracing outlines and maps from memory.

Europe.—Short account of the coasts, seas, principal gulfs, straits, large islands and peninsulas, chief commercial ports. Chief mountain chains, rivers and streams, chief countries (situation, government, important towns, industrial and commercial relations with Belgium).

Asia, Africa, America, Oceania.—Boundaries, seas, commercial ports principal States and their capitals.

Part VI. History of Belgium.—Short account of the Conquest of Belgium by the Romans, and the state of Belgium under Roman dominion. Occupation of the Franks in Belgium. Social condition of Belgium in the sixth and eighth centuries. Introduction and progress of Christianity in Belgium; monasteries. General idea of wars and institutions of Charlemagne. Feudal rule in Belgium; castles, private wars, etc. Facts connected with the first and fourth crusade. Belgian communes; their progressive development from the 11th to the 14th century; franchises and privileges; trades and corporations; industry and commerce; fairs and markets. Strife between Flemish communes and Kings of France—Breydel and De Coninck; Jacques and Philip Van Artevelde. The House of Burgundy in Belgium, reunion of Belgian provinces under Philip the Good; strife between the chief communes and the Burgundian Princes. Social condition of Belgium in the 15th century. Charles V. Extent of his power; political organisation of Belgium; revolt of the Men of Ghent, commercial wealth of Antwerp. Chief events in the revolution of the 16th century; Spanish soldiers in Belgium; creation of new Bishoprics, excesses of the Iconoclasts, execution of Counts Egmont and Horne. Pacification of Ghent, success of Alexander Farnese; condition of Belgium at the end of the reign of Philip II. Albert and Isabella, remarkable events in the reign of Maria Theresa in Belgium and of Joseph II.; Belgium under French rule. Revolution of 1830. A few ideas on the rights and liberties of the Belgian constitution and on the organisation of the authority of the State. The reigns of Leopold I. and II.

Part VII. General Hygiene.—The body. Necessary care of the skin, of the mouth and teeth, hair and nails. Toilet preparations. Exercise, work and rest. Food. Rules essential to a good dietary, initial value of principal foods and drinks. Use and abuse of foods and drinks. Adulteration. Drinkable, suspicious and contaminated water; filtering and supply. Alcohol, its ravages from a physical, intellectual, and moral point of view. Clothes. Choice of clothes according to the seasons and varieties of temperature. Cleanliness. Headgear and shoes. Danger of tight clothes. Houses. Situation, general arrangements, causes of unhealthiness; ventilation, lighting, warming; furniture and bedding. Disinfectants.

School Hygiene.—Air, pure and bad; cause of bad air in school; ventilation, danger of draught. Precautions. Light. Lighting of school rooms; arrangement of the desks; danger of the reflection from glossy pictures, cards, etc. Some exercises that demand close strain on eyesight; various precautions. Temperature; Rules concerning heat and cold, application of these rules; warming apparatus. Precautions. Furniture: Importance of proper arrangement of desks and other furniture for the use of children. Injurious positions and attitudes; their effects.

Gymnastics and Games.—Their necessity. Their management and supervision. Precautions. Accidents; First aid to give in cases of cuts, burns, sprains, bites, hæmorrhage, indigestion, suffocation, poison, etc.; use of the school medicine chest.

Infectious Complaints.—First symptoms of these maladies. Duty of teacher. Suggestions on the following subjects :—arrangement of time and work ; cleanliness of the building ; warming and airing of classes, arrival and leaving of children, recreations, contagious diseases, corporal punishment, vaccination.

There is a paper, lasting 1 to 1½ hours, on each of these 7 subjects ; 20 marks is given for the 1st, 3rd, and 4th sections, 40 for the 2nd, and 10 each for the last 3 ; 130 marks in all.

B.—Oral Examination.

This is a *Viva Voce Test*, the first part being on the *langue maternelle* ; reading, with expression, an easy piece in prose or verse, the rapid explanation of a piece with regard to manner and matter, a few remarks on spelling, syntax and punctuation.

Geometric Forms—Straight lines and their various positions, different sorts of angles. Essential properties of triangles, squares, rectangles, parallelograms. Regular polygons, short analysis of prisms, right and oblique, and of pyramids, right and oblique. Properties of circle and circumference. Short analysis of cylinder, cone and sphere.

Elementary Ideas on Natural Science.—*Man* : Short account of a skeleton, functions of bones, muscles, nerves ; simple explanation of the organs of sense, healthy care of these organs ; elementary explanation of the digestion, respiration and circulation. *Animals* : Functions and description of the following : the horse, ass, pig, cow, sheep, goat, dog, cat, fox, lion, bear, wolf, bat, frog, toad, lizard, slow-worm, fowl, pigeon, duck, goose, swallow, warbler, nightingale, tomtit, lark, sparrow, snake, snail, mole, bee, cockchafer, wasp. The description of these animals will bear especially on their external form, their habits, the services they render, and their dangers. *Plants* : Short account of plant life (root, stem, flower, fruit). Description of the following plants : Wheat, rye, barley, oats, potato, haricot, peas, linseed, carrots, cabbage, mushrooms. Flowers to grow in pots in school or garden ; poisonous plants of the country which children are inclined to touch. *Minerals* ; Clay, sand, salt, carbon and metals.

Elementary Ideas of Physics.—General properties of bodies ; divisibility, porosity, compressibility, elasticity, gravity, weight, centre of gravity. Lever, ordinary balance. *Ideas on Equilibrium of Liquids* : fountains, communicating vessels, etc. *The Air* : Atmospheric pressure, barometer, suction pump. *Warmth* : Expansion, thermometer, change in condition of bodies. *Water* : Boiling, evaporation, mist, cloud, rain, snow, hail, dew. *Light* : Solar spectre, rainbow, colours. *Sound* : Echo, resounding.

These three oral subjects are taken for 20 minutes each, and 55 marks given for the whole.

C.—Practical Examination.

Drawing.—Freehand design ; tracing and divisions of straight lines ; angles and polygonal figures with applications, tracing and division of circumference ; ornament ; ellipses, ovals, spirals, interlacing and various patterns with curves and lines ; leaves and natural flowers. Useful designs for embroidery. *Song* : Learnt by ear. *Gymnastics* : One exercise illustrated out of a Teacher's Book by Docx.

D.—Examination in Teaching.

Two tests for each candidate, one chosen from manual occupations based on Froebel system, another from the section dealing with thought, language and repetition.

The four subjects in these last two divisions can gain 115 marks ; the last alone can gain 60.

APPENDIX 19.

DISTRIBUTIONS DE VÊTEMENTS DANS LES JARDINS D'ENFANTS PENDANT L'ANNÉE 1906-1907.

Designation de l'école.	Comités de Charité		Œuvres Diverses.		Comités Scolaires.		Comité De la Foire.		Vêtements contectés dans les écoles primaires au moyen de fournitures de travaux manuels.	Jonets.	Dons en Argent.	Nombre d'enfants qui ont bénéficié des dons de vêtements.
	Cos-tumes compl.	Vête-ments divers.	Costumes compl.	Vêtements divers.	Costumes complets.	Vêtements divers.	Cos-tumes compl.	Vête-ments divers.				
1	—	—	13	80	35	237	—	12	—	279	Francs.	234
2	—	—	13	404	6	196	—	6	—	277	"	148
3	—	—	—	190	—	351	—	17	—	190	"	190
4	—	—	11	78	18	865	—	—	—	175	"	140
5	—	—	170	590	—	1,136	—	100	—	600	"	600
6	—	—	15	81	—	175	—	—	—	300	"	120
7	—	—	13	75	—	24	—	—	—	300	"	71
8	—	—	12	98	12	373	—	—	—	386	—	139
9	—	—	12	75	20	764	—	—	—	374	15 70	190
10	—	—	8	58	6	300	—	—	34	100	45 "	94
11	—	—	20	110	—	141	—	—	—	184	—	165
12	24	62	24	207	—	—	—	7	—	190	—	190
13	—	—	35	155	126	884	—	4	—	300	—	262
14	—	—	8	261	—	3	—	—	—	143	50 "	85
Totaux	24	62	354	2,462	223	5,449	—	146	34	3,798	451 70	2,628

RÉCAPITULATION.

		Infé- rieure.	Moyenne.	Supé- rieure.
Corps	1er don. La balle - - - -	2		
	2e „ La boule, le cube et le cylindre - - - -	1		
	3e, 4e, 5e, 6e, don. Jeux de construction	3	4	3
Surfaces	Planchettes - - - -	1	2	2
	Jetons - - - -	1	1	
	Pliage - - - -		2	2
	Cartonnage - - - -			2
	Découpage - - - -			2
	Tissage - - - -	2	2	2
Lignes	Bâtons - - - -	2	3	
	Anneaux avec bâtons - - - -			1
	Tressage, entrelacements - - - -	1	3	2
	Lattes - - - -		1	1
Points	Dessin - - - -	2	2	3
	Anneaux - - - -		1	
	Piquage - - - -		1	1
	Sable, modelage - - - -	2	1	2
	Perles - - - -	2	2	2
	Causeries - - - -	3	3	3
	Occupations - - - -	22	28	28

APPENDIX 21.

COMMUNE DE SCHAERBECK. ECOLE GARDIENNE No. 6.

*Menu for One Week for 50 Children.
Served by Girls of Cours Menagère.*

Monday, October 7th, 1907.

Soup aux pois cassés.
Carbonnades flamandes.
Gâteau de pommes de terre.
Pain. Bière.
(5 frs. 22 c.)

Tuesday, October 8th.

Soup aux épinades.
Rosbif.
Pommes de terre.
Endives.
(6 frs.)

Wednesday, October 9th.

Soup aux tomates.
Pain de viande hachée.
Pommes de terre.
Chou bloix.
(5 frs. 35 c.)

Thursday, October 10th.

Soup aux tomates.
Ragout de mouton.
Pommes de terre.
Haricots.
(4 frs. 10 c.)

Friday, October 11th.

Soup aux poireaux.
Pommes de terre.
Endives.
Des oeufs.
Pommes etuvées
Pain. Bière.
(4 frs. 98 c.)

Saturday, October 12th.

Bouillon.
Boeuf bouilli.
Pommes de terre.
Choux rouges.
(5 frs. 42 c.)

For these dinners (some free, some paying 1d.) the Commune of Schaerbeck gives a grant of 2,000 fr. a year, including the Section Menagère and the wages of the mistress.

APPENDIX 22.

NOTE ON ADENOIDS.

TRANSLATION OF INSTRUCTIONS ISSUED TO THE HEADS OF THE
COMMUNAL SCHOOLS IN BRUSSELS, 1906.

Teachers often find certain children, particularly in winter during damp weather, suffering from extreme absence of mind, absolute want of attention, and a sort of lethargy which is easily mistaken for laziness. Progress is so slow, intelligence so dormant, that these scholars end by being classed as abnormal. In the majority of cases, the children are neither idle nor abnormal; they are simply suffering from the effects of a malady with which they are affected, the growth of adenoids. If they are examined by a doctor specialising in maladies of the throat and nose, he will perform a very simple and perfectly safe operation, and thus restore their intellectual abilities.

The growth of adenoids is usually due to a mass of small lymphatic tumours, which make breathing through the nose difficult and sometimes impossible.

The result of this affection on the general organism is extremely serious, and it is most important to remove it. It retards development of the mind and affects the memory, it hinders the child's growth, and it may lead to deafness, even to meningitis.

The malady is exceedingly common, and will be recognised by teachers as soon as they know the chief symptoms. It is enough to have examined a few cases of adenoids to recognise them at first sight.

The symptoms are of two classes: those noticeable in school; those discoverable only by an examination made at home.

Those noticeable at School: The child's mouth is nearly always open because nasal respiration is blocked by reason of the growth of adenoids. As a result the upper lip is raised, and development ceases.

Adenoids often cause hardness of hearing, which explains the absent or drowsy appearance, characteristic of children suffering from them. They often cause ear troubles and discharge from the ears. The voice has a nasal sound; the child not infrequently stammers; development is slow. The working of the brain is slack, application becomes laborious; the assimilation of new ideas is difficult.

Symptoms noticeable at Home—Snoring is a general rule. A cough at night is usual; often there are two or three fits of coughing, or even more, due to the mucous in the larynx, arising from the adenoid growths.

The incontinence of urine is very common; often sleep is troubled by nightmare; the child cries and jumps up in bed with every sign of intense terror.

It is certain that a close enquiry made in the directions above indicated, at school and at home, will bring to light a large number of cases. It is only necessary to bring this situation of things to the notice of the teachers, and they will at once submit a number of children to medical investigation, with a view of advising parents to get the operation done as soon as possible.

APPENDIX 23.

SHORT INSTRUCTIONS ON THE FIRST SYMPTOMS OF INFECTIOUS DISEASES, DRAWN UP FOR THE USE OF THOSE TEACHING IN THE COMMUNAL SCHOOLS, BY THE "SERVICE D'HYGIÈNE" OF THE CITY OF BRUSSELS.

To the Head and Assistant Teachers of the City of Brussels.

The spread of infectious complaints being common in the schools, and it being impossible for the school doctors always to send home soon enough children whose presence is a source of danger to their schoolfellows, it is advisable to make known the early symptoms of these diseases to the teachers. Consequently the medical staff of the *Service d'Hygiène* of Brussels has presented to *M. l'Echevin de l'Instruction Publique* the following pages, noting in the shortest possible way the first symptoms whereby each of the maladies which are infectious may be recognised.

M. l'Echevin has decided to print and distribute these to all members of the teaching staff.

Of all diseases which may affect the human body, some are only injurious or dangerous to the person affected, others can be caught by contamination or infection. In the first group are all organic diseases; in the second, contagious diseases, such as typhoid fever, scarlatina, &c.

It is therefore necessary, in order to keep the school in a healthy condition, to be able to recognise with certainty the presence of these latter maladies at the very beginning in order to prevent their spreading. The teachers should therefore be in a position to recognise the first unmistakable symptoms.

Unfortunately, it is not possible to realise this ideal state of things, for these illnesses rarely show marked characteristics in their very early stages; indeed, they sometimes elude even the practised and careful eye of a doctor.

Are we then to let the mischief grow and spread without trying to fight it?

Certainly not. For by studying certain general symptoms, one can always recognise the beginnings of serious illness. And if by chance one is mistaken in having attached undue importance to some slight indisposition, no real harm is done and one has the consolation of knowing that no dangerous germs have found a place in the school. Besides this, the child's return home or his isolation cannot but be good for him if he is at all unwell. Any excess of caution could never be blamed in such a case.

We now propose to describe quite briefly and broadly the main features of those complaints which would entitle the teacher to take suitable preventative measures without delay.

To make these symptoms more easily recognised, we will divide infectious complaints into :

- (A) Internal maladies accompanied with fever from the beginning.
- (B) Internal maladies in which the fever is in the early stages only slightly marked.
- (C) Maladies without fever.
- (D) External maladies and skin diseases.

A.—INTERNAL MALADIES BEGINNING WITH FEVER.

This class includes small-pox, scarlet fever, influenza. The first symptoms which attract attention are an intensely feverish condition, violent headache, unnatural heat of the skin, eyes distinctly bloodshot, a full, hard and quick pulse, extreme depression, physical and intellectual prostration or unusual agitation, sometimes nausea and sickness, stiffness and pain in back and limbs, intense thirst, dryness of the mouth, and a foul tongue.

B.—INTERNAL MALADIES WITH SLIGHT FEVER.

Diseases of the second class in which fever does not appear in the earliest stage are : Typhoid fever, measles, croup, diphtheria, and chicken-pox.

In the early stages of these illnesses great depression is the rule ; there is weakness of mind and body, with marked inattention. Besides these symptoms, to which may possibly be added high fever, we must also note : in cases of *typhoid fever*, a sort of stupefied expression, continuous pain in the limbs, drowsiness, heaviness in the head, and bleeding of the nose ; in cases of *measles*, a dry and persistent cough, constant sneezing, running of the eyes and nose, and brilliancy of the eyes ; in cases of *croup and diphtheria*, hoarseness, a peculiar cough with a sound such as might be produced in a metal tube. In addition to this, the bottom of the throat is red and swollen, showing white patches which partly cover the tonsils and uvula. The danger of spreading these last two complaints is extreme. *Chicken-pox* is the slightest of these contagious diseases ; it is often only recognisable by the appearance of red pimples on the body, which soon change to spots with little round heads containing humour.

C.—MALADIES WITHOUT FEVER.

Infectious complaints without fever attending are whooping-cough and acute and granular ophthalmia.

Whooping-cough has at first all the appearance of a cold, only the cough is drier, more persistent, and hacking. The existence of another case in the family simplifies the diagnosis. Later on the complaint can be recognised without any possibility of mistake by certain characteristics.

These are : convulsions caused by fits of continuous coughing, which produce a sort of temporary suffocation, the face becomes purple, the eyes water and the coughing ends in a peculiar sound resembling the crowing of a cock, with vomiting, in which the child brings up a quantity of clear stringy mucous. These attacks cannot be mistaken by anyone who has seen them.

Contagious ophthalmia is recognised by redness of the eyes, swelling of the eyelids and aversion to light, by pain in the eye, and above all by the quantity of suspicious liquid which escapes from the corners and rims of the eyelids.

To the group of non-febrile complaints we must add those diseases of the nervous system the spread of which is not due to any morbid or virulent germ, but which is caused by fear or irritation. These complaints are epilepsy, convulsions, attacks of the nerves, and St. Vitus' Dance or chorea. Children suffering from these spasmodic affections ought at once to be put away from their companions' sight. We think it necessary to enter into this subject at some length, so that the teacher may at once take the necessary steps and describe the symptoms afterwards to the school doctor, when the removal or readmittance of the child can be decided upon.

I. *Epileptic Giddiness*.—The sick child sits down or falls, the face is pale and vacant, the eyes haggard, the upper limbs and features tremble involuntarily ; consciousness returns readily after two or three minutes.

II. *Epilepsy*.—The child turns white, often utters a cry, and falls down unconscious and insensible ; breathing stops, the body stiffens, then is

violently shaken by muscular contortions. The face becomes purple red, the features are distorted and agitated by convulsive movements, the teeth are gnashed, the tongue is often bitten and torn, a frothy, and sometimes bloody, foam forces its way through the lips with a whistling sound; then, after a time, normal breathing returns, the face grows white and the patient sleeps. The child awakes surprised, stupefied and worn out. These attacks vary in number and duration, even with the same child, and at the beginning it may be in perfect health, continuing so in the intervals.

III. *Nervous Attacks.*—This complaint is less serious and only attacks the elder girls in school. Imitation is a powerful factor in its development. The attacks may be brought on by the slightest contradiction. The symptoms are: general agitation, cries, tears, movements more pronounced than in epilepsy, loss of consciousness, slight or incomplete. The patient should be excluded from school until it has been clearly shown that the crisis was accidentally brought on by some mental trouble and is unlikely to reappear.

IV. *Infant Convulsions.*—In infant classes, convulsions may be produced by various causes, such as emotion, fear, indigestion, worms, &c. The child should be isolated and taken home at once.

V. *St. Vitus' Dance (chorea).*—There is great danger of spreading this complaint by imitation. It is chronic, and consists in the production of involuntary, irregular, and twitching movements, which may involve the whole body or may be limited to one limb, to one side of the body, the neck, or the face. Sometimes very slight, it may nevertheless reach such a point as to prevent walking and destroy all possibility of voluntary movement. All children suffering from this complaint should be sent away from school and should not be allowed to return till unmistakably and completely cured.

Nervous twitching of the face is a localised form of St. Vitus' Dance, and likewise demands exclusion from school, only, in certain less marked cases, this measure may seem too harsh and decision must be reserved for the doctor.

D.—EXTERNAL MALADIES.

In the last class of contagious diseases, we place those which are produced by animal or vegetable parasites existing on the surface of the body. Although a clear description makes it possible to recognise these complaints, it is necessary, in order to justify the exclusion of a suspicious case, that the doctor should confirm the teacher's diagnosis. Whilst waiting for this, it is wiser to isolate the child from its class companions.

These complaints are—(1) The itch; (2) Scalp affections, sub-divided into favus, ringworm and alopecia.

They are recognisable by the following characteristics:—

I. *Itch* (animal parasite).—It is the result of the presence under the skin of a particular parasite, the *acarus scabiei*. Symptoms: Little blisters, transparent at the top, due to the existence of the *acarus*. It affects principally the clefts of the fingers, wrists, armpits, arms, stomach, &c. These little blisters produce desperate irritation, especially at night. They are nearly always scratched by the child, which causes a brown crust to form. There is constantly a little white or greyish trail beneath the surface of the skin, ending in a sort of dark-coloured point, where the *acarus* lives. The itch can be cured in a few hours if properly treated.

II.—*Scalp affections.* Characterised by vegetable parasites. (a) *Favus* (veg.: *achorion*). Generally attacks the head. Symptoms: Little yellowish, circular, unequal cup-shaped crusts, like a piece of honeycomb, hair thin and brittle round these scabs, which may spread over the whole scalp. The irritation is very active. The head has an unpleasant smell. This affection leads to falling-off of the hair and baldness.

(b) *Ringworm* (veg. *trichophyton tonsurans*) appears on the scalp. Symptoms : hair thin, brittle and broken, with less colour than the surrounding hair ; from black or brown it becomes reddish or ashen grey ; further, the hairs are unevenly broken near the surface of the scalp. The fall of the hair produces a regular tonsure about the size of a florin or larger. The surface of these patches is uneven and rough, and covered with a powdery scurf of a bluish colour.

(c) *Alopecia* (bald patches) (veg. *microsporom*) on all hairy parts, scalp, eyelids, &c. Symptoms : irritation, fall of the hair, preceded often, but not always, by change of colour. The bare patches of varying sizes unite ; the skin is soft and extraordinarily white. This complaint, which seems quite harmless, is perhaps the most serious of all the parasitic skin complaints. It remains unobserved for a long time, and may finally leave the body completely deprived of hair.

The habit of children putting on each other's hats is the most common cause of contagion ; they should be warned against this reprehensible habit.

(Appendices to French Report.)

APPENDIX 24.

PROPORTION OF CHILD POPULATION UNDER COMPULSORY
SCHOOL AGE (6) PROVIDED FOR IN CRÈCHES AND
ÉCOLES MATERNELLES. (1904.)

PARIS.

Arr.	Crèche (public)	Beds.	Crèche (private)	Beds.	Éc. Mat. (public)	Children.	Éc. Mat. (private)	Children.	Population (1901).
I.	1	40	1	25	2	288	-	-	63,209
II.	2	65	-	-	3	859	-	-	63,485
III.	1	38	-	-	5	1,361	-	-	88,839
IV.	1	20	2	105	9	2,008	-	-	99,182
V.	3	100	-	-	7	1,403	4	656	117,329
VI.	1	30	1	25	4	669	-	-	100,185
VII.	-	-	3	140	5	726	4	339	98,500
VIII.	-	-	2	70	2	104	3	539	102,625
IX.	1	40	1	20	3	654	2	280	120,842
X.	2	60	-	-	8	2,219	1	289	154,693
XI.	2	53	1	25	15	4,142	2	461	233,697
XII.	2	80	1	20	10	3,491	5	584	128,956
XIII.	4	169	2	100	10	4,387	2	220	126,508
XIV.	3	180	1	36	10	2,924	4	416	139,739
XV.	3	110	1	30	12	4,459	6	365	152,099
XVI.	2	55	1	30	5	898	2	169	117,087
XVII.	4	95	3	160	11	2,650	5	730	199,338
XVIII.	3	107	1	50	15	4,865	4	842	247,460
XIX.	4	134	2	75	13	3,986	2	628	143,187
XX.	4	157	-	-	19	5,721	3	556	163,601
	43	1,533	23	911	168	47,814	49	7,074	2,660,559

Summary.

In 1904 there were 43 public + 23 private Crèches accommodating	2,444 Children
In 1904 there were 168 public + 49 private Ecoles Maternelles accommodating	54,888 "
	<u>57,332 "</u>

In 1896 there were 157,205 Children under 6 in Paris.
 In 1896 there were 2,666,873 { Children between 2 and
 6 in France (M. Bédorez).
 In 1896 there were 4,636,381 { Children between 6 and
 13 in France.

PROPORTION OF CHILD POPULATION UNDER COMPULSORY
 SCHOOL AGE PROVIDED FOR IN CRÈCHES AND ECOLES
 MATERNELLES.

FRANCE.

In France (1907) there are 322 Crèches in the Depts., 68 in Paris, 44 Dept. de la Seine	<u>434 Crèches.</u>
In France (1897) there were 2,509 { Ecoles Maternelles } { (public) containing }	454,474 Children
In France (1897) there were 3,350 { Ecoles Maternelles } { (private) containing }	283,095 "
Total - - 5,859	<u>737,569 "</u>

The average per 1,000 children in Ecoles Maternelles between the ages
 of 2 and 6 for the year 1897 is 2.2.*

* Page 23, Statistique de l'Enseignement primaire, 1904.

APPENDIX 25.

RULES OF THE SOCIETY OF CRÈCHES, FOUNDED IN 1846.

I.—OBJECT AND MEMBERSHIP OF THE SOCIETY.

Art. 1.—The object of the Society is : (1) To help to found and to maintain Crèches ; (2) to perfect and extend the institution of the same.

Art. 2.—The Society is composed of Titular, Honorary, and Corresponding Members.

Titular Members are all persons who, admitted by the Administrative Council, pay a yearly subscription of not less than 6 francs.

The title of Honorary Member is given by the Administrative Council for services rendered to the Society or to the Institution of the Crèches.

The title of Corresponding Member is given to persons who, not residing in Paris, maintain a connection with the Society by helping to carry on its work.

II.—ADMINISTRATION OF THE SOCIETY.

Art. 3.—The Society is managed by a Council consisting of fifty titular members appointed for six years. A sixth part of the Council is renewed annually.

Art. 4.—The Council elects for three years a President, two Vice-Presidents, a Censor, an Assistant Censor, a Secretary-Registrar, an Assistant Secretary-Registrar, a Director of Expenditure, an Assistant Director, a Treasurer, and an Assistant Treasurer.

Elections take place by ballot, according to the strict majority of votes.

Art. 5.—The Council is responsible for the moral and material management of the Society.

It meets at least four times a year. The attendance of a minimum of eleven members is necessary to render any resolution valid.

Decisions relative to the acquisition, transfer, or exchange of property, and to the acceptance of donations or legacies, are subject to the previous authorisation of the Government.

Art. 6.—In the intervals of the meetings of the Council, its functions are carried on by an Administrative Committee composed of officers mentioned in Art. 5 and of four other members of the Council nominated by election and also appointed for three years.

Art. 7.—The Administrative Committee meets every month. Five members constitute a quorum. Official reports of its meetings are always communicated to the Council.

Art. 8.—The President represents the Society ; he directs the working of the Council and of the Committee : he has the casting vote, and may convene extraordinary meetings of the Council and of the Committee.

Art. 9.—Members of the Council and of the Administrative Committee may be re-elected.

All the functions of the Society are gratuitous.

III.—REVENUE AND FINANCE.

Art. 10.—The funds of the Society are obtained from :—

1. The income derived from any property in its possession.
2. Annual subscriptions.
3. Donations from Honorary and Corresponding Members—and all other persons.
4. Grants and legacies which the Society is legally authorised to accept.
5. Subsidies granted by the authorities.

6. Money collected upon special occasions, fêtes, concerts, exhibitions, etc.
7. The sale of any books or works offered to the Society with this object, or published by the same.

Art. 11.—The treasurer is responsible for the receipts, expenditure and all that has to do with the accounts. He makes a report of his dealings after each transaction.

Art. 12.—One-twentieth part of the receipts is set aside every year to form a reserve fund which is invested in Government stock or in French railway shares.

IV.—GENERAL MANAGEMENT.

Art. 13.—The Society annually holds a public meeting, of which the programme, determined by the Council, includes a report on the transactions and conditions of the work.

No report or address may be read at the annual meeting, and nothing published, which has not previously been examined and approved by the administrative Committee or the Council of Administration. The report is published and addressed to M. le Ministère de l'Intérieur, to M. le Ministère de l'Instruction Publique, to M. le Prefect de la Seine, and to M. le Prefect de Police.

Art. 14.—Private Rules, drawn up by the Council of Administration, determine in detail the measures necessary for the enforcement of the Statutes.

Art. 15.—No alteration in the statutes can be considered otherwise than at a special meeting, and on the motion of five members of the Council; it can be adopted only at a second special meeting, and after securing two-thirds of the votes.

It is subject to the approval of the Government.

Art. 16.—In the event of the breaking up of the Society, the Council of Administration will determine, subject to the approval of the Government the manner in which the funds will be disposed. This disposal will have to be in conformity with the object of the Society.

APPENDIX 26.

SPECIMEN COPY OF RULES FOR CRÈCHES.

FOR MOTHERS USING THE CRÈCHE.

Open from 7 a.m. to 7 p.m.

I.—AGE.

Children are received at the Crèche from the age of three weeks to three years.

II.—CONDITIONS OF ADMISSION.

1. Birth certificate.
2. Vaccination certificate.
3. Certificate of health from M. ——. Consulting hours 12.30 to 1.30 daily
4. Mother's address.
5. Address of employer. This must be given to the Directrice when the child is brought.

III.—MOTHER'S OBLIGATIONS.

The mother must bring her child regularly in a clean condition. After illness or absence of eight days the child must have a fresh certificate from the crèche doctor before re-entering. If the mother is feeding her child she must attend for this purpose at least twice a day.

IV.—RESTRICTIONS.

A waiting-room is put at the disposal of the mothers. They are advised not (sometimes forbidden) to go into the play-room or bedrooms, but to see their children through a glass door.

V.—GENERAL RULES.

The Directrice has complete authority in the crèche. She is authorised to admit the children every morning—she can refuse those who seem ill. She need not admit those whose mothers do not submit to these rules.

VI.—COMPLAINTS.

All complaints to be addressed to the Lady President—address—————

APPENDIX 27.

DETAILED EXPENSES OF CRÈCHE FOURÇADE (MODEL) FOR
CURRENT YEAR, 1906.

	frs.	cs.
1. Insurance and taxes - - - - -	723	55
Repairs - - - - -	1,562	50
2. Staff—Wages of directrice - - - - -	1,200	50
" <i>berceuses</i> - - - - -	3,895	50
Gratuities - - - - -	170	50
3. Food—Milk - - - - -	1,870	70
Other provisions - - - - -	4,308	50
4. Lighting - - - - -	424	40
5. Warming - - - - -	1,554	60
6. Water - - - - -	325	20
7. Laundry - - - - -	674	80
8. Furniture - - - - -	1,030	15
9. Linen and clothes - - - - -	2,114	40
10. Chemist and disinfectants - - - - -	175	90
11. Sundries - - - - -	549	15
Christmas tree - - - - -	357	10
Administrative expenses - - - - -	80	50
	<u>21,017</u>	<u>95</u>

APPENDIX 28.

DETAILS OF LAUNDRY FOR 25 CHILDREN MAKING 7,722
ATTENDANCES IN A YEAR OF 297 DAYS.

15,741 napkins	(5 per day, 1 month to 7 months ; 3 per day, 7 months to 12 months ; 2 per day, 12 months to 16 months).
13,959 towels	(4 per day, 1 month to 7 months ; 3 per day, 7 months to 12 months ; 2 per day, 12 months to 16 months).
1,904 sheets	(3 per week, 1 month to 7 months ; 2 per week, 7 months to 12 months ; 1 per week, 12 months to 16 months ; 2 per month, 16 months to 3 years).
1,976 pinafores	—2 per week.
1,976 handkerchiefs	—2 per week.
50 mosquito curtains.	
594 housecloths	—2 per day.
624 aprons for <i>berceuses</i>	—4 per week.
624 blouses for <i>berceuses</i>	—4 per week.
156 caps for <i>berceuses</i>	—1 per week.

COST OF MAINTENANCE.

	frs.	cs.
Wages of <i>berceuses</i> , 297 days at 2 frs. 50 c. - - - - -	742	50
Firing - - - - -	96	
Water - - - - -	33	80
Soap, soda, etc. - - - - -	84	
Interest at 4 per cent. on 5,000 frs. spent on building laundry - - - - -	200	
Upkeep - - - - -	100	
	<hr/>	
	1,256	30
	<hr/>	

It is estimated that washing on the premises is an economy, and that washing of crèche sent to public laundries would amount to just double above sum.

APPENDIX 29.

TABLE OF INFANT GROWTH DURING FIRST YEAR.*

Mois.	Poids.	Accroissement en poids		Taille	Accroissement par mois	Quantité de lait Par Jour
		Mois	Jour			
Nai- sance	3k250	"	"	50 c/m	"	"
1	4 "	750 gr.	25 gr.	53	4 c/m(<i>sic</i>)	600 gr.
2	4 750	750	25	56	3	650
3	5 450	700	23	58	2	700
4	6 100	650	22	60	2	750
5	6 700	600	20	62	2	800
6	7 250	550	18	63	1	850
7	7 750	500	17	64	1	900
8	8 200	450	15	65	1	950
9	8 600	400	13	66	1	950
10	8 950	350	12	67	1	1,000
11	9 250	300	10	67 50	0 50	1,000
12	9 500	250	8	68	0 50	1,000

Pendant les douze premiers mois de son existence un enfant, nourri au sein, ou autrement, doit, chaque jour, augmenter de poids suivant le tableau ci-dessous :

Mois	1	2	3	4	5	6	7	8	9	10	11	12
Augmentation en grammes ...	30.6	31	27.4	22.4	18.14	14.8	12.8	11.4	11	8.4	7.4	5.6

* From the *Bulletin* of the *Société des Crèches*.

APPENDIX 30.

SYLLABUS OF LESSONS ON THE CARE OF INFANTS, GIVEN BY
MME. LÉON LÉVY, AT CRÈCHE ST. JACQUES, MONTLUGON.

FIRST LESSON.

In the Linen-Room.

Indispensable articles of a layette.

For infants under 1 year—chemise with sleeves, a bodice, a flannel waist bandage, swaddling clothes and napkins.

For infants over 1 year—a chemise without sleeves, a flannel waist-bandage, a petticoat with bodice, drawers, a dress or pinafore.

Principles.

(a) Always to sacrifice prettiness to comfort.

(b) See above everything that the child is free and unconstrained.

Freedom for the circulation of the blood and liberty of movement. No tight strings, no pins, and above all no needles.

Do not forget its tender skin and soft bones, its brain—the skull does not protect it—the spinal column; why the child is better lying down.

Clothing.

For choice—linen, calico and wool—of good quality, strong and dyed. Cleaning and mending, washing, dry in the open air. Do not iron what touches the body. No lace.

The Use of Clothing.

For warmth, chills, sweats—light head covering, large shoes, the lower extremities to be kept warm.

SECOND LESSON.

In the Kitchen.

Bear in mind :—

(a) A milk diet exclusively, till the child is at least 7 months old, and longer still if teething is backward.

The sterilisation of milk. Bottles, easy to clean; mouth-pieces, easy to clean, to be soaked in clean water. How to choose and keep them clean.

(b) The diet should be almost entirely liquid till teething is over. Add to the milk lightly cooked eggs, milk soups, ground barley, ground rice, vegetable flours, broths, and *panades*.

(c) Regular bottles and meals promote good digestion; a meal every 2 hours till the age of 3 months, then a meal every 3 hours till the age of 3 years.

(d) Ascertain by weighing, and not by guessing, that the weight of the child shows increase by about 1 oz., then by $\frac{2}{3}$ oz., then $\frac{1}{2}$ oz., after the age of one year by at least $\frac{1}{2}$ oz., per day. Weigh the child in a cloth at the baker's every month, and divide the weight gained by 30, to ascertain the average gained each day.

Indigestion.

(a) *Sickness.*—A child may sometimes throw up its milk immediately after a meal without being ill. It means that it has taken too much milk at a time or taken it too quickly. A child that throws up curdled milk sometimes after a meal has not digested it. Mix lime water with its milk or give it a spoonful of Eau de Vichy before each bottle. In this case leave more time rather than less between the bottles.

- (b) *Diarrhœa*.—When a child has no longer the solid and yellow evacuations of a healthy state (too constant and too liquid) dilute the milk with rice water or lime water. On a doctor's advice give a few drops of tincture of paregoric.
- (c) *Constipation*.—A child should have at least one movement every 12 hours. If not, dilute its milk with barley water, give doses of camomile or a spoonful of liquid honey.

THIRD LESSON.

In the Bath-room.

Hygiene of the skin. The skin should act as well as the lungs. Cleansing baths, water with lather of soap; strengthening baths, salt water; quieting baths, lime and starch; invigorating baths, bran. Observe: A bath can be given in a wash-tub every day in water at a temperature of 37° C. (*i.e.*, about 96° Fahr.) warm to the hand without fear of the child catching cold, if it is well dried. Powder it afterwards with flour wherever needed.

Take particular care of its eyes, nose, and ears. Lotions and hot compresses of boracic water and camomile, or plain boiled water.

Keep the hair short, wash and soap the head every day. Rub with a soft brush dipped in spirits of wine and glycerine.

Clean the brushes and combs with ammonia water. Each child should have its own comb and towel. Avoid sponges, use *coton hydrophile*.

The cleaning of w.c.s, disinfection. Cess pools, ventilation.

FOURTH LESSON.

In the Bedrooms and Pouponnat.

Concerning bedding—Its composition and maintenance; fresh air; position of bed. Lay the child on its side. Never in the same bed as a grown-up person, horizontal position the best; cleanliness; avoid rocking.

The Pouponnière.

Choose games without danger. Freedom of movement in a guarded place. Avoid staircases, corners, fire, matches, boiling water.

FIFTH LESSON.

Hygiene and Medicine for Infants.

- (a) *Diarrhœa*.—Regular milk diet. Lime water. Rice water.
- (b) *Ophthalmia*.—Avoid draughts. Bathings and lotions of warm water and water with boracic and camomile. (NOTE.—Explain their contagion.)
- (c) *Small Pox*.—Vaccinate before the age of 3 months. (NOTE.—As early as possible.)
- (d) *Ulcerations*.—Extreme cleanliness—dry well—powder with lycopodium. (NOTE.—Here it would be well to speak of ringworm and its infection and need of prompt care.)

Symptoms by which one recognises:—

- (a) Measles.—Running eyes—cold—cough—rash.
- (b) Whooping cough.—Continuous nervous cough without bronchial sounds.
- (c) Croup.—Cough with loss of voice—grey spots in the throat. The child cannot say "one."
- (d) False croup.—Hoarse cough that yields to fomentations of boiling water on the neck.
- (e) Scarlet fever.—Sore throat—sickness—headache. In all these illnesses isolate the children as soon as possible and send for the doctor.

Remedies for the following Accidents.

- (a) *Blows, Contusions.*—Compress of arnica. (NOTE.—Clear water is preferable to arnica—which sometimes produces eruptions.)
- (b) *Burns.*—Compress of pueric acid, or failing that exclusion of the air by a clean greasy substance or a tight bandage to exclude air.
- (c) *Hemorrhage* (from the nose).—A dose of antipyrine, one grain at most.
- (d) *Dislocated Joints.*—Paregoric. Dose of bismuth (on a doctor's order).
- (e) *Convulsions.*—Mustard plaster to the legs, half a spoonful of syrup ether—or rubbings over the chest with ether—tepid baths of lime—dose of camomile.
- f) *Cuts and Wounds.*—A good washing of very hot water. (Boiling water is antiseptic.) Suck the wound. Join the edges with bands of plaster. (NOTE.—Goldbeater's skin and gummed lustering are better than diachylum.) Cause them to be sewn up if necessary. Bandage carefully. Do not touch any wound except with scrupulously clean hands and nails.
- (g), (h), (i) *Broken Bones, Sprains, Dislocations.*—Bend the arms—extend the legs—cold compress of clean water—absolute immobility for all cases.
- If after a fall a child cannot use an injured member without pain, send for a doctor without trying any remedies.
-

APPENDIX 31.

INSTRUCTIONS ON FEEDING.

The following instructions have recently been addressed to the Directrices of Crèches for distribution from the Académie of Medicine, 1906 :—

1. The mother's milk is the only natural nourishment ; no other can compare with it.

This should be given at least every two hours during the day, but only twice during the night, rest being necessary for both mother and child.

The child should receive nothing in between, even if it cries. The child should be suckled for as long a time as possible. It is specially desirable during the months of June, July, August, and September to have no artificial feeding, except in cases of illness.

Every woman who wishes the best for her child should abstain from alcoholic drink ; she ought to abstain from anything containing alcohol—as wine, beer, cider, etc.

2. Mixed feeding has to be resorted to when the mother's milk is insufficient at the end of or during the time she is feeding the child. She must then supplement the child's nourishment by adding a sufficient quantity of animal milk.

3. Artificial feeding is milk from ass, goat, or cow. It must be ascertained for certain that the milk used is neither skim, nor adulterated, nor contaminated. A doctor should decide whether the milk should be given pure, diluted, or sweetened.

It should always be given luke-warm. The germs which produce disease (gastro-enteritis, tubercular disease, typhoid, etc.) may be destroyed by boiling, by pasteurisation, by warming in a saucepan to 100 degrees, by sterilisation above 100 degrees.

Milk boiled or warmed to 100 degrees in a saucepan should be consumed in the course of twenty-four hours—sterilised milk may be kept longer.

To give the milk to a child use a spoon or glass—these can easily be cleaned. A feeding bottle can be used on condition that it is made without a tube. *All tube bottles are very dangerous and should be forbidden.* The mixing of milk, when necessary, should be done with water recently boiled. Before giving the child any milk, it should be tasted to be sure that there is no bad taste or smell.

4. When weaning the child should have more than milk. Gradual weaning is better than sudden. It is less full of risks than when a child is very young. It should never take place during months of great heat. Solid food given too soon is very dangerous.

These rules are closely followed in the crèche. Great stress is laid on the mothers feeding their own children, all statistics on infant mortality showing increased strength of breast-fed children.

APPENDIX 32.

BAINS-DOUCHES AT THE ÉCOLE MATERNELLE.

BY MME. GIRARD.

(INSPECTRICE DES ÉCOLES MATERNELLES DE LA SEINE.)

In 1905 I wrote at the end of my report after visiting a school in the suburbs of Paris: "Here is a school marvellously arranged with large and airy class rooms. Nevertheless at the end of a few minutes spent here one is nearly suffocated; there is an unendurable smell which is sickening, till one is obliged to throw open the windows in order to breathe without disgust. It amounts to this—the children are hopelessly filthy. They belong to a population of rag pickers, miserable people, and the taste for cleanliness is almost unknown in their midst.

"These children—a generation ago—would have tumbled about in the gutters or on the dusty roads. With splendid energy we have built them a palace, we have called them into it and they have come. We are teaching them by word and example to occupy themselves, to become better and to give sociably together. But is this sufficient? No. This exertion, admirable though it is, is not enough. Now that the children are no longer in the streets, now that we have claimed them, we must elevate them. And the first thing to do is to wash them, every day if possible, at least once a week, all over.

"So much was tentative, but it had results. Progress, though slow, is coming. In our schools, we are learning the necessity of cleanliness as we learn in certain sanatoriums for consumptives to breathe. How can we put into practice the idea of baths for the Écoles Maternelles as they are given at Bordeaux? The idea attracted me and I sought means to realise it. In a good school of the 18th arr. a bathroom existed, but for many reasons it was unused. The medical inspector of the school, to whom the matter was referred, declared that baths in schools were not very safe, as the staff entrusted with this work did not know in what condition of health the children might be at the time, and serious mistakes might be made from an hygienic point of view. The doctor further remarked that any illness or accident whatever that might occur subsequently would be assuredly put down to this act and that the responsibility of the school staff was open to question on the subject. He also added, that the slightest negligence with regard to the temperature of the bath or in the drying of children after the bath might have very serious effects on their health.

"I continued a searching investigation. I interested the Directrice on the subject, and I cannot be too grateful to her for her help. Thanks to the ready co-operation of all, the dream became an accomplished fact. Anxious not to tax the staff already so full of work, and considering the moderate amount of our resources, we organised as follows: every Saturday the necessitous children, furnished with a written authority from either father or mother, could go to the bathroom. The Directrice, who was very keen, helped in the work herself. Two women were specially selected for the work, one undressed the children, the other bathed, dried, and redressed the little ones according to the instructions of a lady doctor who helped to arrange the rules and regulate the hygienic conditions. Thanks to voluntary contributions, the necessary sponges and towels were forthcoming, also a little stock of skirts and chemises. Two india-rubber caps, absolutely hygienic, were bought, and after each child's use they were plunged into warm water, so that no heads were wetted.

"On the first day thirty children were douched and bathed in three hours. The parents were delighted and gladly sent their children again and again.

"This is simple social education, and on this subject it is the example that matters. Once the custom of cleanliness is acquired, the need arises and the rest will follow."

APPENDIX 33.

MODEL TIME TABLE FOR THE SCHOOLS IN THE DEPARTMENT DE LA SEINE.

IV.—Emploi du temps; modèle pour les écoles du département de la Seine.

HEURES.	LUNDI	MARDI	MERCREDI	VENDREDI	SAMEDI
De 9 h. à 9 h. 1/4	Inspection de propreté. — Conduite aux cabinets. — Entrée en classe.				
De 9 h. 1/4 à 10 h. 1/4	Exercices de lecture, d'écriture et de langage.				
De 10 h. 1/4 à 10 h. 3/4	Récitation. --- Jeux scolaires ou gymnastique.				
De 10 h. 3/4 à 11 h. 1/2	Leçons de choses Comme le lundi Comme le lundi Comme le lundi				
De 11 h. 1/2 à 1 h.	Sortie de la classe. — Déjeuner. — Récitation.				
De 1 h. à 1 h. 1/4	Conduite aux cabinets et aux lavabos. — Rentrée en classe.				
De 1 h. 1/4 à 1 h. 3/4	Exercices de lecture et de langage.				
De 1 h. 3/4 à 2 h. 1/2	Calcul	Chant	Calcul	Calcul	Chant
De 2 h. 1/2 à 3 h.	Récitation. — Jeux scolaires ou gymnastique.				
De 3 h. à 3 h. 1/2	Dessin	Morale	Dessin	Dessin	Morale
De 3 h. 1/2 à 4 h.	Travail manuel.				

Le jeudi et les jours assimilés au jeudi par l'article 2 du règlement, pour la répartition du service, la classe du matin commencera à 9 h. 1/2, se terminera à 11 h. 1/2 et sera comptée par une récréation d'une 1/2 h.; la classe du soir commencera à 1 h. 1/2, se terminera à 4 h. et sera comptée par une récréation de 3/4 d'h. Le programme des classes du jeudi comprendra surtout des entretiens, des récits, des exercices de dessin et de travail manuel et des chants. Pour chacune des classes de l'école, l'emploi du temps, établi par la directrice conformément aux indications générales ci-dessus et avec les modifications que nécessitent les jeux scolaires et les exercices de gymnastique, sera approuvé par l'inspecteur primaire et par l'inspectrice des écoles maternelles. Il sera affiché dans les classes.

TABLEAU ANNEXÉ.

1.—*Écoles tenues par une Directrice et une Adjointe.*

SERVICE D'HIVER.

De 8 h. à 8 h. 1/2. Directrice.
 De 8 h. 1/2 à 9 h. . . Adjointe.
 De 11 1/2 à 12 1/4. Directrice.
 De 12 1/4 à 1 h. . . Adjointe.

De l'heure qui suit la sortie générale, le soir, jusqu'à 6 heures, roulement entre la Directrice et l'adjointe.

SERVICE D'ÉTÉ.

De 7 à 8 heures. Directrice.
 De 8 à 9 heures. Adjointe.
 De 11 1/2 à 12 1/4. Directrice.
 De 12 h. 1/4 à 1 h. Adjointe.

De l'heure qui suit la sortie générale, le soir, jusqu'à 7 heures, roulement entre la Directrice et l'Adjointe.

2.—*Écoles tenues par une Directrice et deux Adjointes : A et B.*

SERVICE D'HIVER.

De 8 à 9 heures. . . Directrice.
 De 8 h. 1/2 à 9 h. 1 adjointe. (Roulement entre
 les deux adjointes.)
 De 11 1/2 à 12 1/4. Adjointe A ou B.
 De 12 1/4 à 1 h. . . — B ou A.

Service du soir : Comme ci-dessus.

SERVICE D'ÉTÉ.

De 7 à 8 heures. Directrice.
 De 8 à 9 heures. Adjointe A. } Roulement.
 De 8 h. 1/2 à 9 h. — B. }
 De 8 h. 1/2 à 9 h. Directrice.
 De 11 1/2 à 12 1/4. Adjointe A ou B.
 De 12 h. 1/4 à 1 h. — B ou A.

Service du soir : Comme ci-dessus.

3.—*Écoles tenues par une Directrice et trois Adjointes : A, B, C.*

SERVICE D'HIVER.

De 8 à 9 heures. . . Directrice.
 De 8 h. 1/2 à 9 h. . . Adjointe A. } Roulement
 De 11 1/2 à 12 1/4. 2 adjointes B, C. } entre les adjointes.
 De 12 1/4 à 1 h. . . Adjointe A. } en trois jours

Service du soir : Comme ci-dessus.

SERVICE D'ÉTÉ.

De 7 à 8 heures. Directrice.
 De 8 à 9 heures. Adjointe B, ou C, ou A. } Roulement en 3 jours.
 De 8 1/2 à 9 h. — A, ou B, ou C. }
 De 8 1/2 à 9 h. Directrice.
 De 11 1/2 à 12 1/4 2 adjointes } Roulement en 3 jours.
 De 12 1/4 à 1 h. . Adjointe }
 De 12 1/4 à 1 h. . Adjointe }

Service du soir : Comme ci-dessus.

4.—*Ecoles tenues par une Directrice et quatre Adjointes* : A, B, C, D.

SERVICE D'HIVER.

	1 ^{er} jour	2 ^e jour	3 ^e jour	4 ^e jour
De 8 à 9 heures ...	Directrice	Directrice	Directrice	Directrice
De 8 h. 1/2 à 9 h. ...	A	B	C	D
De 8 h. 1/2 à 9 h. ...	B	C	D	A
De 11 1/2 à 12 1/4 ...	C	D	A	B
De 11 1/2 à 12 1/4 ...	D	A	B	C
De 12 1/4 à 1 h. ...	A	B	C	D
De 12 1/4 à 1 h. ...	B	C	D	A

Service du Soir : Comme ci-dessus.

SERVICE D'ÉTÉ.

	1 ^{er} jour	2 ^e jour	3 ^e jour	4 ^e jour
De 7 à 8 heures ...	Directrice	Directrice	Directrice	Directrice
De 8 à 9 heures ...	A	B	C	D
De 8 h. 1/2 à 9 h. ...	B	C	D	A
De 8 h. 1/2 à 9 h. ...	Directrice	Directrice	Directrice	Directrice
De 11 1/2 à 12 1/4 ...	C	D	A	B
De 11 1/2 à 12 1/4 ...	D	A	B	C
De 12 h. 1/4 à 1 h. ...	A	B	C	D
De 12 h. 1/4 à 1 h. ...	B	C	D	A

Service du Soir : Comme ci-dessus.

5.—*Ecoles tenues par une Directrice et cinq Adjointes* : A, B, C, D, E.

SERVICE D'HIVER.

	1 ^{er} jour	2 ^e jour	3 ^e jour	4 ^e jour	5 ^e jour
De 8 à 9 heures.	Directrice	Directrice	Directrice	Directrice	Directrice
De 8 h. 1/2 à 9 h.	A	B	C	D	E
De 8 h. 1/2 à 9 h.	B	C	D	E	A
De 11 1/2 à 12 1/4	C	D	E	A	B
De 11 1/2 à 12 1/4	D	E	A	B	C
De 12 1/4 à 1 h.	E	A	B	C	D
De 12 1/4 à 1 h.	A	B	C	D	E

Service du soir : Comme ci-dessus.

SERVICE D'ÉTÉ.

	1 ^{er} jour	2 ^e jour	3 ^e jour	4 ^e jour	5 ^e jour
De 7 à 8 heures.	Directrice	Directrice	Directrice	Directrice	Directrice
De 8 à 9 heures.	A	B	C	D	E
De 8 à 9 heures.	B	C	D	E	A
De 8 h. 1/2 à 9 h.	Directrice	Directrice	Directrice	Directrice	Directrice
De 11 1/2 à 12 1/4	C	D	E	A	B
De 11 1/2 à 12 1/4	D	E	A	B	C
De 12 1/4 à 1 h.	E	A	B	C	D
De 12 1/4 à 1 h.	A	B	C	D	E

Service du soir : Comme ci-dessus.

6.—*Ecoles tenues par une Directrice et six, sept ou huit Adjointes* :

Mêmes règles que pour les Ecoles tenues par une Directrice et cinq adjointes, sauf que le roulement se fera en six, sept ou huit jours.

APPENDIX 34.

MENUS IN ECOLES MATERNELLES.

(Self-supporting at 10 centimes per child.)

Monday.—Pot-au-feu and lentils.
Tuesday.—Soupe maigre and ragout of mutton.
Wednesday.—Cabbage soup and sausage.
Thursday.—Pot-au-feu and potatoes.
Friday.—Pot-au-feu and haricots.
Saturday.—Soupe maigre and haricots au lard.

First Day.—Soupe grasse and beef.
Second Day.—Haricots, soup with sorrel and leek.
Third Day.—Ragout of mutton and potatoes.
Fourth Day.—Purée of peas or lentils and sausage.
Fifth Day.—Soup, potato and cabbage with pork.

Monday.—Macaroni cheese.
Tuesday.—Pot-au-feu.
Wednesday.—Lentils au lard.
Thursday.—Pot-au-feu.
Friday.—Potato purée au lait.
Saturday.—Pot-au-feu.

(At 20 centimes a child.)

Monday.—Ragout of mutton and potatoes.
Tuesday.—Pot-au-feu.
Wednesday.—Veal and macaroni.
Thursday.—Pain de pommes and sausages.
Friday.—Mutton and dried haricots.
Saturday.—Roast beef and lentils.

MENU FOR ONE MONTH.

(Adopted by the 19th arr. in Paris for the *Ecoles Maternelles*.
 Approved by Mme. Girard.)

FIRST WEEK.

Monday.—Leek and potato soup. Roast mutton minced. Apples.
Tuesday.—Sorrel and rice soup. Roast mutton minced. Macaroni cheese.
Wednesday.—Haricot beans and onions. Roast veal minced. White beans mashed.
Thursday.—Leek and potato soup. Roast veal minced. Omelet.
Friday.—Vegetable soup. Roast mutton minced. Spinach and gravy.
Saturday.—Sorrel and potato soup. Roast mutton minced. Sweet rice pudding and cakes.

SECOND WEEK.

Monday.—Vegetable Soup. Roast veal minced. Mashed potatoes.
Tuesday.—Onion and potato soup. Roast veal minced. Cheese scallops.
Wednesday.—Leek and potato soup. Roast mutton minced. Cooked salad.

Thursday.—Sorrel and rice or semolina soup. Roast mutton minced. Mashed potato and milk.

Friday.—Onion and haricot water soup. Veal minced. French beans.

Saturday.—Vegetable soup. Veal minced. Rice pudding and eggs. Figs.

THIRD WEEK.

Monday.—Sorrel and haricot bean soup. Minced mutton. White beans mashed.

Tuesday.—Leek and potato soup. Minced mutton. Mashed potato.

Wednesday.—Onion and lentil flour soup. Minced veal. Spinach and gravy.

Thursday.—Vegetable soup. Minced Veal. Cheese vermicelli.

Friday.—Leek and potato soup. Minced roast mutton. Apples.

Saturday.—Sorrel and rice soup. Minced roast mutton. Sweet rice pudding. Fruit.

FOURTH WEEK.

Monday.—Leek and potato soup. Minced roast veal. Mashed potato.

Tuesday.—Sorrel and rice or semolina soup. Minced roast veal. Macaroni cheese.

Wednesday.—Onion and haricot soup. Minced roast mutton. White beans mashed.

Thursday.—Leek and potato soup. Minced roast mutton. Rice pudding and eggs.

Friday.—Vegetable soup. Minced roast veal. Spinach and gravy.

Saturday.—Sorrel and potato soup. Minced roast veal. Potatoes in white sauce. Fruit.

Food flours.—Pea, barley and chestnut flour, &c., to replace fresh vegetables in winter.

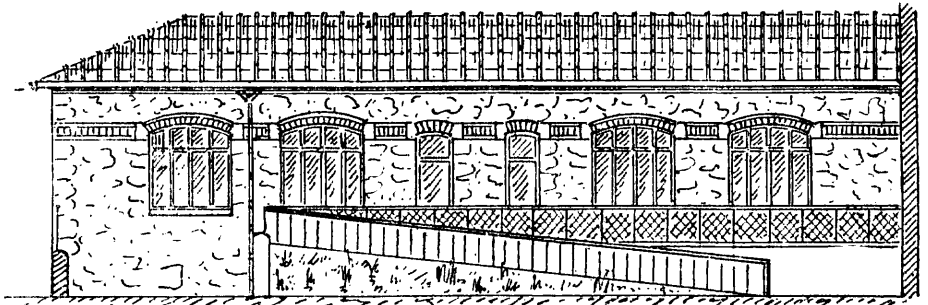
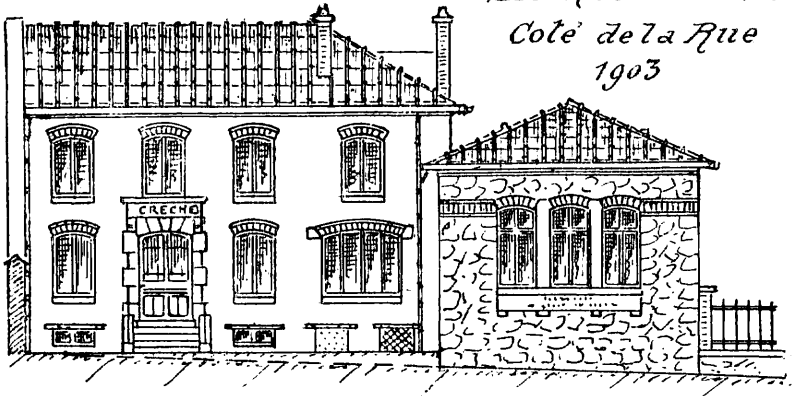
APPENDIX 35.

PLANS AND DETAILED COST OF BUILDING AND EQUIPMENT OF VARIOUS CRÉCHES.

I.

CHARENNE : XX^e

*Côté de la Rue
1903*



Côté de la Cour

Dépense : 85,000 fr. plus 11,000 fr. pour les substructions.

Terrasse - - - - -	2,500	Planchers, ciment armé, canali-	
Maçonnerie, Carrelage - - - -	29,500	sation, dallage - - - -	15,500
Charpente, menuiserie, ser-		Parquets chêne - - - -	3,000
rurerie - - - - -	16,000	Fumisterie, marbrerie - - - -	1,000
Couverture, plomberie, eau et		Peinture, vitrerie, papiers - -	5,500
gaz - - - - -	8,500	Branchement d'eau - - - -	500
Calorifère air chaud - - - - -	2,500	Marbrerie - - - - -	500

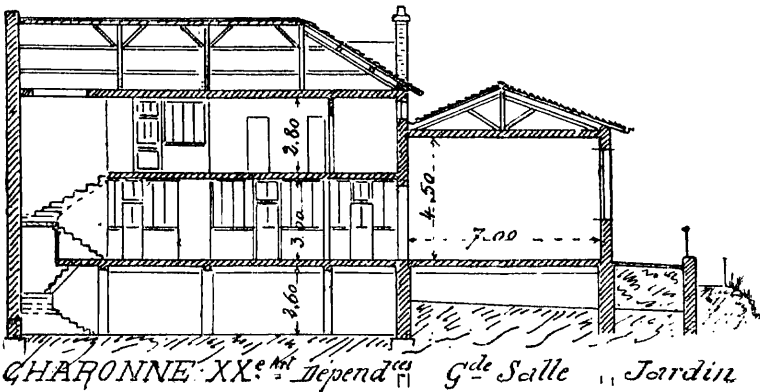
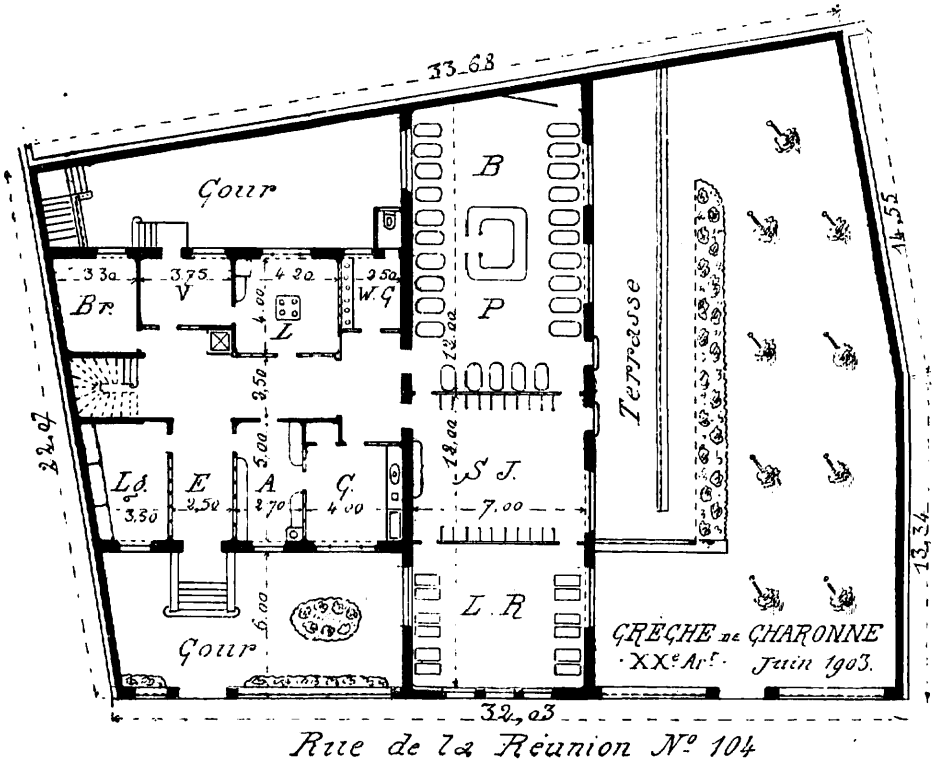
Cost of site not given.

Number of beds, 50.

Silver Medal, Paris Exhibition, 1900.

Architect M. PAUL MARBEAU.

I.—(contd.)



III.

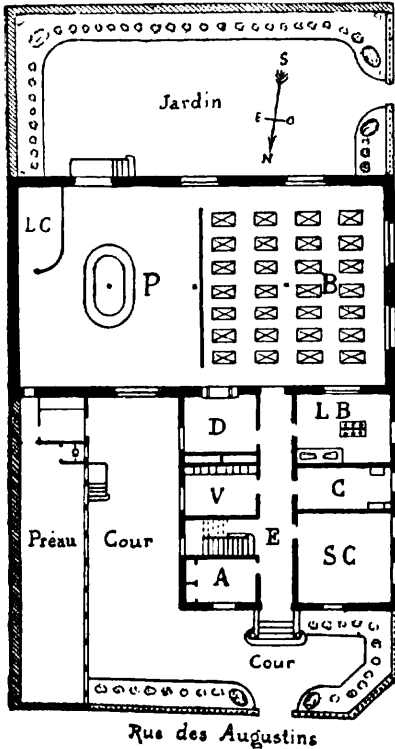
ARGENTEUIL (Seine-et-Oise)

Rue des Augustins.

Crèche construite par M. Girardin, architecte.

Inaugurée le 9 novembre, 1899.

56 places.



Dépense totale
de construction,
53,480 fr.

Et le terrain (603 mètr.),
a coûté en plus,
9,015 fr.

Maçonnerie	-	-	21,450
Carrelage	-	-	720
Bitumage	-	-	960
Charpente	-	-	3,295
Menuiserie	-	-	5,030
Serrurerie	-	-	5,489
Persiennes en fer	-	-	130
Couverture, Plomberie	-	-	4,159
Installation des eaux	-	-	302
Appareil à gaz	-	-	193
Electricité	-	-	408
Fumisterie	-	-	400
Calorifère	-	-	1,850
Peinture	-	-	1,856
Mobilier	-	-	898
Lavabos (syst. Scellier)	-	-	449
Lingerie	-	-	1,215
Literie	-	-	1,290
Linoléum et stores	-	-	976

Le terrain à 33 m 50 sur 18 m.

La salle des berceaux et la pouponnière mesurent ensemble 48 mètres sur 9 mètres 40.

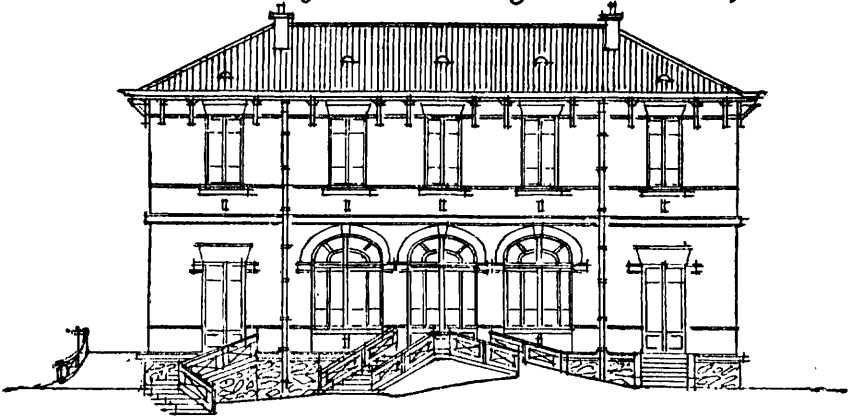
Au sous-sol, la laiterie et la buanderie; au 1^{er} ÉTAGE se trouvent la chambre d'isolement, le logement de la Directrice, etc.

Total, 62 495fr. including site.

Architect, M. GIRARDIN.

IV.

Crèche du Quartier de La Gare (XIII Arr^e),



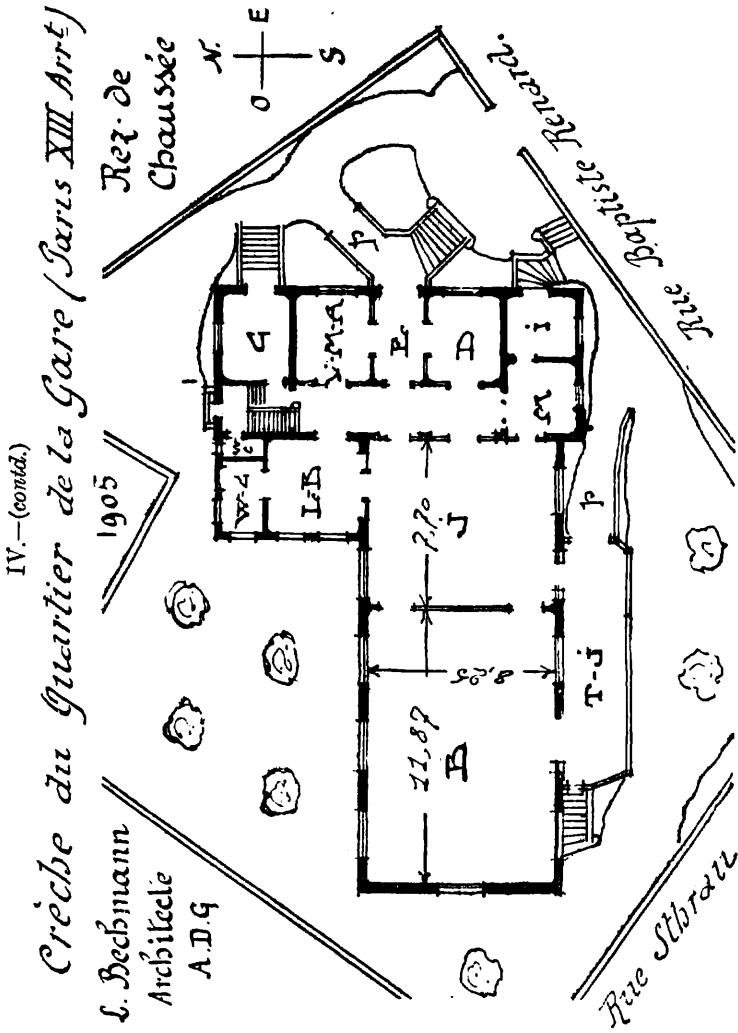
Quartier de La Gare (XIII Arr^e)



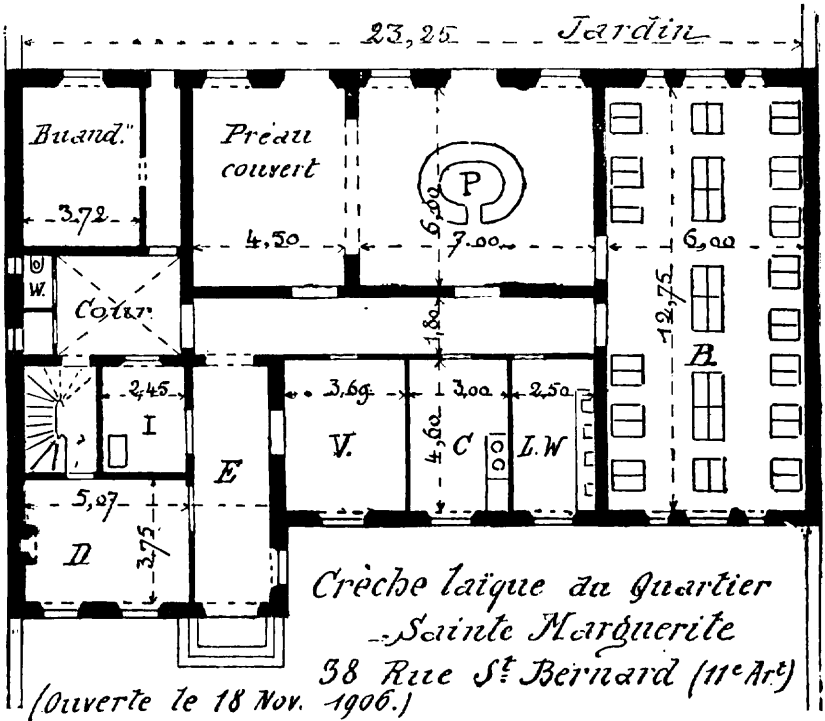
Total, 88,029fr. 60 c., without site.

Architect, M. BECHMANN.

	frs.		frs.
Terrassement - - -	2,000.00	Plomberie, couverture - -	7,760.13
Maçonnerie - - -	29,482.80	Peinture, vitrerie - -	3,199.98
Chiment et Béton - -	9,500.00	Calorifère à vapeur - -	4,100.00
Charpente, serrurerie -	9,659.13	Fumisterie - - -	994.28
Canalisation - - -	2,394.45	Stores, Jardinage, etc. -	1,147.00
Menuiserie et Parquets	7,797.05	Consolidation du Sous-sol	9,994.78
		Number of beds, 60.	



V.



Total, 50,730fr., without site.

Architect, M. ADELGEIST.

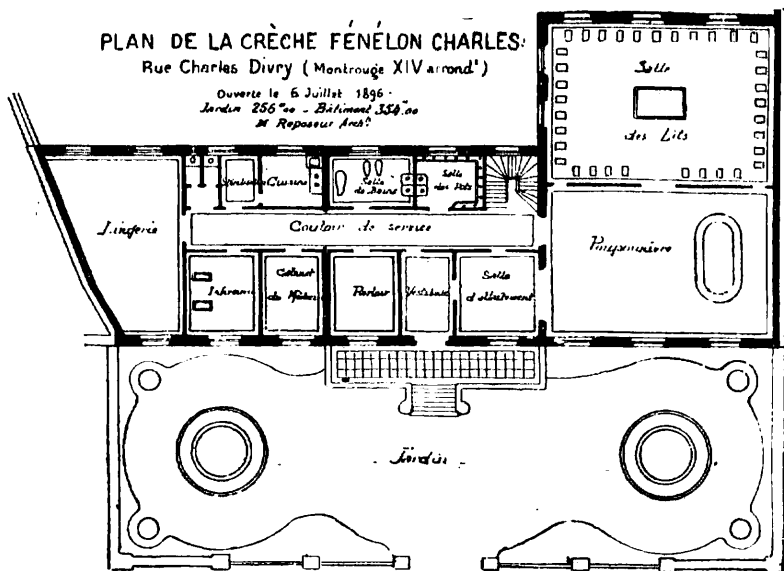
	frs.		frs.
Maçonnerie	- 22,900	Calorifère	- 5,280
Serrurerie	- 4,500	Peinture	- 1,900
Charpente	- 2,800	Canalisation	- 2,200
Menuiserie	- 4,800	Mobilier, etc.	- 1,850
Couverture, plomberie	- 4,500		

Number of beds, 45.

VI.

PLAN DE LA CRÈCHE FÉNELON CHARLES:
Rue Charles Divry (Montrouge XIV^e arrond')

Ouverte le 6 Juillet 1896.
Terrain 256^m - Bâtiment 359^m
M. REPOUSEUR Arch^t



- Plan du Rez de Chaussée -

Surface: 354 mètres.

Sur sous-sol comprenant caves, calorifère, étuve.

Façade principale (côté du perron)	-	30 m.	
Jardin	-	30 m.	sur 10 m.
Salle des lits et Pouponnière, chacune	-	10 m. 60	sur 7 m. 15
Couloir de service	-	17 m.	sur 1 m. 75
Salle d'allaitement	-	3 m. 99	sur 3 m. 85
Parloir	-	3 m. 99	sur 3 m. 29
Cabinet du médecin	-	3 m. 99	sur 2 m. 95
Infirmierie	-	3 m. 99	sur 3 m. 60
Salle des Bains	-	4 m. 10	sur 2 m. 40

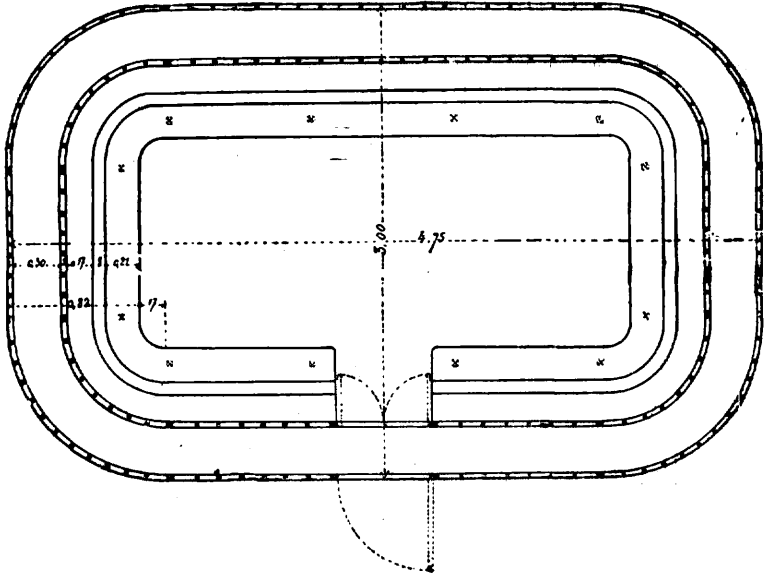
Total, 44.407fr., without site.

Architect, M. REPOUSEUR.

	frs.		frs.
Maçonnerie	- - 16,094	Plomberie	- - 2,600
Charpente	- - 7,747	Serrurerie	- - 3,940
Menuiserie	- - 6,744	Calorifère	- - 1,615
Couverture	- - 2,432	Peinture	- - 3,235

Number of beds, 36.

APPENDIX 36.



*Plan du Meuble (dit Pouponnière) qui a été fait
pour la crèche Wunschendorff à Nancy.*

(Appendices to German and Swiss Report.)

A P P E N D I X 37.

STATISTICS¹ OF "KINDERBEWAHRANSTALTEN," "KLEINKINDERSCHULEN" AND "KINDERGÄRTEN" IN GERMANY IN THE YEARS 1901-2 (IN SOME CASES 1902).

Towns.	Existing Institutions.		No. in attendance at end of 1902 (including free scholars).		No. of Free Scholars.		Persons engaged in direction, charge, or attendance.		Total sum of Municipal Grants in 1901-2 (or 1902) to institutions in Column 3.
	Total No.	Municipal or receiving Municipal Grants.	in all institutions (Column 2).	in Municipal institutions, etc. (Column 3).	in all institutions.	in Municipal institutions, etc. (Column 3).	Total No.	No. of Trained Kindergarten Teachers.	
1	2.	3.	4.	5.	6.	7.	8.	9.	10.
Aachen	8	—	1,253	—	654	—	49	40	M —
Altona	6	3	863	563	177	56	25	24	1,500
Augsburg	10	5	1,034	506	74	52	32	9	7,000
Barmen	28	—	3,279	—	232	—	45	37	—
Berlin ²	62	?	5,061	?	?	?	?	92	?
Bochum	6	5	650	550	80	50	10	6	2,025
Breslau	45	24	3,319	1,776	638	477	88	57	3,760
Cassel	12	5	889	494	23	21	30	13	3,750
Charlottenburg	7	—	184	—	—	—	9	4	—
Chemnitz	12	6	996	721	19	15	31	14	4,000
Cöln ²	35	12	3,754	1,196	277	73	86	49	16,148

¹ "Statistisches Jahrbuch Deutscher Städte, XII. Jahrgang," p. 397. (No distinction is made between the kinds of institutions.)

² Later figures are given in Appendix 38.

APPENDIX 37.—*continued.*

1. Towns.	2. Existing Institutions.		3. No. in attendance at end of 1902 (including free scholars)		4. No. of Free Scholars.		5. Persons engaged in direction, charge, or attendance.		6. Total sum of Municipal Grants in 1901-2 (or 1902) to institutions in Column 3.
	7. Total No.	8. Municipal or receiving Municipal Grants.	9. in all institutions (Column 2).	10. in Municipal institutions, etc. (Column 3).	11. in all institutions.	12. in Municipal institutions, etc. (Column 3).	13. Total No.	14. No. of Trained Kindergarten Teachers.	
Grefeld ²	19	—	1,107	—	119	—	33	20	10.
Danzig	13	1	712	340	655	22	43	18	M.
Dortmund	20	7	2,049	529	280	172	52	38	1,200
Dresden	22	11	3,364	2,621	356	143	66	30	19,007 ³
Dusseldorf ²	25	23	3,298	3,226	—	51	39	—	9,550
Duisburg	8	—	1,199	—	104	—	20	8	12,495
Elberfeld	21	—	1,712	—	100	—	20	22	—
Erfurt	7	3	394	305	89	67	14	7	2,317
Essen	12	—	1,970	—	246	—	35	17	—
Frankfurt a. M. ²	21	11	2,321	1,504	124	22	48	31	7,140
Frankfurt a. O.	7	5	471	400	42	40	7	2	540
Freiburg i. Br.	11	11	1,576	1,576	187	187	39	24	7,050
Görlitz	3	2	87	65	5	2	6	1	710
Halle a. S.	15	6	929	333	50	21	32	19	2,670
Hamburg ¹	36	—	2,699	—	108	—	139	54	—
Hannover	15	2	1,341	244	25	—	45	30	1,150
Karlsruhe	22	—	1,932	—	37	—	42	22	—
Kiel	2	—	152	—	9	—	4	2	—

Leipzig ²	32	28	2,516	2,430	82	72	38	10,325
Liegnitz	6	3	357	160	78	6	6	500
Lübeck ³	7	—	394	—	—	26	10	—
Magdeburg	20	2	1,036	165	91	50	26	1,050
Mainz	2	1	182	80	20	3	3	115
Mannheim	19	5	2,098	660	143	62	28	1,200
Metz	20	11	1,186	882	823	29	21	25,538
Mülhausen i. E.	23	23	3,820	3,820	764	72	23	47,222
München ⁴	50	8	4,623	1,003	431	174	119	10,038
Nürnberg	27	17	2,752	1,913	136	50	36	2,150
Plauen i. V.	4	4	360	360	11	8	8	11,916
Posen	22	2	1,531	157	563	51	38	1,400 ⁵
Spandau	1	1	50	50	5	2	1	—
Strassburg i. E.	27	22	4,464	4,381	4,381	121	58	80,597
Stuttgart	25	17	3,879	3,146	448	90	32	13,500
Wiesbaden	2	2	312	312	17	17	5	8,547
Würzburg	7	5	832	701	42	22	14	3,229
Zwickau	1	1	130	130	14	4	1	800

² Later figures are given in Appendix 38.

³ Including a grant of 12,007 M. to two Municipal "Kinderbewahranstalten" attended also by children of school age.

⁴ Hamburg does not support any institution directly, but the "Armenverwaltung" pays for the care of poor children, and thus indirectly supports most of the institutions.

⁵ Lübeck gives no grant in money, but provides a number of meals.

⁶ Including a grant of 900 M. to an institution, in support of the training of Kindergarten teachers.

APPENDIX 38.

TABLE GIVING THE PERCENTAGE OF CHILDREN UNDER SCHOOL AGE ATTENDING INSTITUTIONS IN THE TOWNS VISITED (EXCLUSIVE OF CRÈCHES).

Towns.	Total Population.	Population under school age.	Number of Institutions.		Approximate number of Children attending Institutions.	Percentage in attendance under school age.
			Municipal.	Private.		
Berlin - - - - -	2,040,148 (1905)	211,948 (1905)	-	63	5,688	2.67
Cologne - - - - -	428,722 (1905)	61,263 (1905)	9	35	No figures	available
Crefeld - - - - -	112,000	15,000	-	15	1,200	8
Düsseldorf - - - - -	253,274 (1905)	32,524 (1905)	8	19	3,752	11.53
Frankfort - - - - -	340,000 (1906)	40,769 (1905)	2	28	3,000	7.35
Leipzig - - - - -	518,682 (1906)	61,139 (1905)	-	32	2,516	4.11
Munich - - - - -	538,983 (1905)	64,157 (1905)	23	30	5,506	8.58
Basel - - - - -	{ 130,000 (1906) 112,227 (1900) }	16,000 (1900)	73	20	4,049	25.30
Zurich - - - - -	169,400	20,002 (1900)	47	19	2,828	14.14

¹ The percentage is in some cases misleading; e.g., in Frankfort, though the percentage is lower than in Düsseldorf, the standard of the institutions is much higher. A high percentage may be due to the fact that very large classes are allowed to each teacher.

(2) Time-table of a Kleinkinderbewahranstalt

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
7.30-9.30		Children	assemble and play together free			
9.30-10	Learning by rote. Singing	Bible History	As Monday	As Tuesday	Questions on Bible History	Storytelling
10-10.45			Lunch and Free Play			
10.45-11.10	Drill	Ring Games	Plaiting or Pricking	Drill	Ring Games	Free
11.10-11.30	Speaking or Object Lesson	Building	Embroidery Cards	Storytelling	Painting or Stick- laying	
11.30-12		If possible some other	Free Play	Free Play		
12-2			Free Play			
2-3	Weaving, unravel- ling or colour lay- ing	Stringing beads	Laying out shells or rings	Arranging colours	Bead stringing or paper-folding	
3-3.30			Free Play or Finger Games			
3.30-4			Coffee and Bread			
4-5 or 6.			• Free Play			

(4) Time-table of an École Infantine.

PLAN DE LEÇONS. (ÉCOLE ENFANTINE DE MALAGNOU.)

Classe d'Enfants de 6 à 7 ans.

Heure.	Lundi.	Mardi.	Mercredi.	Vendredi. ¹	Samedi.
9h. à 9h.45	Causerie morale.	Calcul intuitif (1 à 10).	Poésie et chant.	Causerie (Leçons de choses).	Calcul intuitif (1 à 10).
9h.45 à 10h.15	Jeux gymnastiques (chants marches).	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
10h.15 à 11h.	Lecture, écriture.	Lecture, écriture.	Lecture, écriture.	Lecture, écriture.	Lecture, écriture.
2h. à 2h.45	Tissage.	Piquage.	Broderie (exer. prép. à la course).	Causerie.	Découpage et Collage. ²
2h.45 à 3h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
3h.15 à 4h.	Dessin.	Construction (5 me. don.).	Perles (surfaces ³ ou cercles).	Dessin.	Construction ou bâtonnets.

¹ Thursday is a holiday.

² "Découpage et Collage"—paper-cutting and pasting in a book.

³ "Surfaces"—squares, triangles, and parallelograms in wood.

Classe d'Enfants de 5 à 6 ans.

9h. à 9h.45	Causerie morale.	Calcul intuitif (1 à 6).	Poésie et chant.	Causerie (histoire natur.).	Calcul intuitif (1 à 6).
9h.45 à 10h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
10h.15 à 11h.	Exer. prép. de lecture et écriture.	Exer. prép. de lecture et écriture.	Exer. prép. de lecture et écriture.	Exer. prép. de lecture et écriture.	Exer. prép. de lecture et écriture.

Heure.	Lundi.	Mardi.	Mercredi.	Vendredi.	Samedi.
2h. à 2h.45	Tissage ou lattes. ¹	Piquage ou cercles.	Broderie.	Pliage (éléments de géométrie).	Collage ou Découpage.
2h.45 à 3h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
3h.15 à 4h.	Dessin ou bâtonnets.	Construction (4 me. don.).	Perles ou surfaces.	Dessin.	Jeux de balles (ou surfaces).

Classe d'Enfants de 4 à 5 ans.

9h. à 9h.45	Causerie morale.	Calcul intuitif (1 à 3).	Poésie (exer. de langage).	Causerie (hist. natur.)	Piquage.
9h.45 à 10h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
10h.15 à 11h.	Construction (3 me. don).	Dessin.	Construction (3 me. don).	Bâtonnets (dessin et calcul).	Dessin.
2h. à 2h.45	Tissage ou lattes. ¹	Bâtonnets.	Perles.	Jeux de boules.	Perles ou découpage.
2h.45 à 3h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
3h.15 à 4h.	Boutons et jetons. ²	Jeux de balles ou boules.	Broderie.	Pliage (les éléments de géométrie).	Jeux de balles ou surfaces.

¹ "Tissage" is mat weaving; "lattes" plaiting, preparatory to mat weaving.

² "Boutons" are ordinary porcelain buttons of different colours. "Jetons" are round pieces of cardboard of different colours.

Classe d'Enfants de 3 à 4 ans.

Heure.	Lundi.	Mardi.	Mercredi.	Vendredi.	Samedi.
9h. à 9h.45	Causerie morale.	Bâtonnets (dessin).	Poésie et chant.	Causerie.	Surface.
9h.45 à 10h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
10h.15 à 11h.	Construction.	Pliage.	Boutons et jetons.	Boutons et jetons.	Pliage.
2h. à 2h.45	Perles.	Lattes ou tissage.	Construction.	Perles.	Bâtonnets (dessin).
2h.45 à 3h.15	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.	Jeux gymnastiques.
3h.15 à 4h.	Balles.	Chaîne ou perfilage.	Jeux libres ou jardinets. ¹	Cercles (dessin).	Boutons (jetons) cercles.

¹ "Jardinets" are sand-boxes.

APPENDIX 41.

SPECIMEN REGULATIONS AS TO KINDERGARTEN WORK, &c.

(1) *Directions as to the "Occupations" in the Kindergartens of the City of Zurich (May 2nd, 1907).*

1st Stage—children of from four to five.

1. Building ; (Box with 8 cubes, afterwards with 8 oblongs) after a model and free, with or without supplementary material.
2. Working with sand ; after a model and free, until the children can carry out simple designs by themselves (gardens, &c.).
3. Making paper chains, with 1 and 2 colours.
4. Stringing beads, with 1 and 2 colours.
5. Cutting out simple forms.
6. Plaiting (eventually).
7. Paper sticking ; chains of rings, simple rosettes, &c.
8. Figure laying, with square tablets ; after a model and free.
9. Stick laying (eventually).
10. Making patterns with porcelain buttons, &c., after a model, a drawing and free.

2nd Stage—children of from five to six years.

1. Building with cubes and oblongs (16 pieces), after a model and free, with or without supplementary material.
2. Working with sand, for the most part unaided.
3. Paper chains, with 2 and 3 colours.
4. Bead stringing, single and double chains.
5. Cutting out.
6. Plaiting.
7. Figure laying with squares and triangles ; after a model and free.
8. Figure laying with iron sticks and semi-circles (prototype) after model and free.
9. Figure laying with peas, porcelain buttons, &c., after a model drawing and free.
10. Free drawing with chalk, blacklead or coloured pencil.
11. Clay-modelling (optional).
12. Paper-folding, from squares and rectangles (optional).
13. Paper sticking and cutting out (optional).

III. For both stages.

1. Walks and occupations in the open-air, as often as the weather allows
2. Games ; action games, ball and nine-pin games, imitation games, guessing games.
3. Short songs and verses (Book "Spiel-und Liedersammlung für Kindergärten.")
4. Story telling.

(2) Programme of the Ecoles Infantines in Geneva (from the Bulletin de Semaine)

DIVISION INFÉRIEURE.

Enfants de 3 à 6 ans.

Enseignement intuitif au moyen du matériel Froebel.

Causeries morales.—Simple récits destinés à contribuer au développement moral et éducatif de l'enfant, et à lui donner de bonnes habitudes.

Leçons de choses.—Causeries ayant pour but de faire connaître à l'enfant les choses, plantes ou animaux qui l'entourent. De 3 à 4 ans, la causerie morale et la leçon de choses devront se fondre en un seul récit.

Langue Maternelle.—Exercices de langage qui amèneront l'enfant, soit, à reproduire exactement des mots et des phrases simples, soit à lui faire trouver des mots ou des phrases simples, les exercices seront fait surtout à la suite des causeries et des leçons de choses.

Écriture.—Préparation à l'écriture par le dessin.

Arithmétique.—Préparation au calcul au moyen du matériel Froebel. Calcul jusqu'à 6. Partage de l'entier en moitiés et quarts.

Géométrie.—Notions géométriques élémentaires au moyen du matériel Froebel.

Dessin.—1^{re} année.—Les enfants sont préparés au dessin au moyen du matériel Froebel.

2^{me} année.—Premiers essais de dessin. L'élève forme sur l'ardoise pointée des rangées en disposant les cubes du 2^{me} don, les petites surfaces ou les bâtonnets. Les

DIVISION SUPÉRIEURE.

Enfants de 6 à 7 ans.

Enseignement intuitif au moyen du matériel Froebel.

Causeries morales.—Récits dont le but essentiel est de développer chez l'enfant les sentiments affectifs, la conscience, l'amour du travail et du devoir. Le texte des autres leçons sera tiré de la causerie morale, qui, chaque semaine, donnera ainsi une certaine unité à l'enseignement.

Leçons de choses.—Récits entretiens ou causeries dans lesquelles on donnera à l'enfant, en les mettant à sa portée les notions élémentaires scientifiques sur les choses, plantes ou animaux de son pays.

La leçon de choses aura pour but de développer chez l'enfant l'esprit d'observation, la réflexion et le jugement.

Langue Maternelle.—Préparation à la lecture par des exercices d'analyse et de décomposition au moyen desquels l'enfant apprend à connaître et à chercher les mots, les syllabes et les sons. Étude des consonnes. Lecture spontanée de syllabes simples, mots, locutions et petites phrases faciles. Études des équivalents au point de vue de la lecture et de l'orthographe. Exercices faciles de lecture courante. Reproduction orale et écrite de mots et de phrases faciles. Petits exercices oraux de rédaction.

Écriture.—Exercices élémentaires gradués et rythmés au crayon, de syllabes et mots faciles préparés par la lecture. Exercices préparatoires à l'encre. Moyenne.

Arithmétique.—Calcul intuitif au moyen du matériel Froebel. Les quatre opérations jusqu'à 10. Calcul oral et écrit. Partage de l'entier en moitiés, quarts, huitièmes. Petits problèmes oraux. Numération jusqu'à 20.

Géométrie.—Notions géométriques au moyen du matériel Froebel (point, ligne, surface, solide).

Dessin.—4^{me} année.—Division de la droite en 2, 4, 8, 3, 6. Application à des motifs de décoration. Combinaison de droites et de courbes. Composition. Figures géométriques, triangles, Carrés, Rectangles. Dessin d'objets usuels sans indication du relief. Dessin

DIVISION INFÉRIEURE.

Enfants de 3 à 6 ans.

rangées sont ensuite dessinées sur l'ardoise pointée.

3^{me} année. — Continuation des exercices au moyen des cubes, des carrés et des bâtonnets. Dessin d'après le pliage. Dispositions ornementales obtenues par la combinaison de droites. Préparation au dessin contenant des courbes. Composition. Dessin de mémoire.

Chant. — Mélodies simples et paroles faciles. Enseignement intuitif de la mesure.

Gymnastique. — Mouvements et jeux; marches, rondes et jeux de balles.

DIVISION SUPÉRIEURE.

Enfants de 6 à 7 ans.

des lettres en caractères imprimés. Quelques essais de dessin de feuilles par le décalque des points.

Chant. — Exercices d'intonation. Gammes *d'ut*. Accord parfait. Chants à l'unison et à deux parties. Mélodies et paroles faciles.

Gymnastique. — Mouvements et jeux; marches, rondes et jeux de balles.

Couture. — Exercices préparatoires.

APPENDIX 42.

SPECIMEN COURSES OF TRAINING.

(1) Syllabus of Training Courses in *Pestalozzi-Froebel Haus I.* (*Berliner Verein für Volkserziehung*).

A.—Course of Training for Governesses and Kindergarten Teachers in the principles of Pestalozzi and Froebel.

Subjects of Instruction.—1. The theory of education (*Erziehungslehre*) on the basis of psychology. 2. Introduction to the works of Pestalozzi and Froebel. 3. History of Pedagogy. 4. Kindergarten theory. 5. Children's literature. 6. Health knowledge. 7. Nature Study in relation to education. 8. Theory and Practice of Education (*Unterrichtslehre*). 9. Geometry. 10. German. 11. Froebel's occupations and their carrying out. 12. Drawing. 13. Needlework. 14. Singing. 15. Gymnastics, Ball and Movement Games. 16. Practice in the Kindergarten, the Transition Class (*Vermittlungs Klasse*), the Elementary Class, and the Afternoon Home.¹ 17. Domestic occupations, and garden work. 18. Training in the bodily care of the child, bathing, the cooking of children's food, &c.

The theoretical instruction is for the most part in the hands of those persons who also give the practical training, or are otherwise occupied with the direction of the institution, which secures the close connection of all branches of instruction.

Length of Course.—1–2 years, according to the age and experience of the candidate, and the goal at which she aims. *Conditions of Admission:* The degree of preliminary education required is that of a full course Secondary School for Girls (9–10 classes).

Time of Entry and of leaving after taking the examination: April and October. *Fee for German Students:* 3 M. entry fee, 50 M. quarterly (to be paid in advance). For further training in the Elementary Classes, after taking the examination, the fee is 50 M. a session. A few scholarships are provided to reduce the fees, applications to be made to the Directress.

¹ *Nachmittagsheim* for school children, out of school hours, where instruction is given in hand-work, &c.

For foreigners: 3 M. entrance fee, 77.50 M. quarterly to be paid in advance.

Objects of the Training.—These depend on the age, capabilities, and general education of the students, and on the time spent in the institution; according to these students are trained as Governesses, or Assistants in families and Kindergartens; as Directresses (*Leiterinnen*) of small and large Kindergartens; as teachers in Kindergarten Training Institutions, for which purpose special preparation-courses are provided, if a sufficient number of students come forward possessing the requisite experience and capabilities.

Conditions of Admission: Production of the last school certificate, and of a certificate of health. Written consent of parents or guardians.

Note.—A student can only leave in April or October, after a previous six weeks' notice, otherwise the fees must be paid for the following quarter.

B.—Course of Training for Directresses of "Horte," Children's Homes, and such Institutions.

Subjects of Instructions.—(a) *Theoretical.*—Questions on the theory of education and social pedagogics, Lives and works of the great Educators, Children's Literature, the History of Civilisation, Hygiene in relation to the care of children, Nature Knowledge, Singing and Movement-games, Visits to Charitable and Social Institutions.

(b) *Practical.*—Cooking children's food, simple house-work, needle-work (darning, patching, simple cutting-out, machine sewing), the care of plants, the bodily care of children. Froebel's occupations and the making of toys, instruction in manual work (wood-work, pasteboard-work, book-binding, basket-work, raffia-work, brush-making, drawing), practice in the Afternoon Home for Boys and Girls

Length of Course.—1-1½ years, according to age and experience of candidate.

Conditions of Admission.—The degree of preliminary education required is that of a full course Secondary School for Girls (9—10 classes). Age not under 18, production of a health certificate, and of the last school certificate; in the case of a minor consent of parents and guardians.

Time of Entrance.—October.

Fees, quarterly 50 M. (to be paid in advance), 3 M. entrance fee.

For foreigners.—77.50 M. (to be paid quarterly in advance), 3 M. entrance fee.

Some Scholarships are provided to reduce the fees, applications to be made to the Directress.

C.—Introductory Course in educational and social work for Girls and Women.

In order to give the wives and daughters of the educated classes an opportunity of learning the principles of the educational ideas of Pestalozzi and Froebel, and of preparing themselves for social work, the Pestalozzi-Froebel House I. has for years taken occasional students (*Hospitantinnen*), for whom an individual time-table is arranged from the different courses of instruction, according to their particular wishes and needs.

Applications for less than six months will not be received. Women who are already engaged in professional work, and only desire guidance and further instruction, can, as an exception, enter for three months.

Fee 50 M., without reference to the number of lessons.

Note.—In the winter special courses of lectures are held on Education and Social Science, followed by discussions.

(2) Course of Training for *Kinderpflegefrauen* (*Berliner Fröbel-Verein*).

The course lasts a year. In the first six months the students attend a Kindergarten in the mornings, where they take part in the work, under the

direction of the *Kindergärtnerin*. In the second six months they spend the mornings in families under the charge of experienced housewives (*Schutzdamen*), to have practice in domestic work, and in the care of children; they receive there morning and afternoon meals.

The lessons (16 to 18 hours weekly for each division) are given in the afternoons from three o'clock onwards.

The subjects of instruction are:—

German.—Exercises in spelling, grammar, and style.

Needlework.—Knitting, crochet, darning, patching, marking linen, and machine sewing; practice in the making of blouses, aprons, children's clothes, &c.

Froebel's Occupations.—Drawing, weaving, building, pricking (cards), embroidery-cards, paper-folding, basket-weaving, &c.; story-telling, tales and songs for children, singing and movement-games.

Arithmetic.—Problems occurring in daily life.

Theory of Education, Nature Knowledge, and Hygiene.—Introduction to first aid in case of accidents.

(3) Regulations for the Training of Girls as superior Nursery Maids
(*Verein für Volkskindergärten-Frankfort*).

(i) *Object of the Course.*

To give well recommended girls, who have completed their compulsory school education, the opportunity of making themselves familiar with the management and care of small children, so that they may be able to fulfil the duties of a superior nursery maid in a family, and at the same time receive a practical preparation for life.

(ii) *Method of Training.*

1. Help with the work of the Kindergarten, under the special direction of the head-mistress.

2. Instruction in the following subjects:—

The theory of education.

Froebel's occupations.

Introduction to children's occupations and games.

Needlework.

Household work.

Singing, including finger and action games.

3. Practice in the bathing of children.

Conditions of Admission.

The training is free. The course lasts for a year. Admission can take place at any time, but a pupil can only leave either on April 1st or October 1st.

Candidates must possess the written permission of parents or guardians, a school certificate, and a certificate of health.

Before a pupil is finally admitted, further inquiries as to her suitability will be made.

Rules for the Pupils.

1. The pupil must come punctually to the Kindergarten, at the time shown on the time-table, and must stay there till at least 6 p.m.

2. She must obey the regulations of the head mistress, and fulfil the duties assigned to her conscientiously and diligently.

3. She must bring her lunch (*Frühstück*) and tea with her, and will receive midday dinner.

4. At the end of the course she will receive a certificate as to her work and behaviour.

5. Disobedience and dishonesty will be followed by instant dismissal.

6. After a sufficient period of training, satisfactorily performed, good situations can always be secured.

(4) Training-Course for Kindergarten Teachers (Zurich.)

German.—Five hours (per week). Selected reading material with special regard to the history and development of the Fairy-Tale. Andersen, the Brothers Grimm, the Odyssey. German Saga. Modern Fairy-Tales — “Käthchen v. Heilbronn,” by Kleist. Short original lectures. Story-telling and recitation. Essays and composition exercises.

Education.—Three hours.—The psychology of perception (*Anschauungspsychologie*) and its application to education; detailed and complete treatment of the three chief divisions: recognition, feeling and will. Reading and explanation of short passages from the writings of Comenius, Rousseau, Pestalozzi, Jean Paul. Short readings from the History of Education.

Method.—Two hours.—Theoretical and practical treatment of all the occupations of Froebel, with special attention to those which can be applied in the Kindergarten. Written treatment of themes on this subject. Relation and criticism of tales for children.

Hygiene.—Two hours.—Structure and functions of the organs and apparatus of the human body. Care of the same. External necessities of life: air, water, dwelling, clothing, nourishment. The care of children's health. Home sick-nursing and first-aid, with special attention to the rules for the prevention of infectious illnesses.

Natural History.—Two hours.—Plants and plant life in selected groups; the chief animals; excursions and discussion of the natural phenomena encountered. Great attention is paid to drawing.

Geometry.—One hour.—Elementary geometry with practice in geometrical drawing.

Drawing.—Two hours.—Perspective drawing from objects, and drawing from memory.

Singing.—Two hours.—Scales and practice in tune-singing. Songs for one voice and for two voices. Solo-singing. Special attention to selected children's songs. Elements of the theory of singing. Treatment of singing in the Kindergarten.

Gymnastics.—One hour.—Marching. Free and jumping exercises. Exercises with gymnastic apparatus. Games.

Handwork.—Two hours.—Preparation of collections of the occupations especially suitable for the Kindergarten, as well as of various employments for the family circle.

Practice in the Kindergarten.—Ten hours.—Games and occupations. Specimen lessons with criticism following.

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APPENDIX 43.

FORTNIGHTLY BILL OF FARE FOR THE KINDERBEWAHRANSTALT IN LEIPZIG-EUTRITZSCH.

		FIRST WEEK.		Cost for 100 Children
				Mk. pf.
Monday	Oatmeal Soup	- 12 lbs. ¹ Oatmeal prepared with Suet and Sugar	-	5 40
Tuesday	- Beef with Rice	- 10 lbs. Meat at 70 pf.	12 lbs. Rice at 20 pf. Herbs 25 pf.	9 65
Wednesday	Carrots and Potatoes.	5 lbs. dried Carrots at 65 pf.	$\frac{1}{4}$ 5 tr. ² Potatoes at 2.50 Mk. $1\frac{1}{2}$ lbs. Suet at 60 pf.	4 80
Thursday	- Porridge ³ made with Milk with Sugar and Cinnamon.	12 lbs. Oatmeal at 18 pf.	$2\frac{1}{2}$ lbs. Sugar at 24 pf. 12 litres Milk at 18 pf. Cinnamon at 10 pf.	5 02
Friday	- Macaroni ⁴ and Beef	12 lbs. Macaroni at 37 pf.	10 lbs. Meat at 70 pf. Herbs 25 pf	11 69
Saturday	- Lentils and Sausage	20 lbs. Lentils at 18 pf.	$1\frac{1}{2}$ lb. Suet at 60 pf. 1 lb. Flour at 15 pf. 4 lbs. Sausage at 80 pf.	7 85
				<hr/> 44 41 <hr/>

¹ A German lb. is rather more than an English lb.

² 5tr. = 100 lbs. (German).

³ *Milchgrues*, literally "gruel."

⁴ *Nudeln*

		SECOND WEEK.		Cost for 100 Children
				Mk. pf.
Monday	- Rice with Raisins	- 12 lbs. Rice at 20 pf.	$1\frac{1}{2}$ lbs. Suet at 60 pf. 2 lbs. Raisins at 40 pf.	4 10
Tuesday	- Pearl Barley with Beef.	12 lbs. Pearl Barley at 20 pf.	10 lbs. Meat at 70 pf. Herbs 25 pf.	9 65
Wednesday	Mashed Potatoes with Sausage.	1 5tr. Potatoes at 2.50 Mk.	4 lbs. Sausage at 80 pf. $1\frac{1}{2}$ lbs. Suet at 60 pf. Herbs 25 pf.	6 85
Thursday	- Oatmeal ¹ Pudding with Beef.	12 lbs. Oatmeal at 18 pf.	10 lbs. Meat at 70 pf. Herbs 25 pf.	9 41
Friday	- Millet ² cooked with Milk.	10 lbs. Millet at 15 pf.	12 litres Milk at 18 pf. $2\frac{1}{2}$ lbs. Sugar at 24 pf. Cinnamon 10 pf.	4 36
Saturday	- Pea Soup with Sausage.	20 lbs. Peas at 14 pf.	4 lbs. Sausage at 80 pf. $1\frac{1}{2}$ lbs. Suet at 60 pf.	6 90
				<hr/> 41 27 <hr/>

¹ *Gries*. *Milchhirse*.

APPENDIX 44.

SPECIMEN REGULATIONS FOR Krippen.

(1) Regulations for the Krippen in Zurich, 1903.

(Schweiz. gemeinnütziger Frauenverein).

1. The *Krippen* are open in Summer from 6 a.m. to 8 p.m., and in Winter from 6.30 a.m. to 8 p.m. They are closed on Sundays and holidays.

2. Healthy children are received as a rule in the *Krippen* from the age of three weeks between May and October, and from the age of six weeks between November and April, till the fourth—in exceptional cases till the sixth year. They must belong to needy, but honest and industrious families, who have been settled in Zurich at least three months, and will only be admitted in cases where the Mother, owing to the small wage earned by her husband, is obliged to work out of the house. Children can also be received for a shorter or longer time in cases of illness or death.

3. The parents, foster-parents and guardians of the child to be admitted must apply at one of the *Krippen*, where they must fill up the form for admission. This form must be signed by the Member of Committee who is Superintendent for the week, and by the doctor attending the *Krippe*.

4. The birth certificate of the child must be brought at its entry into the *Krippe*; and this remains in the *Krippe* in question as long as the child is attending it. Parents must produce their written consent.

5. Every child received in the *Krippe* must be brought to the institution in a clean condition, by the Mother, or by some person to whom she has entrusted it, between 6 and 8 a.m., and fetched every evening not later than 8 p.m.

No child can remain in the *Krippe* overnight. As long as a Mother is nursing her child she should visit the *Krippe* twice daily for that purpose.

If the Mother, for any particular reason, does not intend to bring the child to the *Krippe* on a certain day, this intention should be announced if possible on the day before; in the same way information should be given if a child falls ill. If a child is not brought to the *Krippe* for eight consecutive days, a new application must be made. If a child falls ill in the *Krippe* it must be sent home at once. Every Mother is therefore obliged to give the address of the place where she works, so that she can be fetched if necessary.

The state of health of the child must be certified by the doctor of the *Krippe* when it enters and when it leaves an institution.

If a member of a family of a child attending the institution is suffering from an infectious illness, such as scarlet fever, diphtheria, measles, small-pox, whooping-cough, &c., the child must remain away until the doctor allows it to be re-admitted.

6. The fee charged is 30 cts. for one child, 50 cts. for two children. The money must be given every morning, when the child is brought, to the person in charge of the institution.

7. The *Krippen* provide all necessary food and care, as well as linen and clothing for the small children during the day, in the evening the children are dressed again in the clothes in which they are brought in the morning.

8. The Mothers or relations of the children should not remain longer than necessary in the *Krippe* for the sake of order. No presents may be given to the Head Sister, or to any of the staff. All gifts belong to the *Krippe*.

9. The relations of the children must follow the regulations of the Head Sister absolutely; complaints should be made to the President or a Member of the Committee.

10. Each *Krippe* is visited daily by the doctor connected with it.

(2) Sanitary Regulations for the Krippen (Zurich).

Airing of Rooms.—Rooms must be well aired in the morning. Care must be taken in doing so that a window is half open in the rooms. When the outer temperature is good, and the ground dry, the children are to be allowed to be out of doors. In the evening, when the children have left, windows and doors are to be opened, and bedding put to air.

Temperature.—14–15° R. [rather over 60° Fahrenheit]. In the evening before the children are fetched the temperature should be rather lower. In autumn, winter and spring the home clothes should be brought into the warm rooms an hour beforehand, so that the children may not catch cold through cold clothes.

Nourishment.—Healthy regular nourishment corresponding to the age of the child; unadulterated milk, neither sweetmeats nor cakes. An infant's head should be raised while drinking, and the child should not be incited to laugh or cry.

Bottles and mouthpieces must be cleaned according to the Sister's orders. Milk should be given to the children neither too warm nor too cold, and at regular intervals of from 2 to 3 hours.

Cleanliness.—The greatest cleanliness should be preserved in the *Krippe* among both children and staff. Floors must be wiped daily, and thoroughly washed once a week; this must take place in the absence of the children.

Further, no dirty linen is to be left about, or anything to cause a bad smell. Soiled bed clothes must be removed at once. Nothing wet must be left on or under the child.

Wet and soiled napkins should be placed in a copper with a lid, and no outlet.

Every time a child leaves its bed covering and counterpane must be turned down over the lower end of the bed. Bed clothes must never lie about in confusion.

Every child should have face and hands washed twice daily, and its hair twice combed.

While the children are being bathed or washed, windows and ventilators in the room in question should be shut.

Each child has its sleeping place (cot, perambulator), its spoon, pocket handkerchief and washing-cloth, and each baby its glass with mouthpiece and *zapfi*.

Further Precautions.—The curtains of the cots should never be quite drawn. Children should be protected from draughts, and care should be taken that the sun does not shine on their heads.

Breathing must not be hindered by the clothes, and movement as little as possible by swathing-bands.

Children should be rocked as little as possible.

Children should be as early as possible trained in habits of cleanliness, but not allowed in this connection to sit or lie too long in one position. Infants should be laid on the right and the left side in turn, with the head somewhat raised. Care should be taken that the child's arms are as far as possible outside the bed-clothes.

Children should be taken into the fresh air as much as possible.

Children should be lifted by *both arms*.

Nothing should be left in the neighbourhood of the children which might hurt them, or which they could put altogether into the mouth.

Nothing painted should be given to the children, nor anything with which they could hurt their small neighbours.

The children should be treated as kindly as possible. Care should be taken that children who like each other should sit or lie together.

The children should be allowed to sleep as long as they please.

Whenever it is observed that a child is unwell, it should be brought to the person in charge, who should inform the doctor as soon as possible, and in the meantime keep the child in her private room, apart from the other children.

(3) Specimen Accounts of a Crèche.

(a) Average Monthly Housekeeping Expenses of a Crèche in Frankfort :—

(24 Children in average daily attendance.)

	Mks.	pf.
Bread - - - - -	31	37
Milk - - - - -	66	26
Meat and Fish - - - - -	66	99
Eggs and butter - - - - -	16	59
Fruit, Vegetables - - - - -	13	19
Flour, sugar, groceries - - - - -	21	41
Drinks (<i>Getränke</i>) - - - - -	24	39
Heating and Lighting - - - - -	48	39
Washing and Water-Tax - - - - -	26	81
Small Expenses - - - - -	14	26
Total - - - - -	329	66

(b) Yearly Expenses of a Crèche in Geneva :—

(Visited altogether by 93 Children.)

	Fr.	c.
Rent - - - - -	1,100	00
Salaries - - - - -	1,725	35
Furniture and upkeep - - - - -	164	40
Fuel - - - - -	423	70
Milk - - - - -	827	00
Bread - - - - -	260	10
Groceries - - - - -	797	40
Meat - - - - -	487	65
Vegetables, butter and eggs - - - - -	965	35
Gas - - - - -	80	70
Tips and presents - - - - -	127	00
Chemist - - - - -	5	40
Total - - - - -	6,964	05

APPENDIX 45.

KINDERHORTE.

Kinderhorte, as a rule are institutions for children of school age only, and so do not come strictly within the scope of this report. Some account of them may be given here, however, partly because there is a tendency in some places (e.g. Berlin) to receive quite young children in the *Kinderhorte*, partly because in other places (e.g. Switzerland), *Kinderhorte* are being started expressly for children under school age.

The object of the *Kinderhort* is to take care of children out of school hours, by providing a refuge from the street. It is open from the close of the school day till six or seven in the evening. The institution is of comparatively modern origin, the first *Hort* having been started in 1871 in Erlangen, but it is now very widely spread in Germany. An inquiry* made by the *Berliner Mädchen-Verein* in 1904, received returns from 91 of the larger German towns giving particulars of *Horte*, from which it appeared that there were altogether in these towns 438 *Horte* visited by some 26,000 children. *Kinderhorte* are maintained by private societies established for the purpose, separate *Horte* being provided for boys and girls. They are generally unsectarian, though charitable and religious societies sometimes provide *Horte*, often in connection with other institutions, such as *Kinderbewahranstalten*. In most towns they are held in the school buildings, where rooms, free of charge, are placed at the disposal of the *Hort* Committees, by the Municipality, which in many cases further supports the *Horte* by grants of money. The *Hort* is generally under the charge of a paid *Leiter* or *Leiterin*, often a teacher, who is sometimes assisted by voluntary helpers. About 40 children are allowed to one person. In Berlin the salary of a male *Hort* teacher ranges from £26 to £50 yearly (525 - 1,000 M.) and of a female from £31 to £48, (630 - 960 M.). The children are charged in most cases a small fee (10 - 20 pf. weekly), as part payment for the food given.

In most *Horte* proceedings begin with an afternoon meal of bread and coffee, or milk; the children then prepare their lessons for the next day, and after that the rest of the time is devoted to handwork in the case of boys (woodcarving, &c.), and to needlework, sometimes cookery in the case of girls; in both cases, however, occupations are varied by games, and walks in fine weather. On half-holidays the *Horte* are open for a longer time, and in summer in many towns they form a kind of "Vacation School," being then open all day. (In Munich the Municipal Authorities take entire charge of the *Horte* during the summer holidays.)

The activities of the *Horte* on the social side are many and various. Christmas festivities, and excursions in summer, visits to school baths and to swimming baths, the visiting of parents by members of the *Hort* Committees Savings Banks, the placing of children in trades and occupations as they leave school, all come within the scope of the *Hort* societies. Some *Horte* provide lending libraries for the children; others arrange for a mid-day dinner for necessitous children, and for visits to Holiday Colonies in the summer. In many cases small plots of ground are provided for gardens for the *Horte* children.

The average cost per child per year in the *Horte* supported by the *Hauptverein Kinderhorte*, Berlin, was 27 M. 36 pf.

* *Tabellarische Uebersicht über die deutschen Kinderhorte, zusammengestellt von Schulrat. Dr. L. H. Fisher (Anlage zum Jahresbericht des Vereins Mädchenhort in Berlin für das Jahr 1904) Berlin, Rudolf Mosse, 1904.*