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EDUCATION BY LIFE

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LIFE

A Discussion of the Problem of the School
Education of Younger Children

²⁷⁶⁷⁸
BY VARIOUS WRITERS

Edited by
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"It is life that educates."—*Pestalozzi.*

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PREFACE

THE idea of this book was conceived and the original plan was drawn up by Miss M. M. Penstone, in the summer of 1910; and only her death in December of that year prevented her carrying it out; but it was her strong wish that it should be finished, and she asked the present Editor to undertake the task. Her plan has been adhered to, as far as circumstances have permitted, and the Editor's belief is that the general spirit of the book is what Miss Penstone would have desired it to be.

The various contributing writers have all been selected on the basis of wide practical experience, as well as for more individual reasons; and the Editor has left them free to express their own views on the applications of their work.

There are two points which may strike readers of the book as requiring some explanation.

(1) As the book is the combined product of a number of minds, the views put forward may not always exactly coincide, in the application of a principle, or in its adjustment to difficult conditions.

(2) As education by life must be a complete thing, rather than a collection of subjects, overlapping must be expected in connection with the different aspects treated.

Both these things are inevitable and even desirable.

The intention of the book is to gather together some of

the most important principles concerning early education, that have stood the test of time and experience, and to apply them to modern conditions and in the light of modern knowledge, but with the intention of giving a point of view, rather than of formulating definite method.

The bibliography attached to most of the chapters should form a background and amplify what is said in the book. It is presumed that readers are acquainted with Froebel's *Education of Man*.

The Editor is very grateful for the help given to her by Miss N. Catty, M.A., and Mr. F. Storr.

HENRIETTA BROWN SMITH.

January, 1912.

CONTENTS

	PAGE
WHERE WE ARE <i>The General Editor</i>	1
THE PERSONALITY OF THE TEACHER <i>Miss E. M. Minhinnick, The Pestalozzian School, Plymouth</i>	13
RELIGIOUS TEACHING AND RELIGIOUS DEVELOPMENT <i>Miss E. R. Murray, Maria Grey Training College, Brondesbury</i>	21
THE HEALTH OF CHILDREN <i>Miss A. Home, Lecturer in Hygiene, Home and Colonial College, Wood Green</i>	44
THE BABY-ROOM <i>Miss E. B. Cole, Lecturer in Education</i>	60
LITERATURE (a) STORIES AND STORY MATERIAL	75
(b) POETRY	88
<i>Miss E. M. Minhinnick, The Pestalozzian School, Plymouth</i>	
HANDWORK. (a) THE CULTIVATION OF ARTISTIC TENDENCIES IN YOUNG CHILDREN	96
<i>Miss C. von Wyss, Lecturer on Nature Study and Art</i>	
(b) INDUSTRIAL HANDWORK	104
<i>The General Editor</i>	

MUSIC	120
<i>R. T. White, Mus. Doc., Goldsmith's College, University of London</i>	
GAMES	138
<i>The General Editor</i>	
METHOD OF APPROACH IN NATURE STUDY	150
<i>Miss C. von Wyss, Lecturer on Nature Study and Art</i>	
EARLY WORK IN NUMBER	158
<i>Miss A. L. Wark, B.A., Lecturer in Education</i>	
READING AND WRITING	174
<i>Miss E. R. Murray, Maria Grey Training College, Brondesbury</i>	
SUGGESTIONS AS TO THE BASIS OF HISTORY TEACHING	195
<i>Miss C. Legg, B.A., Byron House School, Highgate</i>	
SUGGESTIONS AS TO THE BASIS OF GEOGRAPHY TEACHING	203
<i>J. F. Unstead, M.A., Lecturer in Geography, Goldsmiths' College, University of London</i>	

WHERE WE ARE

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THIS is the eighth year of the performance of *Peter Pan*. Fifty years ago that play could not have been written, for children had not then revealed themselves to the extent to which under present conditions we see them revealed. Nor would its very wide appeal have been possible at that time, for children were suffered rather than understood or enjoyed.

The newspapers of January 1912 described a Christmas present given by an American millionaire to his little son: it is a play house which has cost £6,000, and is said to be complete in all its arrangements. This also would have been impossible fifty years ago, even if millionaires had been as common as they are now; for if people lacked sympathetic imagination with regard to children, they had, at least, a strong sense of moral responsibility.

These extremes help to demonstrate our present position. We know now the importance of early years, and the children's need for liberty and right surroundings in order to grow; but we shut our eyes to the harm that is being done by those parents who gratify themselves in their children's pleasures, and by those teachers who glorify themselves in making children fit a theory. This does not, of course, apply to all parents and teachers, but to the extreme cases. And it is from extremes that we learn the tendencies of our time.

In this book we are concerned with the more limited sphere of the teacher's work, and the teacher of young children is one of the most zealous persons alive; but she is the victim of an overwhelming number of new theories concerning the nature of children, and without the test of time and experience it is very difficult to sort out the true from the false. And the zeal of the teacher is not always her best guide in this difficult task.

The past has given us a great legacy of ideas, and a smaller

one of practice, and it would be useful to set out quite definitely what help it has given us, and how we have used it.

It may be fairly assumed, even by those who are not altogether in agreement with them, that the principles of Froebel have had the most lasting influence, whether for good or evil, on the education of young children. In the first place his theory and practice went hand in hand; in the second place he was more deeply impressed than any previous educator had been, with the importance of a child's early years, and in the third place he had a deep and real knowledge of young children, derived partly from a long study of their natures, and even more from a kind of maternal instinct with which he seems to have been endowed.

Froebel was a borrower and an originator—in both capacities he showed his genius. In borrowing he transformed and illuminated what he had borrowed, as, for example, in the case of handwork. With Pestalozzi handwork was little more than a useful subject which helped to make children better fitted for their life after school, and formed a means towards a livelihood. With Froebel it was a means of development towards one of the highest phases possible to man—that of creativeness.

There is little doubt that Froebel was greatly influenced by both Rousseau and Pestalozzi, and took freely of their experiences; at the same time there is no crude literalism in his borrowing, but rather an originality as great as in his individual work.

As an originator we owe more to Froebel in theory and in practice than to any other educationalist of the past, in relation to the education of young children; and though much of his work is spoiled by confusion of style, and excessive symbolism, and many of his applications are strained and unpsychological, yet we inherit from him certain great and outstanding principles that have stood the test of time and experience, and a spirit that still inspires his followers.

It is difficult to estimate the value to us of his practice or application of principle. On the one hand it is strained and often very far from reaching the children for whom it was intended—as, for example, the scheme of Gifts and Occupations with all their bye-laws: and on the other hand without this application we should not have had the strong confidence in his work, nor should we have been so conscious of the spirit in which his work was done. By means of a material medium

he has been able to inspire his followers much more effectively than if he had simply written the *Education of Man*—and yet between the education of man and the Kindergarten system there is a great gulf.

Professor Dewey, one of Froebel's most enlightened followers, has given a very probable explanation of the circumstances that drove Froebel to the rather narrow and symbolic application of his work, and of the logical rather than psychological treatment of much of the material of the gifts and occupations.

"It must be remembered that much of Froebel's symbolism is the product of two peculiar conditions of his own life and work. In the first place, on account of inadequate knowledge at that time of physiological and psychological facts and principles of child growth, he was often forced to resort to strained and artificial explanations of the value attaching to plays, etc. To the impartial observer it is obvious that many of his statements are cumbrous and far-fetched, giving abstract philosophical reasons for matters that may now receive a simple every-day formulation. In the second place the political and social conditions of Germany were such that it was impossible to conceive continuity between the free co-operative social life of the Kindergarten and that of the world outside. Accordingly he could not regard the "occupations" of the schoolroom as literal reproductions of the ethical principles involved in community life—the latter were often too restricted and authoritative to serve as worthy models."

The following is an attempt to set out, in summary, the most universally accepted of Froebel's principles, and to examine the nature of our acceptance of them, in the practice of to-day. It does not pretend to be any consecutive account of his psychology or philosophy.

"Education consists in leading man, as a thinking intelligent being, growing into self-consciousness, to a pure and unsullied, conscious and free representation of the inner law of Divine Unity, and in teaching him the ways and means thereto."

This definition of education gives the keynote to Froebel's work, and it would be impossible to understand it without such a guide. It is from this that we gather the constant stress he lays on the education of the individual, his belief in the innate goodness of the individual, and the high place he gives to the teacher's work.

In his sketch of the developing life of children in infancy and early childhood he is probably the first to emphasize, if not to discover, the importance of the recognition of instincts, and to show their value as educational factors.

It is to him that we owe the discovery of the value of play, and it is he who makes us see the wider meaning of the word, and the importance of the fact that "play and speech constitute the element in which the child lives."

Continuing his investigation of a young child's life he realizes the part played by experience, and how the self-taught child follows his own natural way of learning. He notices also that what the children learn is their surroundings, and the method is chiefly the method of doing. He realizes that at this stage children have the right conception of life, i.e., as a whole, a unity; and that to break up this unity is to interfere seriously with the growth of both knowledge and religion. He points out that, side by side with their absorption of the world without, must be the expression of the world within the child, else his knowledge will be merely external. He gives to expression one of the most important places in the whole of education, because through it man reaches one of the highest phases of his existence, that of creativeness.

He speaks strongly against the fallacy of regarding a child's development as always parallel with his age—"Each successive stage depends on the vigorous, complete, characteristic development of each and all preceding stages of life." And he has spoken no less strongly against the education which is "prescriptive, categorical, interfering," leaving no place for the individual, instead of the education in which the educator is "passive, following (only guarding and protecting)."

He regards each individual as fundamentally good, and declares that "a good tendency, only repressed, misunderstood or misguided—lies originally at the bottom of every shortcoming in man."

His conception of the work of the mother and of the father is a very beautiful and natural one—each at the right time guiding the child to work out its own development. His whole sketch of family life shows how it may merge into school life and form an unbroken existence for children. He regards family life as the foundation of the religious sentiment. His conception of religious education is very closely connected with Nature teaching; it goes more deeply into the founda-

tions of religious life than do most schemes of religious teaching, and it does not seek to hasten externals.

Now most educators accept all of this, and a good many of them endeavour to practise it. But it has not yet been universally adopted with that reality and conviction which would make it the foundation of the whole plan of the education of young children : instead, it has been adopted in parts, and applied to an already existing scheme.

We do not as a State educate individuals, but masses ; and though year by year this is being amended, it will take many years for teachers to shake off those habits of teaching whole classes, which they have both inherited and acquired.

We do not really make the theory of play the foundation of our Infant Schools. We have " games " and " free play " and " lessons." We should not as a matter of fact be allowed to do so by most inspectors, even if the teachers, as a body, were prepared to grasp all the meaning and sacrifice all the results. Groos' tremendous maxim, " Animals do not play because they are young, they have their youth that they may play," leaves most teachers and inspectors cold, and with no apparent increase of responsibility.

We do not understand " free self-expression." We think we are applying it when we put in our time tables such terms as " free drawing," " free movements." The very need to make such statements condemns us : the freedom is an attachment to existing organized work : want of courage to face real childish results and mistakes bars the way to freedom as a principle. We have not studied its meaning sufficiently to see the whole of its bearing on our work. Creativeness is still a sin ; sometimes it is called disobedience, sometimes rudeness, sometimes destructiveness. It is seldom welcomed, and often not recognized.

In spite of the wordy enthusiasm with which the idea of motor activity has been taken up by Educational Authorities all over the country, our schools are still furnished " for listening " and not for doing. We have still children under eight seated at rigid desks, in monotonous rows, for nearly every kind of " activity " : now and then they stand at the wall for drawing, and now and then go to the hall for a game, but for most of the day they remain rigid. Until suitable furniture is provided for all children under eight, it is foolishness to talk of motor activity.

The promotion scheme of 1910 for L.C.C. Schools, by which

a child can be rushed through the school by leaps and bounds, leaping over stages of work and experience in order to fill up empty desks, has sufficiently proved that the law of development is entirely ignored by those in authority. Formal skill in mechanical arts is considered a sufficient test for promotion—"Yet the boy has not become a boy nor has the youth become a youth by reaching a certain age, but only by having lived through childhood and further on through boyhood, true to the requirements of his mind, his feelings and his body."

We break up the child's world for him into what we call "subjects," and then try to piece them together by a ridiculous process called correlation. It is enough to realize how the chapters of this book overlap to prove to ourselves how real is the unity of the beginnings of things. No false system or correlation will piece together a unity that has never been in the teacher's mind.

Perhaps the worst fault of which we, as a body of educators, have been guilty has been that of literal interpretation.

This is due partly to the fact that many of Froebel's disciples took his applications, rather than his principles, with an uncritical and indiscriminating eagerness: and in spite of the fact that all Froebel's work is progressive they have acted as if he had said, "To be true Froebelians you must follow at all costs my methods, use only such materials as I have prescribed and in the way I have directed, think along my lines only, and adopt my words as an inspired gospel."

That many have gone beyond this stage of blind discipleship is obvious, if we compare some of the earlier questions set by the National Froebel Union with those of the last few years.

Compare. Which of the Kindergarten gifts and occupations specially lend themselves to the teaching of geometry? Enumerate the various angles, plane figures, and solids with which a well-trained Kindergarten child should be familiar, and state in each case the gift or occupation through which that knowledge has been gained.

With. Give six concrete instances of how ideas of quantity, size, or number can be formed, by means of something made or arranged.

Compare. What kind of influence could sticklaying have on an impatient child?

With. What has been your experience of the educational value of handwork in the case of mentally deficient children?

Compare. What are the difficulties to be overcome in a first sewing lesson to a class of babies? Show how you will do this, and give an outline of the lesson.

With. Describe a first course of sewing based on children's interests and needs. Point out its educational value.

Compare. Give in outline a first course of nine lessons on Gift IV, and state what knowledge might be gained in each lesson.

With. Suggest in detail suitable material for constructive work in building, and show how children might use it naturally and profitably.

We are therefore at a critical time when we are flinging off certain shackles, distrusting certain tests and changing our aims, many of us must feel rather bewildered by a vague sense of responsibility, and the necessity of coping with the overwhelming number of new theories that come with every new book or inspector.

It is hopeless and wasteful to attempt to try them all because they are new; only a kind of intellectual and moral dissipation can result from that. It is necessary to have some sort of permanent and steady aim by which we can test or judge new theories, to see on what kind of foundation they rest.

Most of the educational aims seriously put forth by thoughtful people, past and present, have in common a tendency to link education in some way to life. Comenius by his curriculum would prepare the young child for life. Rousseau would simply let him live, and trust Nature for the rest; Pestalozzi formulated the same idea by his famous maxim, "It is life that educates"; Froebel based his plans on the natural developing life of the child; and one of Froebel's most enlightened followers, Prof. Dewey of Columbia University, New York, has put this into practice in connexion with industrial work as a starting point, in such a way that it is safe to infer one of his most fundamental ideas to be, that education is to help a child to live fully, through direct contact with life.

Though expressed differently this idea is accepted as a fundamental maxim by most educators, even if they do not always recognize it in its application. The more utilitarian see in the infant even, the future specialized worker. They see him prepared for a trade in the handwork of his early years. The less materially minded are satisfied that it is always useful to have a store of general knowledge and be "clever with the hands." But these people forget that education cannot be regarded as a *preparation* for life, because children *are* living very fully and intensely during these early years. Education is life, and must assimilate itself with the life of children at the particular stage of their development. The

school, to a young child, must be both in atmosphere and organization as nearly as possible a reproduction of his natural life, and this must be kept in view very clearly by teachers, and by those who have authority over teachers; then there will be no sharp division between the life of the school and the life of the family and social world: the conduct should be the same, and the interests continuous.

Now all of this is implied and often actually set out in the *Education of Man*: but it has not been always understood or practised in the Kindergarten system. Parents have complained that children have no desire to make things at home, because they miss the help of the teacher: they forget the exact way of doing the thing, and they have not the "proper materials." Children have been known to express very frankly their sense of boredom at the ramifications of correlation in no uncertain language. Others have complained that "you neither play nor work," and they would rather do the one or the other. These are the bolder spirits: there must be many unspoken criticisms besides. It is not difficult to discriminate between the schools and Kindergartens where the children live, and those where they are educated on a system.

It is the aim of this book to attempt to set out how the various subjects of the curriculum may be put to this test and regarded rather as aspects of life than as subjects.

For the first eight years or so, a child is like a stranger in a new country: all his surroundings are unfamiliar and important, and instinct drives him to get to know them and to acquire some power over them. The school, then, must in the first case provide, as far as it can, such surroundings as shall arouse and satisfy developing interests and stimulate initiative. The various aspects of life that interest a child must form the basis of the school plan—and the methods should be those followed naturally in life. This is the only true correlation, where the child is the centre and his various interests the radii from the centre. He is not ready to regard life as a unity yet, he is only seeing small connexions: to force others is false and foolish work. But it must be a unity in the teacher's mind.

It is easy to discover his interests and to provide suitable surroundings; at least it is easy to suggest what these suitable surroundings ought to be in order to satisfy his growing interests.

(a) He is interested in all the things of Nature, including the sky, the weather and the varying seasons. To satisfy this there should be living things to care for both inside and outside the school, and some of the dreary asphalt playground should be broken up for garden borders and sand heaps, not in a school here and there but universally; it is probably needless to say that each Kindergarten should have its own garden. Inside the School a very necessary piece of apparatus in each class-room is a very large zinc or zinc-lined tray for nature work. There should be plenty of window ledge space, tables and shelves for plants—so that each child has a place for his pot of growing things.

(b) A child is interested in many inanimate things which he can use and exercise his growing power: by means of them many of his elementary fundamental ideas come to him, e.g., those of form, size, balance, weight, motive force. For this plenty of toys must be provided, as well as plenty of constructive material, and preferably toys which every individual can use, and use with ease. The gifts of Froebel were the first step in this direction, and form a suggestive basis: but there is no need to pursue an exhausted application to its death: many of his bricks are too small and too uniform to give sufficient scope. Life is psychological and presents itself haphazard: the gifts are logical in plan and application and do not, so to speak, keep a neck to neck pace with children's experiences. Besides toys there should be a constant stream of odd things, often acquired by chance, brought by both teacher and children for general observation.

(c) Children are keenly interested in other people, and this is seen in their passion for stories. As far as surroundings go plenty of pictures and picture books should be provided in this connexion.

(d) They are fond of music and rhythmic verse, and this suggests that at any rate a piano, and if possible a violin, should be included in school furniture: a small band of children with toy instruments can be formed to head the line in marching, and play in time to the music.

(e) They are interested in construction and in representation in either action or material: for these surroundings should provide space, materials and tools, the latter of the simplest order. This is more fully dealt with in the section on Industrial Handwork.

(f) They are interested in all varieties of physical activity,

and again the most requisite necessity is space, both inside and outside the school. Balls, reins, skipping ropes, etc., are useful here.

The curriculum naturally follows the developing interests: it should be regarded simply as aspects of life, and at this stage it is often difficult to discriminate between a subject and a method, notably in the case of games and handwork. Briefly, however, the interests may be set down in the order previously followed for surroundings: (a) Nature work; (b) number and form work, with possibly some experimental science and geography; (c) literature including poetry; (d) music; (e) constructive handwork and dramatic representation; (f) physical exercises; (g) religious ideas.

Reading and writing are not aspects but conventions or acquired arts of life, and so they do not form a part of the developing interest. They are necessary, but should not be prematurely forced upon children when time is needed for more valuable and important work. They are not a test of intelligence, but simply of memory and mechanical skill. Yet they form an important consideration in the promotion of children. Up to the age of seven, the normal child evidently feels no desire or need to learn either. He may appear to do so from simple desire to imitate an elder child, but he is not naturally anxious to do anything so formal. The desire to work for a future need is not possible for a young child, and unless reading is so bound up with extraneous interests as to be almost unrecognizable it is a bitter pill to swallow. This is dealt with more fully in the chapter on that subject. The constant practice both incidentally and consciously in language, and the building up of the vocabulary is the best of preparations, and this is referred to in the chapter on stories and on games.

The methods indicated in the following chapters are as far as the writers can see the methods of life—but only general indications, and a point of view are given. The details must be left to special conditions, and the teacher's own personality.

The best method can be spoiled by people whose individuality does not fit it, or whose want of intelligence keep them from discriminating between device and principle. Programmes of work, except as exemplifications of a principle, should never be given to teachers in general. They presuppose a lack of individuality and discrimination, indeed a kind of professional indolence and want of spirit, in those who

adopt them to any large extent. Both special method and plan of work should be markedly characteristic of the professional individuality of any teacher.

If it is life that educates, then the methods of teaching should be the methods of life. Man first learnt because he felt a great need, and to know certain things or not know them meant life or death to him. In early times he learnt to know first by doing, by active experiment, by constant trials, and he gradually handed down his experience, *as it was needed*, to his successors. Children must in some way follow this path; in fact they do so outside school, where they acquire their most fundamental and lasting knowledge. If the need is not always there, naturally, it is easy for a teacher to arouse one, but she has to learn to control herself as she follows the children, in the way the early man followed his son in his first hunting experiments, letting him try his own skill and only supplying experience when it was needed.

Children must make mistakes if they are to learn the real things of life. To guard a child from this is to blind and cripple him, and send him out unfit for life. Material may appear to be spoilt and time may appear to be wasted, but the appearance is fallacious. By the other method powers are wasted, initiative killed. The discipline will be more of an atmosphere than an achievement, and no class can be in any sense level, but rather a collection of individuals. The question of discipline forms no special section in this book, it is rather a result of following the methods of life as far as the children are concerned, and is implied in the section on the personality of the teacher.

The sections on reading and writing, and on history and geography, and much of the section on music, are intended largely for the child from seven to eight, though the reading article may imply earlier possibilities. Up to eight the average child's school life should be unbroken, and in one atmosphere. From seven to eight they are, so to speak, changing their skins, they are beginning definitely to master certain difficulties, to show some material and outward progress; when this stage is complete they are more ready for a new kind of world such as the girls' or boys' school, but they are not girls or boys until they have reached this stage, and they should not be placed in conditions where they are officially or virtually regarded as such.

In a recently published book, *What Is and What Might*

Be, by Mr. E. G. Holmes, a Utopian school is sketched where nothing but what is ideal ever seems to happen. We cannot hope or even wish to become Utopians, and according to Lowell "We cannot bring Utopia by force." It is life at its best, with all its human possibilities and difficulties, that we must aim at reaching, and allow for, in our plans; and we must shun, as we would shun any form of untruth, the highly organized "up to date" school, where there is a glamour perfection as false as it is pernicious.

But while we may never reach Mr. Holmes' very beautiful but somewhat unreal school, we may hope in time to have more human and homelike schools, beginning with the nursery in those districts where conditions demand the early care of children, and ending with children who have fulfilled the conditions necessary for real development, without undue haste, and ready for the more organized and controlled atmosphere of the girls' and boys' school, where it is to be hoped that education will still consist in leading them "to a pure and unsullied, conscious and free representation of the inner law of Divine Unity."

HENRIETTA BROWN SMITH.

BOOKS OF REFERENCE

- Froebel's *Education of Man*, Hailmann's translation. Inter. Ed. Series. *Autobiography*. Appleton.
- Comenius' *School of Infancy* (Heath's Pedagogical Library). 2s. 6d.
- Pestalozzi's *How Gertrude Teaches Her Children* (Swan Sonnenschein).
- The Child's Inheritance*. Greville Macdonald. 12s. 6d.
- What Is and What Might Be*. E. Holmes. 4s. 6d. net. Constable.
- The School and Society*. Dewey. University of Chicago Press. 5s.
- The School and the Child*. Dewey. Blackie. 1s.
- Infant Schools*. Salmon & Hindshaw. (First Part.) Longmans, Green. 4s. 6d.
- Articles in Child Life*. Geo. Philip & Son.
- Studies in Childhood*. Sully. Longmans, Green. 12s. 6d.

THE PERSONALITY OF THE TEACHER

EDUCATION means giving the child the necessary opportunity to develop its best self. Fitness to do this on the part of the educator demands sympathy, insight and power. To become really forceful in the child's highest development makes exacting demands upon those whose life work it is, and the influence of the teacher's personality in this process cannot be over-estimated.

Personality sums up what we are and includes heritage and individuality, together with the resulting effects of their interaction upon the varied conditions of environment—the great modifiable factor in education. By force in an educational sense is meant an influence, direct or indirect, which induces a re-action of some kind in the organism being operated upon—the child. The force of the teacher becomes operative in inducing desirable and suitable re-actions: first, by improving conditions of environment apart from self; secondly, by direct appeal, because she is what she is. From all points of view the study of environment is of deep interest, but especially to those who believe in the vitalizing power of the personal force, a force which can make livable, and even helpful, an environment of a seemingly most hopeless type. To gauge this influence, to state exactly in what it consists, is difficult, because as a force it is so impalpable, so unconscious, so much a part of one's everyday life that one passes it by.

At times, however, there crosses one's path a nature of so striking and vivid a type that its appeal is insistent, and demands recognition. Then it is that we feel the meaning of the personal element. The far-reaching effect of personality has been fully recognized in the past, but its general recognition as a vivifying power in helping the best in us to become better, has not been so widely accepted. To most of us has come the experience of contact with one of so uplifting and inspiring a nature, that even after the lapse of years, the

recall of that influence has been to impel to deeper and fuller effort. Others may have touched one's life for just an hour or two, but that passing touch has left an ineffaceable record, kindling to finer issues some undreamt of power within ourselves. Life's great teachers have been those who have begotten within the sphere of their influence an unquenchable hunger for goodness, truth and beauty.

Occasionally power of this kind is met with in the classroom, when the gifted teacher makes everything of living service to the child. Nothing must stand in the way of helping to make us more worthy of our work. The enrichment of personality is an absolute duty, possible to all, even to the dull, the commonplace. No one can be either if filled with the desire to be of the greatest service to the children. To be so actuated dignifies outlook and makes the rut of the commonplace impossible, and such genuine feeling at the back of effort may be safely trusted to find a right means of satisfaction.

Belief in the unconscious influence of taste by surroundings demands the improvement of environment in all ways; the utmost would be done to render the children more sensitively responsive to beauty, and hurt by the harmful and ugly things of life. Especially would attention be directed to elevate the standard of cleanliness, the hunger for fresh air, and an appreciation of and desire for order and neatness in one's self and one's immediate surroundings. The school or classroom reflects the teacher—its freshness, homeliness, comfort and tasteful arrangements indicate what she is. This is the outcome of absolute belief in the vital importance of what is being attempted, coupled with a personality so discriminating and intelligent, as to realize the possibilities of the environment within its control. Every inducement is there, which makes for sensitiveness of response.

If we agree that each one of us is an unconsciously modifying influence in life, it naturally follows that each should consider by what means that influence can be made of greater value to the community as a whole, particularly so by those who are brought into such close relationship with the young. "A spirit communicated is a perpetual blessing. The best teachers climb beyond teaching to the plane of Art. It is themselves and what is best in themselves that they communicate. Every man or woman is one of mankind's dear possessions, to his or her just brain or kind heart and active

hands, mankind entrusts some of its hopes for the future ; he or she is a possible well spring of good acts and source of blessings to the race."

This brings us to the direct appeal. That appeal which emanates from the teacher because of the personal touch—that subtle something which begets in those coming under its sway an unconscious reflection of itself. The personalities with whom we are brought into daily contact offer material for study which is both valuable and interesting, valuable as throwing light upon the effect of personal influence upon children.

The following notes taken from actual experience may illustrate this.

A. is the calm, self-reliant, gentle teacher, full of enthusiasm for her work, heedless of self, devoted to the children whose good points she always discovers and makes the best of. She has them really in the hollow of her hand. Their respect and love for her never fails, and it lasts even into manhood and womanhood.

B. is the born leader, clever, keen, richly endowed with the power of sympathy and human appeal. A sense of humour that is irresistible, and with all this, ability to command and a sufficiency of force and good sense to carry her followers intelligently along. There is devotion and slavish following, but this is the misfortune rather than the fault of such a leader.

C. is another born leader, clever and keen in many ways, but full of conceit and an overpowering belief in self. Lacking in breadth, only able to see things from one point of view. A decided autocrat in government. Obtains good immediate superficial results, but holds and trains with such a tight hand that her work shows nothing suggestive of a fuller life ahead ; rather is there a tendency to distaste for the very things in which such apparently good work is being done, and an intention on the part of the workers to have a good time as soon as they are unfettered.

D. is a calm, self-reliant nature ; clever, restrained, most patient. A slave to duty and excellence, whose work with the children is always more for the future than the present. Influence a matter of very slow growth, but abiding in its nature. Her pupils always respect her, but few of them realize what she has been to them until they have left school some distance behind.

E. is enthusiastic, interesting, and in certain ways, capable, but erratic and unstable, sustained effort is not easy to her, constantly getting into difficulties because of this and her lack of method. Influence strong with children at the moment, but not abiding.

F. Not clever, diffident of her own power, absolutely honest and true, most persistent, succeeds because of her doggedness, charming in many ways, and very appealing to children.

Personality shows itself in manner and bearing which should be its unconscious expression. When it is not, when there is the faintest trace of artificiality or insincerity, then something is wrong, and the influence or lack of it upon the children is proportionately bad. The majority of young teachers would do well to give this side of their work more attention than they do. Too many are either on stilts, so superior that they never get near enough to the children in sympathy to know much about them, or to be of any real use to them, or so apologetic, so flabby, so weak, that they fail to inspire with confidence or anything strong and stimulating. The superior people must get off their stilts and be natural. The apologetic must stiffen and try to cultivate that habit of self-forgetfulness which thinks only of the work. If the young teacher feels the sanctity of her work, that will give her the right kind of bearing. Daily experiences must be broad, inspiring and educative, permeated throughout with a thoughtful regard for the child's future good. Respect, admiration and belief in the teacher should deepen with closer intercourse, and they do deepen if the teacher is honestly doing her best. Devotion to duty, and unselfish regard for the welfare of the child, tells, although due recognition may never be made to the doer. To prepare for this work and to maintain the ideal with which one starts is not easy. There are frequent disheartenments. One rarely sees any result for one's best effort, and visible results are grateful to all. But the teacher has to put much of that aside, and sustain herself with the belief that nothing good is ever ineffective or ever lost. With that conviction, it is possible to be a happy worker without regard for results. This possibility is kept alive in us in all sorts of ways, depending largely upon the needs of our individual natures. No two people are influenced or affected in quite the same way, or by the same stimulus, and it is necessary to find the things in life which make the highest appeal to us, and keep alive that steadfast belief in the value and

purpose of what we are doing. We want to be responsive to the best, to be fitting and worthy of the privilege of service.

This must be the constant aim. "The crowning grace of personality is in the power to invest the conditions of life with meanings emanating from ourselves." Right choice of the source of enrichment is not always the easy thing it would seem to be. Just as "Each child must find his own mode of expression," so the teacher must find his or her own mode of inspiration. Youth is the time of optimism and undaunted belief in possibility, and it is just as hard to realize one's limitations then, as it is later to do all that one sets out to do. Because of this, it sometimes happens that time and energy are both misspent in trying to acquire a taste that is considered desirable in the main, but which makes no strong personal appeal. We need courage and wisdom. The courage that insists on being true to one's own individual needs and the wisdom to recognize limitations, and to put aside the apparently unattainable. "To be what we are and to become what we are capable of becoming is the only aim of life." All those influences which make for strength and purpose in action, for lofty ideals, and for readiness of response to truth and beauty, are essentials in the deepening of personality. The initial step in this process, the deepening of the personality of the teacher, demands that one should fall in love with one's work. Its importance must overshadow all else, its value must stand out clearly as the most desirable thing in life. This attitude of aspiration and desire renders welcome any training, however arduous, for approximate approach to the ideal. For equipment in personal fitness, the first and most essential factor would be the means to be taken for the strengthening of character. There must be due recognition of the moral law, acquirement of self-control, and cheerful response to the call of duty.

The recognition of the moral law, and the means to be employed for its fulfilment, is of unique importance in one's dealings with children. "Between educator and pupil, between request and obedience, there should insensibly rule a third something to which educator and pupil are equally subject. This third something is the right, the best. The child has a very keen feeling, and rarely fails to distinguish whether what the educator or father says or requests is personal or arbitrary, or whether it is expressed by him as a general law or necessity." Any failure on our part to recog-

nize this, and to live in harmony with its teaching, lessens our value as educators. It is never unwise to apologize to a child or to a class when hastiness in temper or judgment has made one unjust. Children are very generous on such occasions, and are always ready to go half-way to meet one.

Social service living with and for others is another means of development in the personal life. Such service broadens sympathy because it brings one into closer touch with human needs and failings. It should make insight keener and anxiety greater for the welfare of the children. The difficulties of life are more real, and the disciplinary value of such work is great. It makes for efficiency in thought and action. No member of a community can live the life fully without gaining power on the side of insight, discriminating judgment and balanced action.

In the attempt to enrich the personal life, and make the setting more worthy, care must be taken to keep a sensible balance between work and leisure. The over-zealous are inclined to use up more energy than can be afforded, and physically to lower their standard of efficiency, which makes them practically less fit to do well the work they have most at heart.

On the other hand there are the slack people, and quite a good number of them. Such are inclined when their course of training is done with, to settle down and just be satisfied with what they have—a hand to mouth policy which is fatal to good work. It must never be forgotten that teaching is an organic process, and is influenced by the developing forces which underlie all vital activity. To stand still is impossible—one must do one of two things—go on or go back. So that it is imperative to take advantage of all the opportunities within reach; but it is equally imperative to do so with reasonableness and good sense. The wise use of opportunity means training one's self to see things in right perspective, to have a due sense of proportion and fitness. This gives a well balanced outlook which is of priceless value to the teacher.

A child's questions relative to motive and conduct make severe demands upon readiness of thought, and the power of bringing conflicting elements into right focus. What, for example, is the right thing to do when a small child asks, "Why may I play ludo in the drawing-room on Sunday when my brother may not play croquet on the lawn?" In treating such a question as this the teacher must think of the

relationship of the parent to the child, and do and say nothing that will in any sense lessen the child's respect for father and mother. The child has to be satisfied, and the teacher has to give an answer that shall be in harmony with the law of right. Personality largely determines how this shall be done. The child's difficulties are considerably lessened when the teacher's point of view is sufficiently intelligent, broad and sympathetic to include that of the child. The question of government is equally influenced. When to see and when not to see are matters of detail in class management, largely dependent upon outlook. The more we have thought and read and experienced, the less likely are we to make mistakes. In dealing with rewards and punishments, in seizing the opportunity of the moment for furnishing experiences that will last, wisdom in meeting any of these conditions is largely the outcome of that power which solves the problems of the moment on a basis of culture and experience.

The exercise of personality is fraught with possible danger, both to teacher and taught. Strength of character is accompanied by a sense of power, the use of which is both natural and enjoyable, and in this pleasure is its temptation. The teacher may become an autocrat in government—superior and opinionated, scornful of those with less strength, impatient and irritable when in contact with opposition, cruel even to the sensitive in her manifestation of that impatience, and conceited.

The working conditions of a teacher's life have in them elements conducive to the development of these unfortunate traits. There is the constant attitude of authority, which is decidedly bad; then we are dealing with minors, who are dependent in many ways upon us, and are, for the most part, at our mercy. All this gives to the position a fictitious value. Hence it is absolutely essential to keep a strong check upon the use of this power, and to try to be in right perspective.

Upon the child the effect of dominating power, unless wisely used, is even more disastrous. Many strong natures do harm through sheer thoughtlessness. It has never occurred to them to consider what effect they may have upon the children whom they are trying to educate. The kind of domination varies with the individual, but of whatever type, unless used with care, it harms the children, because it weakens their attitude in some form or another, and tends to make them less able, less confident, less self-reliant. The children

must do their own thinking, formulate their own judgments, and be as free and independent as is consistent with community life.

It is a great temptation to a forceful teacher to let the children rely too much upon her. As a result of this, they acquire a habit of looking for a mental and moral prop. The enormity of this is rarely felt until adult life is reached, when the ability to think and act for one's self should be fully matured, but in many instances is lamentably wanting, because of this crippling domination in early life. Nobody means to do this, but few of us grasp the importance of intellectual and moral freedom for the child. We are too eager to hasten development on lines that seem good to us, forgetting the fact that the child must develop along the lines of its own peculiar needs. Any attempt to force it in an opposite direction ends in weakness or disaster. The personal element must never, under any circumstances whatsoever, swamp individuality.

So much for the forceful people. To those less strikingly effective—and there are many such—might one suggest that earnestness and belief in our high calling is one of the best means of gaining efficiency and power? Be really interested in what you are doing, and show that interest. Use your own judgment, get hold of principles, and think out their application in your own way. The effort involved in all this produces a stronger mental attitude, and begets a sense of capability and power—an excellent antidote for ineffectiveness. If you possess any gift—a cheerful habit of mind, a more than usual care for orderliness, both of mind and the material things of the class-room—use it. By its exercise you become stronger and of more value. Whatever your gift, cultivate it, make it of use to your children. Do not be afraid of such use because it may appear to you to be trivial or outside of the curriculum. The use of a gift which you yourself realize, will help you to self confidence, and will react on your work with the children for efficiency and enjoyment.

E. M. MINHINNICK.

RELIGIOUS TEACHING AND RELIGIOUS DEVELOPMENT

WHEN we speak of religious teaching or of religious training, we usually mean religious instruction only. As a rule, for younger children this consists in the telling or reading of Bible stories, the repetition of hymns and Bible texts, and possibly of some catechism. Any discussion on the subject is apt to confine itself to the right choice of these to suit different ages or stages.

Before we come to this, one question, it seems to me, ought to be honestly faced and honestly answered. In all other directions we are nowadays agreed, that the proper proceeding is to provide right conditions for development. We give much thought to the natural tendencies through which it is possible to guide development, in what we consider to be the right direction. Now the question is, whether we are to deal with religious teaching in the same way, or whether, in this particular subject, we are to go on putting before children what we know they cannot yet understand, but what we hope they will find valuable in after days.

It is surely a mistake to treat what, we are all agreed, is the most important subject of all, according to methods which in all other subjects are now considered ineffective.

It is no easy task to decide what material has most religious value for little children. Most writers refer to this as a difficult point, and leave it unsolved. In religious teaching, little help can be gained from following the course of race-development, though the Herbartians have attempted it in a half-hearted way. To do so is to ignore Froebel's warning that the child is the child of the present as well as of the past, it is to ignore the force of the suggestions which pour in upon him from his surroundings.

We cannot let our children invent a terrible Being to account for the thunder. We do not wish them to believe in Thor and his chariot, except with the "conscious self-

delusion" which is said to underlie art. Nor is it wise to let them believe that in the thunder, which the instinct of self-preservation causes them to dread, they hear the voice of God. We cannot let them imagine beings of superior strength who must be propitiated. Though children are ready enough to personify the sun, the wind and other natural phenomena; though they may often treat a doll or a favourite stone as a fetish, yet such occurrences have nothing to do with the religious life of a modern child under ordinary conditions. It is possible that such things might assume different proportions in the case of a child from whom all religious teaching was carefully withheld. This, however, is hardly possible, for every child sees churches, hears church bells, and asks questions, and from the most meagre of answers can construct for himself something undreamt of by primitive man.

Dr. Hayward, in his *Reform of Moral and Biblical Education*, follows the Herbartian Ziller in suggesting, only as he says tentatively, certain fairy tales as the right instruction material for children under seven. He also follows Ziller in giving as the psychological principle to be kept in view: "That the teacher's chief duty at this stage is to kindle the imagination, for the moral judgment of the child is undeveloped, and the teacher should not try to force it prematurely." For his second stage, and here he tells us he speaks with confidence, the psychological principle to be kept in view is, "That the special moral interests of children at this stage do and ought to centre round duties within the family circle."

There is something strange in this order. It seems somewhat extraordinary that the family circle is not considered in the case of the younger children. The fairy tales and the other material spoken of, such as *Æsop's Fables* and certain specified fairy tales, not only have no religious value, but many of them are far beyond the range of ideas of a young child. The error here seems to be somewhat fundamental, namely, the taking for granted that morality precedes religion, which is as untrue in the case of children as it is of primitive men.

In Froebel's *Training Course* the teachers were to be "trained to the care and observation of the earliest germs of the religious instinct in man," and this is surely the right course to pursue.

If we take this view we shall probably agree that religion, religious development and religious training neither can nor ought to be confined to a set period per week or per day. *There is far too much direct religious instruction given to children.* It must require real genius to give a Bible lesson to the same children every morning without letting it become a matter of routine which fails to excite any emotion.

We do not always realize where the religious element ought to come in. We do not, for instance, bring reverence into our Nature lessons as we ought to do. It is Arthur Thomson who, speaking of the time when our forefathers held the oak as an emblem of what was sacred and heard God speak when it rustled, adds: "We seem to go to the other extreme now, for we pass a noble oak tree without looking at it." Froebelians at least will not agree with one statement in Miss Ayres' helpful *Suggestion for a Syllabus in Religious Teaching*, where she speaks of the aim of the religious course being "to bring the child into relation with God through His works," and then says that "this aim and that of Nature teaching are quite distinct."

No one except Froebel, has, so far as I know, given anything like a full account of the beginnings of religious development in a child. His accounts seems quite in accordance with modern psychological ideas, and we may with much profit consider what he had to say on a subject to which he attached the utmost importance.

To Froebel "religion is the endeavour to raise into clear knowledge the feeling that originally the spiritual self of men is one with God." Religious instruction, he says, "quicken, confirms and explains the feeling that man's self, his mind and spirit proceed from God; it gives an insight into the being and working of God, into the relation of God to man, it applies this knowledge to life and to the progressive development of mankind."

To the question, When does religious development begin? he answers that as with the spring to life of seed or plant it is there long before it is outwardly visible, and he protests against the frequent "it is much too early." It is the "how," not only the "when," he tells us to consider. Still he gives us help in recognizing the earliest stages.

1. The very beginning he finds in the relations between the child and the parents: "*This feeling of community first uniting the child with mother, father, brothers and sisters . . .*"

is the very first germ of all true religious spirit, of all real yearning for perfect union with the Eternal."

2. This beginning is fostered by the religious, that is the reverent atmosphere of the home, which, says Froebel, children understand with the heart, not by the thought. And surely this is really true, though it may not be expressed in exact psychological terms. Emotion is communicated with little need for thought, and however enlightened it may be, religion to be religion must be largely an emotion.

3. Froebel considers also the gesture of reverence, the closed eyes, bowed head and folded hands, usually taught to little children, "the outward appearance of gathering together the innermost force of life."

4. Very early, too, begins the child's "life with Nature and with the fair silent things of Nature." In the Mother Songs, the baby in its mother's arms is told that a kind but unseen spirit put into the flowers the colour and sweetness which give him so much pleasure. "Some one put it there for baby, some one baby cannot see." So the sun sends its light to please the child, the moon and stars love him: "Love is what they wish to show," says Froebel. "In Nature's every word God's own Father voice is heard," and as the child looks at the starry sky he is to feel the Being of its Creator. The wind again is a great Force unseen, effects only can be seen.

Nor is this all mere sentiment; to Froebel as to Goethe the Time Spirit "weaves for God the garment" we see him by, and this he desires to put before a child in such form as to make appreciation possible.

5. Akin to the importance of the home atmosphere is the joining in the religious life of others. "The coming of people together in an assembly" attracts the child, and his pleasure in an occasional church going arises "from the speaking and singing being done by all . . . it is the entrance in a common life that makes him enjoy going to church." Those who have to deal with young children would do well to notice how Froebel's "mother" answers her child's questions about church going "out of the range of his own experience, feelings, and ideas, his own intellectual development and necessities." He is told that there he will learn "Why flowers bloom and birdies sing, And why we still remember Christmas Day, And why you feel so happy when you play With flowers and little lambs in spring: Or see the moon and stars and sunset-glow."

He is to be told, too, of the music of the organ, deep and grand.

6. Another fundamental note is the interdependence of the community and the inter-relations of the whole universe. The family comes first; it "affords the first opportunity for the child to notice the bond whereby humanity's life is bound up together." The family is "more than school and church." But the baby is taught, too, that he has to thank Jenny the cook, and Peter who mows the grass for the cow: "Stronger grows my baby tender by the service people render!" Whenever opportunity occurs, the mother is told to "make this inner dependence of life clear and impressive, until you come to the last ring that holds all the rest, God's Father love for all." The baker must have flour, the miller must have corn, "the field can yield no crop if nature does not work towards it, if God did not place in her power and material, if His love did not guide everything to its fulfilment." But, Froebel says to the mother, "it is not directly and at one blow that you can make this clear, it must come about with very gentle steps. The way lies through the imaginative and emotional observation of nature and of man's life, and by expressing by representation what he thus takes in." So the child's sympathy is aroused by the helplessness of the young birds, and his own relation to his mother is shown to him "in the looking glass of outer life," as he watches the mother bird caring for her young, and he turns to her with the cry of how he loves her.

7. And then immediately follows the necessity for expression: "For even a child's love, left unsought, unfostered, droops and dies away."

Froebel does not omit the necessity for expression in words. He says little of prayers for very little children, but he does say of the age of six: "At this juncture it is most beneficial, strengthening and uplifting for the child to receive words, a language for his feelings, that these may not be stifled and vanish away for lack of expression." What he emphasises here is that "the words must give expression to what is already in the boy's soul, he must not be expected to give life to them."

In the verses describing the ideal child, "The mother kissed upon his brow her blessing, Then his love for her expressing, Off he starts his mother serving, All he can do she's deserving." As the child sees flowers and plants and animals

do their part, so he too "even as a child should fulfil his calling ; every age has its duties, and duties are not burdens. Every healthy child likes doing his small duties, and the consciousness of duty done gives independence. See how happy he is in this feeling, he feels his kinship with you thereby."

8. This takes us straight to the desire for approbation from others, and finally to desire of approval from the voice within, "the fore-runner of one-ness even with the highest." For the child, says Froebel, "must be roused to good by inclination, love and respect, through the opinion of others about him." The Christian religion is the recognition of the true Fatherhood of God, and "the child attains true sonship only by making the father's nature and aspirations the motives for all his thoughts and actions. . . . *Therefore* Jesus is the first-born of God."

9. Froebel speaks also of the necessity for presenting true ideals and for avoiding half-truths. Instead of teaching that "the good will be happy," meaning an inward happiness which is not yet plain to the child, let us rather, he says, show that "whoever truly seeks the good must needs expose himself to a life of outer anxiety and care. . . . The consciousness of having lived worthily should be our highest reward . . . we ought to lift and strengthen human nature, but we degrade and weaken it when we seek to lead it to good conduct by a bait, even if this bait beckons to a future world."

We have, then, to consider in more or less detail how we can best help religious development by fostering such early beginnings.

Right relations between mother and child are usually, we thankfully recognize, provided for by Nature, though by friendly talks, and meetings for parents, the teacher can often help to a fuller understanding of child nature and its needs. Those teachers whose work lies among the children of worthless parents often do most noble work in the attempt to supply the elements of sympathy and tenderness which are lacking in the homes.

To create a religious or a reverent atmosphere in the home is out of our power, but we can at least see to it that this exists in the school. First of all, the reverence must be in the teacher, and it must be real, not conventional. The teacher who is more occupied in seeing that the children keep their eyes closed, while an opening prayer is said or sung, than

she is in asking God's help in her own life work, can create no right feeling. One hears of teachers, earnest no doubt, but sadly mistaken, even interrupting the "Our Father" by which she should be consecrating her own day, to call naughty children to order. There would probably be no disorder if the teacher's soul were in her prayer, but if any should arise, it would surely be better to call the un-impressed child apart and tell him gently, not angrily, how she herself feels about speaking direct to God, and that not God Himself can help him unless he wants that help and tries to get it.

If children have the chance of feeling that clergyman or priest, parent or teacher is speaking simply and straight to a Great Unseen, that perhaps is the deepest religious lesson they can receive. It should be no lesson of fear, but one of faith in the Unseen: nay, it is more than a lesson; as those of us can testify who remember such a happening in very early days, it is an experience.

This school opening will take different forms according to the individuality of the teacher. With young children it should always be short, but that is no reason why it should be unimpressive. Some teachers will have prayers only in the form of hymns, the meaning of which is plain to the children. Some, again, will have the Lord's Prayer repeated, however little the children may understand of words whose full meaning few of us may ever learn, with the desire that it may be associated with the child's earliest recollections. Some will read or repeat a verse or verses which seem to them appropriate, some will extract the simplest of ethical or religious lessons from the words of the hymn. It is not at all necessary that the proceeding should be stereotyped, but it must be earnest.

It may be a help to some to hear of an experiment made lately in letting children make up a prayer for themselves. The opportunity arose at our little Harvest Festival, when the children were asked if they would like to make up a prayer of thanks for themselves. They were told to think it over by themselves. Next morning a little girl's hand went up, "I've thought of something for the prayer. Thank God for fathers, mothers and brothers." She, of course, had no sisters, but other relatives were promptly suggested and we settled on, "brothers and sisters and all our friends." For several days there was a frequent, "I've thought of something more for the prayer." Once it was "Fred (an old boy) and

me was talking about it in bed, and Fred thinks we should say, Thank God for the moon and stars." It was a very small boy who insisted on having "the evening star" as well as "all the stars," and one still smaller who desired "our houses" as well as "our nice homes." The result is given as an example of what is in the minds of children. It should certainly not be handed on to other children. My only contribution was to suggest that we should put like subjects together, and that after thanks we should think of doing. The children suggested, "Help us to be kind to each other in the playground," and I said it seemed a pity to stop being kind when we came indoors. I believe I was wrong, and that the children themselves knew best where the temptation was strongest. The language is the children's own: "Thank God for fathers and mothers, for brothers and sisters and all our friends. Thank God for the earth and for the harvest, and for the corn and for our food. Thank God for our not being so poor as some people are. Thank God for the winter and summer. Thank the Lord for the sunshine. Thank God for the moon and the stars and the evening star, and for the trees and the flowers. Thank God for our nice homes and for our houses, and for our school and the teachers. Thank God for the sea and for the sand. Thank God for making Christmas come. Thank God for making birthdays come and for the toys we get." (Response) "Help us to be kind to each other all day long."

Whatever is done, the little ceremony must be reverent. That it may be so, for the children it must be brief, and for the teacher it must be an act of worship. Only if she herself enters into it, can the gesture of reverence count at all, only then can the feeling of a common life under one great Father enter the minds of the children.

We can with the youngest have the moment that is sacred, set apart. But the minds of children are not set in conventional grooves, and they do not keep to set times and seasons for talking on religious matters. Their remarks, references and questions come at all sort of unexpected moments. The sayings, which to our sophisticated ears sound so quaint, may occasion smiles when the children are not present. But at the moment, the simplicity and directness of the child must be met by an equal simplicity and directness on the part of the teacher. There should be no sanctimonious lengthening of face when the name of God is introduced;

but that teacher who feels inclined to laugh at a child is only an outsider, she is not one with her children, nor is her sense of reverence very real.

We can learn from such teachers as Kingsley or George Macdonald, how real reverence may underlie childlike thought or attitude. The verses, "Where do you come from, Baby dear?" and indeed the whole story *At the Back of the North Wind*, in which they occur, breathe a spirit which it is only possible to describe by some such expression as reverent playfulness. Kingsley's "*Water Babies*" has the same tone; and that Froebel well understood this, is shown in such a passage as that in which he refers to children saying grace over their toy feast. "Do not disturb them," he writes, "but rather avoid noticing it, if you cannot identify yourself with the charm that underlies it. It is no drawing down of the sacred into outer life, it is the germ which gives the outer actions of life their meaning and consecration. For how is your child to cultivate innocently a vital feeling for what is holy if you will not grant that it takes form for him in all its purity even in his innocent games? But it must be done, in this innocence, called forth unsummoned from the sacredness of childhood's life and not for show."

Those teachers of little children, who are obliged to spend the first half hour of each day on a so-called Bible lesson, would do well to occupy most of the time in the teaching and singing of suitable hymns. This is better than spoiling beautiful Bible stories by telling them too early and making them matters of routine.

Here, then, we reach naturally the question of providing children with words by which they can express their feelings. This is no easy matter.

It is impossible for us always to know why certain children are so fond of certain hymns, especially as these seem at times most unsuitable. My own favourite at a very early age began, "I once was a stranger to grace and to God, I knew not my danger, I felt not my load." The general tenour of the words affected me not a whit, the charm lay in the last line of each of its many verses, where the words "Jehovah Tsidkenu" occurred. Those strange sounding words seemed to me most solemn and beautiful, and it was no small pleasure to find that R. L. Stevenson had had the same experience. On the other hand, hymns specially written for children may entirely fail of their purpose. One child said, "My favourite hymn

is the one about the hoods and laces," and this turned out to be, "For He is our childhood's pattern." Whether she thought the hymn referred to the hood she wore, and the pattern of the lace on her pinafore no one knows; but if so, an apparently suitable and beautiful hymn was somewhat useless. Most children have wondered why a green hill should have a city wall, and why a grave the same size as their beds is particularly to be dreaded. One child disliked that hymn because she supposed it to convey a hint that even children die, that little graves do exist.

It is clear that we cannot always avoid misconception, and the mere inversion of the sentence which is necessary to rhythm is a stumbling block. We should not, however, try to limit the words of all hymns to such words as we imagine they can grasp. What we must do is to teach carefully in order to make sure that the words have some meaning, and that the meaning is of a religious value. Even if children could understand it, they should not look upon themselves as simple: "Pity my simplicity" is written from the adult standpoint, it is not a child's prayer. He who said, "Except ye become as little children" respected, He did not pity a child's simplicity.

In such a hymn as "God, who hath made the daisies," the smallest child is associating God, the great Father of all, with the daisies that all may pluck and enjoy. He knows that God made the daisies, and that he is giving thanks for the pleasure they bring to him. Even here the second verse, "Tho' we are young and simple, In praise we may be bold," could well be omitted, and we must take care to explain. "*Suffer* the little children."

The best collection of hymns for children that I have seen is *Child Songs for Primary Departments*, edited by Carey Bonner (Pilgrim Press). Both words and ideas of the two following are childlike and are not introspective:—

God, whose name is Love,
Little ones are we,
Listen to the hymn
Which we sing to Thee.

Help us to be good,
Always kind and true
In the games we play,
And the work we do.

Bless us every one
 Singing here to Thee,
 God, whose name is Love,
 Loving may we be.

The other is still more simple :—

“ Thank you ! ” for the world so sweet,
 “ Thank you ! ” for the food we eat,
 “ Thank you ! ” for the birds that sing,
 “ Thank you ! ” God, for everything.

One word as to the teaching of the hymn once it is chosen, for there is no doubt that hymns should be carefully taught. Careful teaching does not necessarily mean drill in accurate repetition. With the youngest children it is better for the teacher to sing the words till the children pick them up, and join in of their own accord, chiming in at first as children do, with the latter bit of each line. It may be as well to let the children say over the words at first, to see that they have caught them correctly, but anything like drill should be avoided ; the singing should be pure pleasure.

All through the day, everything which fosters the social instinct, which deepens the feeling of community, has a religious bearing. All little acts of helpfulness and kindness, all signs of consideration for others, should be encouraged. The desire to help others arises very early : “ So draw we nearer day by day, each to his brother, all to God.” Not that children ought to be praised for every right action, but without the occasional “ That’s right ! ” to the child who is helping the weaker or controlling himself, no standard would be set up. And real efforts to be unselfish or courageous ought to be noticed, though an approving look may be quite enough. Virtue, some writer has said, thrives best in a bracing atmosphere, where right action is taken for granted.

As to the child’s “ life with Nature, and with the fair silent things of Nature,” as Froebel puts it, it is surely time for us to realize more fully that our Nature Lesson is part, and no small part, of our religious instruction. It is because we do not yet acknowledge that God can and does speak to us all, and especially to children, in clearer ways than the one way of the written word, that Miss Lee (*New Methods in the Junior Sunday School*) has felt obliged to hide away in an appendix what her knowledge of child nature tells her is the most suitable religious teaching for them. It is probably in the same way that Miss Ayres (*Suggestions for a Syllabus in Religious*

Teaching) suggests that much of the Nature teaching may be correlated with the year's course of religious instruction. The fact is, that we must correlate our religious instruction with our Nature teaching if we correlate at all. We have no choice. God spoke and speaks to man through Nature long before He spoke, as He still speaks, through human language. Springtime and harvest come in due season, and bring in their wake our hymns of praise and thankfulness. Man had to rejoice in the warmth and safety brought by the sun's return, before he could say, "God is Light, and in Him is no darkness at all." He had to live in a thirsty land before he could write of the shadow of a great rock and of the waters of life.

It is surely plain that if learning to know the Great Father through His works is the end of our Nature teaching, we must pluck from our minds the idea that knowledge is the aim of our lessons. A means it most certainly is.

It needs no knowledge of astronomy, but it needs appreciation of beauty to call forth "The heavens declare the glory of God and the firmament showeth His handiwork," with its description of the sun coming forth like a bridegroom from his chamber. The writers of the Psalms watched and loved everything in Nature. That poet who wrote, "It is the glorious God who maketh the thunder," had also watched with pleasure equal to that of a child how the little calves skip. The writer who speaks of the valleys, so thick with corn that they laugh and sing, had watched the "little valleys" of the furrows, and each drop of rain doing its work of softening the earth. How much feeling for beauty there is in "Consider the lilies . . . for Solomon in all his glory was not arrayed like one of these."

"Must we talk about them, they are so pretty!" said a child one day at the beginning of a lesson on some flowers. Must we, that is, count the petals and learn hard names? And yet the question, "Are they all the same?" after due time has been given for enjoyment of colour and smell, sends the children to look more closely, and to find more beauty in the variety, or in the wonder that they are all exactly the same. There is rapture over the tiny pod which succeeds the withered sweet pea, over the colour and smell of wall-flowers, over the dainty chambers in the three cornered seed case which swells out as the tulip withers. But all is lost when the teacher's aim is wrong, and when her voice,

pouring forth her adult knowledge, prevents the fair silent things speaking for themselves and for their Maker.

One step in the teacher's preparation for her Nature lesson might well be the reading of the "Benedicite, Omnia Opera," the Song of the Three Children, in the Morning Service, where everything, "all the green things upon the earth" are called to "praise and magnify the Lord for ever."

Miss Lee, as a good Froebelian, takes mother-love as her starting point for the baby class, starting with the love of animals for their young. By letting the child enter into this, Froebel says, we make his own life objective, and so help him to become conscious of that through which he must reach out to Fatherhood. The young and tender things, the nestling, the kitten, the lamb appeal to the feelings of little children. Helplessness is something with which they can sympathize, it belongs to their own experience. We want to fill our children's minds with these evidences of Divine Love, with which Miss Ayres wisely begins her year, emphasizing always the love of parent for child and child for parent, to bring to full consciousness that most important of evidences.

The story is surely the way in which we may most fully accomplish this end. Every story which helps children to recognize more clearly the love of one human being for another is in itself religious instruction.

Certainly there is the story of the Babe that came to its father and mother in the homely inn, wondering cattle standing round; the Babe who was a King to its parents as all babes should be, a Prince, to cherish for the work, however small, he too must strive to do for humanity. Nothing is easier than to show really beautiful pictures of that Holy Family, pictures which speak for themselves.

On the whole, however, the Herbartians are probably right in saying that most Bible stories are beyond the grasp of the average child under six, and that these will ultimately prove far more effective if not introduced too soon. We are not, however, reduced to such substitutes as are suggested by Ziller. Such folk-tales may well serve as food for the imagination, and no doubt they have their place, but we can feed imagination also on finer material. The grotesque is not suitable for the baby-room. In their choice of stories the Herbartians ought surely to have applied Herbart's own words, "From the parents idealized, the child learns the

attributes of the Deity." For religious atmosphere, they seem to have depended chiefly on the child's participation in the religious rites of those about them. What seems a curious line of division is made for younger children, who are to be told stories from the life of Jesus, "not as instruction material, but as enlightening narratives, connected with church feasts." One wonders if Herbart himself would have approved of this line of separation.

Probably the most suitable stories for little ones are Miss Lindsay's well known *Mother Stories*. The love of father, mother and child, love and care for animals, love of beauty of sound, and smell and colour, the dependence of human beings upon each other; such are the ideas that Miss Lindsay succeeds in bringing to the children, in good language, with sufficient incident, and with an absence of foolish sentiment, or anything likely to lead to the wrong kind of self-consciousness or precocious introspection. In addition to Miss Lindsay's stories a few of Miss Laura Richards' beautiful stories are simple enough to use. Fairy tales, important though they are, inculcate morality rather than religion. In most, kindness is rewarded, while greediness or ingratitude is punished, and kindness is far more real a virtue to a child than obedience. Some stories like the Ugly Duckling and the Sleeping Beauty may have a deeper touch. There is an old-fashioned story called *Susie and her Six Birthdays*, which might be useful in the baby room, as bringing out family love in the relations of the little girl to her mother, father, little brother, cousins and grandparents. It is very simple and well told, and can be had in Collins' Penny Library. Adaptations can also be made for little children of *Water Babies*, *At the Back of the North Wind* and *The Princess and the Goblins*. The relations between mother and child can be well brought out, too, in such a myth as that of Persephone. Mrs. Gatty's *Parables from Nature* have too little incident for children, but *Earth's Many Voices* (S.P.C.K.) is an old and beautiful collection of Nature parables.

On children over six or seven, well chosen and well told Bible stories make a deep and lasting impression. No other stories stir a child's feeling, and stimulate him to ethical judgments, as do the Bible stories. No other stories show so clearly the consciousness of having lived worthily. For children under eight, however as indeed for any age, we must select. One great simplification is to begin with the story of Abraham.

If our aim is to bring home to modern children the Fatherhood of God, we shall do well to omit the earlier stories. Otherwise whatever we may ourselves believe, we may land ourselves in difficulties.

I believe that many young teachers will here be glad of a little help as to how to treat these and other difficulties. One sometimes hears the suggestion made that the teacher's own belief need not influence her telling of Bible stories, that as she tells her fairy stories and myths, which are only true to her for the spiritual truth wrapped up in them, so she can tell her Bible story. "Let every man be fully persuaded in his own mind," but let neither man nor woman tamper with his or her own honesty, or set up a wall of silence between teacher and child. To young teachers I should like to say, Deal honestly with your child. Tell him you do not understand, yet you believe, if that is your position; or tell him that the stories are from an ancient book, not written down till long after they happened, and some of them copied from older books which are lost, and that what seems to you important is—and then emphasize whatever truth you wish to impress. If the child still presses, "Do you believe?" then tell the truth in this, as in other matters. There is only one way in which we can still believe that God selected one people for His special favour. The Bible contains the traditions, the history and literature of a great people, of the people with the keenest God-consciousness. It shows us how that God-consciousness developed from the time God walked in the garden and spoke with a human voice to the climax of "God is a Spirit, and they that worship Him must worship Him in spirit and in truth." We cannot believe in a God who sent bears to devour naughty children, who sent fire from Heaven to punish not only the presumption of certain men, but all their innocent offspring. But we can well believe that the Israelites saw God's wrath in some catastrophe, as do all primitive people and many who are not primitive. We do believe that interference with God's purposes brings destruction and suffering, not only to those who err, but to many who are innocent.

The teacher who is ready to approach serious questions *with respect for the opinions of others, and with humility as to her own*, is not likely to find much difficulty. She will have no desire to show off her own intellectual superiority by flippant treatment of what is sacred to others, and she will

have still less desire to make children question the wisdom of their own parents. One useful hint is that we need never be in a hurry to teach to children what is new to ourselves. What is new to us bulks so largely in our minds, that it is apt to seem much more important than it really is. It need not, for instance, hurt a child to believe that disobedience, the eating of a forbidden fruit, put Adam and Eve outside the happy garden of Paradise where sin puts us all every one. No parent is likely to object if the teacher should add, that if God sent an angel to keep them out, it was only until they had made themselves good enough to go back, and that some time He would send another angel to guide them, that they might "enter through the gates of the city," where "they that do His commandment have a right to the tree of life."

One must realize too, that there still exist certain persons, who recognize no halting place between belief in a literal Garden of Eden and utter immorality. And honesty does not consist in keeping in the background important points of agreement, and printing in large letters un-important points on which people are likely to disagree. One would not willingly tell children the story of the Flood, but a modified, or rather a shortened version might be given in connexion with the sight of the rainbow. Here, however, we want no picturing, we want no vivid imaging, far less do we want the realistic picture which called forth the remark: "Eh! there's a wee laddie droonin'; eh! what a shame, what had *he* done!"

The story of the Creation is a beautiful poem, and when one has been told that a child in an elementary school in London, on being asked who made the world answered doubtfully "The County Council?" one feels that the first chapter of Genesis may be called a mine of truth, as well as of beauty. The words in the margin, which seem to be a literal translation, "and the evening was, and the morning was," can be substituted for, "And the evening and the morning were the first day." If any stickler for orthodoxy, and such can exist among little children, wishes to discuss the "days," it can at least be pointed out that these could not be days like ours, which are measured by the sun, as the sun is not created till the fourth day. Perhaps here he might be taught that "A thousand ages in Thy sight are but as yesterday when it is past." I would repeat, tell no story that does

not seem to you to have a moral and spiritual value, and concentrate your efforts on bringing out that truth.

I have always begun with the story of Abraham, and here the only difficulty is the intended sacrifice of Isaac; the story of Hagar and Ishmael we may leave out altogether. The children must first be given some idea of the meaning of a sacrifice. We can tell them that just as we show our love to our friends by giving them of our best, so did people in days long gone. But how could they give to God, whom they could not see? They could at least give something up, so they took of the best of their flocks, killed the animal, and burnt its flesh on an altar or table of stones. The smoke rose to the heavens, and God would understand, because He knows what we all mean. Abraham did this as others did; but one day a thought came to him—it seemed like a voice speaking to him, telling him that he should show his love by giving up his very dearest. And so we follow the story—the words are perfect in their simplicity—till the crisis comes, and then the new thought comes to him, that God, who was his Friend, who had made the world so beautiful, from whom comes love itself, could not want a father to kill his son. In two ways, from two points of view, we may use the expression, "God spake." We may believe what we are never told, that a literal voice spoke from a literal Heaven of cloud and blue space. Or we may believe that the Great Spirit wrought within the soul of Abraham, as within the soul of every one of us, bidding us struggle to do the best we know, and struggle for our very lives to know the best.

We are none of us inclined to care for Jacob the Supplanter, and the children, to whom people are either wholly good or wholly bad, are sadly disappointed when the beautiful Rebecca, whose story they have loved, actually suggests to her son that he should deceive his blind father and cheat his brother. "We thought she was nice, and now she's horrid." The poetic justice by which Jacob is cheated in his turn appeals to them, and they become sorry for him and admire the great love he bore for Rachel.

Robert Bird's *Joseph the Dreamer* (Nelson) should be in every infant and junior school, and it can be followed pretty faithfully. Though the story is much expanded, it is so beautifully told and so suitable that it can be followed all the way. It will supply a background for all the stories that follow.

It is extraordinary that a writer so appreciative of the story of Joseph as is Dr. Hayward, should have said that the story of Moses is virtually useless for school purposes. That story of the devoted mother, who would risk everything to save her baby, and whose love made her conceive a way of escape, which resulted in the saving of the whole nation, useless for school purposes! Not only the love of the mother, but the womanly instinct of the princess and the picture of the little sister eagerly watching on the bank, and best of all the return of the baby to its mother, "paid wages for nursing her own baby!" all these delight the children, and are full of human interest.

Even children of six to seven can be struck with the fact that the monstrous and inhuman order to kill the infants was the first act in the great deliverance, that through this one of the despised slaves became learned in all the wisdom of Egypt. Children think far more than is generally allowed by the theorists. It was a girl of seven, whose mother had passed from riches to poverty, who said: "I always think when people lose money and things, it must be right because God does it." "Oh, yes, because some very poor person might find it," said a little boy. No more was said till a fortnight later, when in the story Joseph revealed himself to his brethren with the words: "Be not angry with yourselves . . . for God did send me before you to preserve life." Then the child struck her hand on the table, saying: "Now I know why wrong things happen—good comes out of them!"

That man proposes and God disposes is most strongly brought out in the whole story of the Exodus, without any undue dwelling on the plagues of Egypt. That one man, verily inspired of God, should brave the whole power of Egypt and lead forth a nation is surely far more wonderful, and miraculous means wonderful, than that he should vie with "sorcerers" in producing frogs or turning rods into serpents. "The magicians of Egypt did so with their enchantments." Many commentators show that the plagues had natural causes, and perhaps Moses with his long sojourn in the wilderness knew even more than the wise men of Egypt. That he should, by God's help, transform a rabble of slaves, who murmured over every hardship and despaired over every difficulty, into a nation before whom "the inhabitants did melt away," at the sound of whose trumpets the walls fell

down, these are the real miracles, the true wonders, which fill our hearts with awe, which make us realize that within man and woman dwells the power of the Almighty.

The children should at some time be led to see that God still inspires to all great deeds, and the very best story for that is the story of the inspiration of Joan of Arc.

The rest of this story, up to the final settlement in the Land of Promise, is dealt with in *Help in Telling Bible Stories*, and the question of making these stories real by the aid of good illustrations is fully discussed in its introduction. If the story of Joseph has been taken from Bird, and if favourite stories have been re-told when asked for—a very different matter from revision for the sake of impressing facts—possibly no more Old Testament stories may be wanted in the Infant School. But a few words may be said for those who wish to go on further. The story of Ruth we tell annually at the time of harvest. There is little that is suitable in the Book of Joshua and in the Book of Judges; the most suitable stories are those of Deborah and of Gideon. In the first, one would wish to bring out how the bravery of one, whether man or woman, can create bravery in others. Children are quite capable of understanding that Jael thought she was right in killing the enemy of her people, and the ghastly details need not be given. The story of Gideon brings out well the uselessness of those that are feeble hearted, and of those who are wanting in self-control. As to the story of Samson, it need not be told till the children are old enough to understand a very different state of society from that to which they are accustomed. Or it may be told as the story of a man who was dedicated in his early youth, as they themselves have been, but who made friends with the enemies of his people to his own undoing. One class of children were told of Samson as a man who could not keep his love for one wife, but always wanted a new one, and a girl of eight made the only remark, a somewhat surprising one, "I should not like to have his nature." His death is a fine example of "man's high sorrow over his own failure."

The stories of Samuel and Saul, of David and Jonathan are much more easy to deal with. All teachers should read Browning's *Saul* for their own inspiration.

Turning to the New Testament, all teachers will desire to tell of Him who went about doing good, of Him who showed us the Father. Besides the stories of the birth, the flight

into Egypt and the home at Nazareth, it may be enough to tell of the blessing of the children and of the cures wrought on those who had faith. Such simple and beautiful stories as the Prodigal Son and the Good Samaritan should not be left out, and young children can understand something of the parable of the talents and of the merciless debtor. For children of tender years it is surely better to suppress all such details as are terrible and tragic. A lesson may be taken from the answer given by a child of eight to her little sister of five. They were playing church, and the little one stopped in the middle of "There is a green hill far away," to ask, "What's c'ucified?" "Oh, nothing," was the first answer; "do go on." Persistence brought out, "You're too little to understand," but that was met by, "How'd you like mammy to say that to you?" and then reluctantly came, "Well, it just means killed." "Why couldn't they say killed, then?" said five-years-old, and resumed her singing. The child of eight knew better than many adults, that for her tender little sister this was enough, but who knows how much she herself had suffered in gaining that knowledge?

There are nowadays many most helpful books, and among them are those that have been written for the reformed Sunday Schools of different denominations. In this connexion, perhaps a word of protest may be allowed.

We are not, of course, obliged all to think alike, but it does not seem to me that the ordinary forms of expression, which are used in every Kindergarten, are quite the right methods in which to express what has been given as a religious lesson. The right form of expression for everything ethical is surely, "Go thou and do likewise." The story of the Child in the manger should result in more effort to do loving service for the mother and baby at home, its spirit is not expressed in free drawing or modelling. Our own children have never been seen to go to the sand tray to represent a Bible story, as they do constantly and quite spontaneously for other stories. Assuredly this is not from want of interest. Is it not right even for children to have something in which they breathe a different and a rarer atmosphere? No one would interfere with the spontaneous representations of children unless these were clearly harmful. But that a class of children in school should be taught to act out the Good Samaritan, as has been done, grates on one's feelings. A touching story is told of some children, one of whom was

hopelessly paralysed, playing at Christ curing the lepers. Suddenly the little Christ paused, held up his hand and said, "Stop! Freddie, I'm going to cure *you*. 'Arise and walk!'" There was bitter disappointment at the failure, of irreverence not a whit, but it was a child's own thought and act. On the other hand, when some children had been told the story of *Water Babies*, it was a young teacher who set them to model in clay the chair of Mother Carey, thus making concrete what should never have been materialized. And it was a young child who, when she heard how Tom found Mother Carey sitting so still, and she explained to him that she made things make themselves, said quickly, "Oh, I know who that was, that was God."

To set children, for instance, to model a horn after the story of the anointing of the shepherd David does not seem to me to deepen the desired impression. The story tells of an ordinary shepherd boy, suddenly called away from his daily task to be set apart for a great work for his people. Let us do our daily work well, God might use one of us, is what we want to impress; the horn is but a minor matter, and while modelling, how can we keep the children's minds from wandering to all sorts of things? In the day school, I would rather, after necessary exercise, pass on to something recognized as work, and in the Sunday school after, perhaps, singing, "Help us to be good," let the children go home to try.

The learning of texts by rote is not necessarily part of religious teaching, and is often most irreverent. But the learning by heart of all beautiful things has a religious bearing. "Only be thou strong and very courageous," are words to repeat again and again in the story of Joshua. The words of Ruth to Naomi are perfect in their beauty and simplicity. If the children have heard the story of the shepherd boy David, then is the time to teach Psalm xxiii., and there is a booklet, *The Song of our Syrian Guest* (Drummond's Tract Depôt, Stirling), which gives beautiful and enlightening details about shepherd life. When the story of the Good Samaritan has been told, then is the time to teach the first and greatest commandment, and the second which is like unto it, the two commandments on which hang all the law and the prophets. There is no use trying to teach to little children the whole of the Ten Commandments, but the first, the fifth, sixth, eighth and ninth, and even the tenth,

can be explained and repeated frequently, till they are fairly well known. Psalm c. is easy, and can be learnt at any time, especially at a time of thanksgiving. When the Israelites cross the Red Sea, Psalms xxxiii., xxxiv. and xlvi., lxxv. and cxxiv. can be read, and one or more of the most suitable passages learnt, e.g., "Our soul is escaped, as a bird out of the snare of the fowler, . . . Our help standeth in the name of the Lord, who hath made heaven and earth."

This little article is far from complete, and it is intended to be far more suggestive than prescriptive. The beauty of holiness will always attract far more than the fear of punishment will deter. There is a German word *Gott-einigkeit*, Oneness with God, which appealed to Froebel more than the word Religion. It is Oneness with God that we seek for our children, and it will not come to any of us who keep our religion apart from all else. It will at least come nearer to those who give to religion the meaning Froebel gave, "a continually advancing endeavour."

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BOOKS OF REFERENCE

- The Bible for Home Reading*, Part I. C. G. Montefiore. (Macmillan, 4s. 6d. net.)
- Joseph the Dreamer*. Robert Bird. (Nelson & Son, 5s.)
- Jesus the Carpenter*. Robert Bird. (Nelson & Son, 1s.)
- The Jewish Church*. Dean Stanley. (Murray, 3 vols., 2s. 6d. net. each.)
- Help in Telling Bible Stories*. Isabel Murray. (Froebel Society, 1s. 6d. net.)
- Telling Bible Stories*. Louise S. Houghton. (Bickers & Son, 3s. 9d. net.)
- The Old Testament Story Told to the Young*. Gladys Davidson. (Werner Laurie, 6s. net.)
- Stories and Story-Telling in Moral and Religious Education*. Edward Porter St. John. (Pilgrim Press, Boston.)
- How to Tell Stories to Children*. Sara Cone Bryant. (Harrap & Co., 2s. 6d. net.)
- Suggestions for a Syllabus in Religious Teaching*. G. B. Ayre. (Longmans, Green & Co., 1s. net.)
- Bible Manners and Customs*. G. M. Mackie. (A. & C. Black, 6d.)
- Egypt*. Peeps at Many Lands Series. (A. & C. Black, 1s. 6d.)
- British Museum Guides, *The Egyptian Collection*. (Harrison & Sons, St. Martin's Lane, 1s.)
- Froebel's *Mother Songs*, trans. by F. and E. Lord. (William Rice, 2s. 6d.)

The following rhymes with their explanations: "Mowing Grass," "Pat-a-Cake," "The Nest," "The Flower Garden," "The Pigeon

House," "The Family," "Brothers and Sisters," "Boy and Moon,"
"Light Bird," "The Bridge," "The Knights," "The Church Door,"
"Closing Thoughts."

Froebel's *Education of Man*, trans. Hailmann. Sections 10, 11, 21, 51, 60,
61, 63, 64, 75, 88, 98, 99, 105.

THE HEALTH OF CHILDREN

DURING the first few years of life the mother is the most potent agent in training the child. She inculcates those habits which may be termed fundamental, since on them depends the welfare of the child. Such are the habits that impress the comfort of cleanliness, the regularity of meal times and of bodily functions, and that determine the duration of, and time for, sleep.

When the child is of an age to attend school the teacher shares with the mother the responsibility for its well-being; indeed, upon her devolves the major portion of the responsibility, since the greater part of the child's conscious life is passed under her care. The child now leaves the freedom of home for the discipline of school. His day is mapped out for him, and the arrangement if a judicious one will render him happier, and he will not feel this life of control irksome. It is for the teacher to remember that immature muscle and immature nerve cells soon tire and demand frequent change.

RIGHT CONDITIONS FOR HEALTHY CHILDHOOD.

SLEEP.—Part of the afternoon session in the lower classes of the infant school should be given over to sleep. Children of seven years of age and under need at least thirteen hours sleep a day. Sleep time is the time of growth—it is then that the waste products, the products of muscular and mental work, are removed. The heart-beat is then quieter and less frequent, since less force is needed to drive the blood over the recumbent body, and the breathing is slower and deeper. So both heart and lungs, as well as brain, get more rest. Sleep, then, must be sufficiently long and if possible dreamless. A child can better stand deprivation of food than curtailment of the hours of sleep. In both cases the result will be seen in stunted growth, but the effect will be more marked from loss of sleep.

The children who attend the Infants' school or Kindergarten should be in bed at six o'clock at night. The hours before midnight are the most valuable; it is then that the child falls into the deepest and most refreshing sleep. Many children in the lower classes of the infants' school need a sleep of an hour's duration in the afternoon; and provision should be made for this. In some schools a light wooden framework has been fitted with a number of small hammocks. Such an apparatus is easily removed and easily cleaned. Some children feel no need for this rest; but all should be made to lie down and remain quiet. In a few days' time it will be found that the majority fall asleep. Those who do not acquire the sleep habit should be allowed to play quietly.

For the child of the slum this siesta is often an urgent necessity. At night he either sleeps in the common sitting room or shares a bedroom with adults. In the first case his bed will not be prepared until a late hour, because it must not encroach on the scanty space, and in the second case his sleep may be disturbed by the entry of late comers. Sometimes the child is locked out in the street until the return of his mother with the key. Owing to such untoward circumstances rarely does he get an adequate amount of sleep. The afternoon nap goes to make up the deficit.

The position taken during sleep is of importance. The child should rest on his right side. If he rest on the left the work of the heart is impeded. If he sleep on his back the blood tends to congest in the region of the spinal cord, and bad dreams will be the result. The child should not be allowed to sleep in a sitting posture with the head bent over the chest. Such a position impedes breathing, narrows the chest and causes headache.

FOOD.—The length of the school morning fixes to some extent the time for meals. It would be well here if cause and result could change places, and the time for the midday meal fix the length of the morning session. For the youth of fifteen five hours should be allowed to elapse between two meals. Younger children should be given meals at intervals of from four to four and a half hours. If the child rises at six (the hour at which most children wake), he must have breakfast no later than half-past seven. This fixes the dinner hour at twelve or half-past twelve. If the interval between meal times be too long, one of two things will happen. Either the child comes to table so hungry that he "bolts" his

food, or he comes exhausted, and with exhaustion the desire for food passes away.

One of the faults of the modern school is that it places the dinner hour too late in the day. The young girl attending a High School gets her dinner at half-past one, far too late an hour. To compensate for this a small luncheon is taken about eleven o'clock; but with well-arranged meal times this lunch would not be necessary. Many little children, however, feel the need of such a light luncheon as a small mugful of milk taken about ten o'clock in the morning. Some digest their food rapidly; others, the nervous ones, make but poor breakfasts. Delicate children such as those who have a tendency to rickets, or who are prone to catch cold, derive much benefit from this daily feed of milk. It gives them the fat they need, and gives it in a digestible form.

Neither highly seasoned dishes nor fried and greasy foods should be given. They are indigestible and they vitiate the child's palate, causing it to reject plain, wholesome fare. Some people give children bread fried in bacon fat instead of bread over which bacon fat has been poured. The one dish is indigestible, the other digestible and nutritious. So an egg that has been fried has far less food value than one that has been lightly poached. In the first case the larger part of the white of the egg has been converted into a horny material that will give no nourishment, but will, on the other hand, irritate the intestinal tract.

The child's craving for sweets should be satisfied; it is a natural one. He needs a food that readily supplies him with energy—sugar is such a food. Sweets should be taken at meal time, preferably at the end of the midday meal after hunger has been appeased. The sweets given should be of a wholesome kind, such as toffee or chocolate. Sweets containing nuts are very indigestible.

Children should be trained to eat slowly, and to chew food thoroughly. Food well crushed by the teeth is easily attacked by the various digestive juices. Much water should not be drunk at meal times, it should rather be drunk at the end of a meal. The child is inclined to drink deeply, so distending the stomach with water that it is unable to take the requisite amount of food. Children are always more thirsty than adults. They are growing fast, and water is needed to aid in the tissue changes that are occurring. Most of the

children in the Infants' School need a drink in the course of the afternoon. They should be trained to drink slowly. Water hastily gulped does not quench thirst, and the restraining of the desire to drink greedily is an effort of self-control. Cocoa is the only form of stimulant which should be given to children, as its stimulating properties are mild, and it has definite food value.

In some of the poorer districts of our large towns it is not uncommon to see a child making an alfresco meal of bread and jam. This is but a poor meal. Jam is no substitute for butter or dripping. Fat in some form is an essential part of a child's diet, and if it be omitted the child will develop rickets. A child suffering from this disease is known by a pale face, stunted growth, thin dry hair, swollen wrists and ankle joints, prominent abdomen, flat feet and bowed legs. He is prone to catch cold. Sometimes the voice becomes thin and weak, and the child will appear so dull that the teacher classes him among those who are mentally deficient. Only in extreme cases however will a child exhibit all these symptoms. The probable origin of the trouble is some digestive disturbance caused by injudicious or insufficient feeding and it is thought to arise from a lack of fat in the diet. The remedy is to add some easily digested fat to the child's daily fare; such a fat is cod liver oil or cream. The child should have plenty of milk to drink; the red gravy from the meat should be reserved for him. Twice or thrice a week he should be given a lightly boiled egg. He should be warmly clad, and live as much as possible in the open air.

HABITS.—One of the fundamental habits that should be formed during infancy is regularity in the bodily functions. Never should a child be suffered to become constipated. If, at any time, this state should arise the mother must carefully diet the child. An apple eaten before breakfast, whole-meal bread, stewed fruit all act as correctives. Castor oil is a safe drug to administer. It acts as a lubricant, making it easy for the congested material to pass along the intestines. Sometimes constipation is caused by a deficiency of fat in the diet, the fat being needed to act as a lubricant. Sometimes the condition is due to want of exercise.

The child who suffers from this complaint is known by a sallow skin and dark, puffy lower eyelids. Material that should have been excreted has been reabsorbed into the system, and is the cause of the unwholesome appearance.

The child will be lethargic, will be subject to headaches, and its sleep will be disturbed by dreams. If the condition be not altered, other and more pronounced troubles will follow.

A fairly common childish ailment during summer time is diarrhœa. In this case the food is hurried through the digestive tract and sufficient nourishment is not absorbed. The cause of the trouble should be ascertained. If it is due to an error in diet, say the taking of unripe fruit, a dose of castor oil should be given to remove the irritant. After this treatment the intestines will often return to their normal conditions with perhaps the lapse of a day. If the trouble continues, a food should be given that is so readily assimilated that it leaves little to be expelled. Such a food is arrowroot. The intestinal tract is thus given little work to do, and is given time to regain its tone. In cases of prolonged diarrhœa the child may become so exhausted that it is hardly able to take nourishment. A strengthening food that may be administered in this case is made of white of egg solution. Two whites of eggs are poured into a half pint of water, a pinch of salt and a teaspoonful of brandy are added to the mixture. This food may be given at short intervals of time.

CLEANLINESS.—Another fundamental habit that can be fostered at school is the desire for personal cleanliness. All the surroundings of the child should express order, and should be kept scrupulously clean. The child who comes to school unwashed and untidy must be made to realize that he is "out of the picture" in that class room.

In large families it is the work of the elder children to wash and dress the younger ones. The proper performance of this might well be taught practically to the children of the upper standards in the course of the lessons on mother-craft. It would impress upon them the importance and dignity of the work. They should understand the need for delicate handling of the ear, and for keeping the nasal passage free. If this last fact were emphasized, the number of children suffering from adenoids would be lessened.

DRESS.—The difficulty to be faced here is to supply a dress that will satisfy the needs of the child and be within the purchasing power of a slender purse.

The mother requires that the fabric may be durable and easily washed, and that the number of garments may be as few as possible compatible with warmth. The fewer the

number of garments the less the amount of mending, and the fewer garments will there be in the weekly wash.

The English climate is changeable, and the material chosen for wear next the skin should prevent the wearer suffering from the variations in the weather. Wool is thought to be the best material for the purpose. It is a non-conductor of heat, and so will not permit the bodily heat to be dissipated. It is elastic, and adapts itself to the shape of the wearer. It is hygroscopic, and by taking up the water of perspiration saves the body from becoming chilled after vigorous exercise and in hot weather. Wool is costly to buy : but washed carefully, it is durable and therefore cheap in the long run.

For a girl the following dress will satisfy all requirements :—

A knitted woollen vest coming down well over the hips and having sleeves. Such a vest the child is taught to knit at school. A pair of dark serge knickers held into the waist by an elastic band. These should be provided with removable washable linings. Flannelette is inflammable and should not be used for outer garments, but used for linings under the knickers there can be little danger of its catching fire. A serge skirt attached to a petticoat bodice and worn with a woollen jersey forms the over dress. A washable pinafore should always be worn. In summer time a cotton smock could replace the serge skirt and jersey.

Foot gear is important. Chilled and wet feet are responsible for many serious colds.

Worsted or woollen stockings should be worn. Good boots are expensive, and yet to buy cheap boots is false economy. The clogs of the North country children are cheap and durable, but they are noisy.

In the schools of the future, arrangements might be made for the children to change their clogs, on coming to school, for a pair of the string-soled shoes worn by Spanish peasants. These are cheap and light, almost soundless, and are pliant to the growing foot of the child. Children could be taught to walk gracefully in such shoes.

The boy needs a woollen vest similar to that worn by the girl. His serge knickers should be supported by braces and have removable linings. He should wear a flannel or flannelette shirt and a woollen jersey. His foot-gear will be similar to that worn by the girl.

The part of the dress often omitted is the knicker lining,

and this is a most essential part. Commonly the serge knickers are worn many weeks, sometimes months, before they are washed. If they are worn next the skin they must become fouled on the inner surface. This renders them harsh, and they will chafe the child. Rarely will the child be unconscious of the irritation caused by them. This condition is often the origin of the malpractice to which some little boys are addicted.

SOME OF THE COMMON AILMENTS OF CHILDHOOD.

ADENOIDS. Many children are afflicted with a growth of glandular tissue in that part of the air passage that lies behind the nose and soft palate. This growth is known as adenoids. It may so close the passage through the nose as to cause the child to talk as if he had a cold in the head. It often blocks the opening of the tube that leads from the throat to the ear, and so causes partial deafness. By broadening the face near the bridge of the nose and so obliterating curves, and by forcing the child to keep his mouth open, it gives him a stupid, vacant look. It presses upon certain bloodvessels, lessening the supply of blood to the head, with the result that the child becomes as dull as he looks, and he suffers from headaches. Adenoids are often accompanied by enlarged tonsils, and these, by further blocking up the air passage, render breathing still more difficult. Children suffering from these growths are troubled with colds in the head and chest ailments. The whole tone of the child is lowered by them. Fortunately a small operation will remove them. As a consequence of the operation, the child will be ill for a day or two only, but the improvement that will then take place in its health, appearance and mental capacity is often little short of astounding. The growth may recur; as a rule, it does not. Apart from any question of an operation the growth of adenoids may be checked, and may even be prevented altogether by making the child breathe through its nose. As the air passes through the nose dust particles are removed from it by the minute hairs found within the nose; the gummy secretion of the nose acts as a germicide, and the air is warmed and rendered sufficiently moist.

To keep the nasal passage free the mother must cleanse the infant's nostrils each day, and the teacher in the Infants' School must make all the children in her class blow their noses once or twice each day.

There are always some cases of adenoids in every large school, and considering how a child may be handicapped mentally and physically by the continuance of the growth, teachers should make it their business to become acquainted with the symptoms of the disease. Any child who often suffers from cold in the head, or who shows two or three of the signs given, should be examined by the school doctor.

GATHERINGS AND SWOLLEN GLANDS. Whenever harmful germs find entry into the tissues the part affected becomes swollen and inflamed. Here a battle is in progress between the germs and certain cells in the body. If the germs win the day the inflammation and swelling extend; if the cells triumph the germs disappear since the cells devour them. We can come to the aid of these cells by cleansing the wound, and by treating it with an antiseptic lotion. In the first place we free it from that material in which the germs multiply; in the second case we aid in killing the germs.

If the inflammation appears below the skin, and is not deep seated, it is easy to deal with. The part can be washed with warm water to which has been added boric acid powder, a teaspoonful to every pint of boiling water, or a 3 per cent. solution of *lysol* may be used. In neither case should the solution be hot enough to burn the child. A piece of medicated lint that has been dipped in the *clean* hot solution should be placed over the sore, and kept in position by a light, firm bandage. A small gathering should be dressed night and morning. The lotion that has once been used should be thrown away, and the lint should be burnt; neither should be used again. In most cases the gathering will heal in two or three days. If it occurs in a limb, and the part is very swollen and painful, it would be well to put the limb in a sling to prevent its being used. Antiseptic treatment and rest will probably effect a cure.

Some children are prone to swelling in the glands of the neck. Here, again, is evidence of the entry of harmful germs. The glands have retained the germs, thus preventing them from passing into the blood stream and being distributed over the body. Within the glands are numbers of those cells that devour germs. The fact that the glands have swollen shows that so far the germs are getting the better in the fight.

The germs that infect the glands of the neck come there by way of the mouth. Children who are mouth breathers are more likely to be attacked than those who breathe through

the nose. Or the germs may have been put into the mouth on a dirty "comforter."

The child affected should live an open-air life and sleep in a room with windows wide. He should be given plenty of nourishing food, such as fresh milk, cream, eggs, be warmly clad and have sufficient sleep. On no account should the glands be rubbed. To do so would be to inflame them still more. The child should sleep by himself, as there is fear of his infecting those who come in close contact with him, and he will not have such fresh air if others live in the same room with him.

OPHTHALMIA.—This is the name given by most people to the inflammation of the thin skin covering the eye and lining the eyelids. As this skin is very sensitive, a rough cold wind will cause it to inflame, or it may be inflamed by overstrain of the eye. Children who are in a poor state of health through insufficiency of food or of fresh air are most likely to be sufferers. The inflammation is often accompanied by a discharge which mats the eyelashes together. Sometimes the lashes fall out and the eyelids become swollen at the edges. If the condition becomes chronic the eyelids will permanently assume red, swollen edges.

The eyes may be bathed with a weak solution of an anti-septic lotion. The child must be seen by a doctor. If the inflammation is not arrested it may extend to the cornea, the clear transparent tissue through which rays of light pass to the interior of the eye, and the cornea may be rendered partially or wholly opaque, bringing partial or entire blindness to the eye.

The discharge from affected eyes is extremely contagious, and the disease spreads rapidly through a school. The child who is suffering rubs its smarting eyes with its fingers, and then handles some book or piece of apparatus that another child will handle later on; or the child uses the washing basin and towel that is common to a number of children. Thus the disease is spread. Children who show signs of ophthalmia must be excluded from school.

DEFECTIVE EYESIGHT.—When the vision of children in a school is tested the examiner finds that the number of cases of short-sightedness increases steadily as he passes from the classes in the Infants' School to those of the upper standards. There is nothing inherent in the eye causing this rapid deterioration. It is our business to find out the conditions that are responsible and alter them.

The young child is long-sighted : he sees best those objects which are twenty feet and more away. To see nearer objects certain muscles are brought into action. Attached to the eyeball are three sets of muscles that turn it within the socket. When near objects are viewed the muscles that turn the eye towards the nose are contracted. If the child looks at things that are very near he squints.

This pull of the muscle puts a strain upon the tough, white coat of the eye, the sclerotic, to which one end of each muscle is attached. In youth, the tissue of which this coat is composed will yield to constantly recurring or continued strain, and the eyeball will be stretched. This elongation of the eyeball places the sensitive retina on which the rays of light fall, out of focus for rays from a distant object. Concave lenses must in such case be worn to aid the eyes.

It is evident that children must not be given occupations that exact near eye work if the eyesight is to be preserved. Young children, if taught to read at all, which is a doubtful advantage, should be taught to read from the blackboard. If coloured chalks are to be used they should be light in tone. Children's books should be printed in clear, bold type (double pica), upon cream-tinted paper. The reading lessons for young children when books are employed should not last longer than ten minutes. Drawings should be made with chalk held at arm's length. Children up to six years of age should not be made to write between ruled lines, nor should they be taught needlework or knitting.

Certain signs show that a child's eyesight is not good. He suffers from headaches ; he frowns and knits his brows ; peers or squints at his work. Sometimes he holds his head to one side and looks with half-closed eyes. He makes mistakes when reading from the blackboard. For a time he reads well, then mistakes occur, and the mistakes become more frequent. This is not due to inattention, but to fatigue in some of the eye muscles. He complains that the letters dance.

If a child often suffers from headache or shows any of the symptoms named above, the teacher must test his eyesight. Each teacher should keep a card printed with two lines of different kinds of type, of a size and clearness that can be read by a person with normal eyesight at distances of twenty feet and forty feet respectively. This card must be kept out of sight of the children, lest they become familiar with the letters.

It must be kept clean. When used for testing it should be placed in a good light, and the child to be tested should stand at a distance of twenty feet from it. He should be questioned as to the letters of the smaller type. Should he answer correctly he may be classed as having good sight. If he fail, he should be tried with the line of larger type. Should he pass this test, he may be classed as "second" as regards sight. Should he fail to read both lines he may be ranked in the third class.

Children with either second or third class eyesight must be seen by the doctor as soon as possible. They should be placed near the front of the class and excused from lessons that involve near eye-work. Children who rank as "third class" should be taught in special schools where manual work takes a prominent place in the curriculum, and in which little writing or reading is done. By such treatment these children may be saved from drifting into the ranks of the blind.

DEFECTIVE HEARING.—The child who is deficient in hearing is generally inattentive. Perhaps in the past he tried to hear, but has been discouraged into wilful inattention. He has rather a vacant look. Lessons that are interesting to others do not appeal to him. Sometimes in an effort to hear he sits with his mouth open, turning the less deaf ear towards the speaker. He asks that words and sentences may be repeated. He, himself, repeats incorrectly.

The child's hearing should be tested by the teacher in a quiet room. The teacher must first find out how far away a child with normal hearing may stand and yet hear her whisper. The child to be tested is to stand at this distance, with her back turned to the teacher. The teacher will then whisper distinctly such words as twenty-two, forty-nine, any word that has forceful consonants, and the child must write down or repeat the words whispered. Each ear is to be tested separately; a small pad of cotton wool should be placed in the ear that is not tested, and the child must be told to close its mouth.

The teacher must ascertain the distance at which the child can hear, and report to the doctor.

The deafness may be due to a collection of hardened wax in the ear. The child should be told to lean its head on its hand, so that the affected ear comes uppermost. Into this the teacher should then pour a few drops of warm, not hot sweet oil. This will soften the wax, which can then be removed

by syringing. The doctor or school nurse should do the syringing. The amateur nurse may inflict serious injury upon the child.

An attack of measles or scarlet fever, or a throat affection, is not uncommonly followed by inflammation of the middle ear. This has reached the ear from the throat by way of the Eustachian tube. It is attended with much pain, and there is usually a discharge from the outer ear. This shows that the membrane which divides the outer from the middle ear, and which acts as a receiver of sound waves, has been pierced. A child who has discharge from the ear should be seen by the doctor as soon as possible. Serious results may follow neglect. The hearing of that ear may be lost, and the brain may be affected.

Sometimes deafness arises from a defective hearing apparatus. In some cases there are outward signs of this in malformed outer ears. Children who are deaf must attend the special school where they will be taught lip-reading. Children who have learned lip-reading are often known by their particularly bright, animated appearance; for directly a means of communicating with them has been established, the vacant expression gives way to one of intelligence.

BLEEDING AT THE NOSE.—Cases of this kind are most likely to occur during hot summer weather. The child should be taken to a quiet room and placed in a reclining chair. A pad of cold wet rag placed on the bridge of the nose and something cold at the nape of the neck will often stop the bleeding; raising the arm above the head also helps to check it. The child should not be allowed to bend forward over a basin, and it should be discouraged from blowing its nose just then, as both actions tend to bring the blood to the nose. If the bleeding continues, the child must be seen by the doctor. Sometimes the bleeding is caused by constipation; the child needs a purgative.

SPRAINS AND BRUISES.—These should be bathed with water as hot as can be borne. This treatment is good when the harm is recent. After this cold wet rags may be applied. For a sprain a firm, not tight, bandage will do much to reduce the swelling and give support to the injured part. Rest is an absolute necessity for a sprain.

Children rarely hurt themselves when they tumble. If a child is sick after a fall it should be made to lie down in a quiet room, and cold wet rags should be put upon its head.

If it remains dazed by the fall a doctor should be sent for. It is suffering from more or less severe concussion of the brain.

BURNS AND SCALDS.—A bottle of Carron oil should always be at hand for the treatment of burns and scalds. This is made by mixing equal quantities of linseed oil and lime water. If the injury is severe the clothes should not be drawn or pulled off the damaged part. They should be cut away. Lint soaked in Carron oil should be applied, and over this should be put a layer of cotton wool, and these dressings should be kept in place by a light bandage.

The burn has been a nervous shock to the child, who must be kept as quiet as possible.

COLD IN THE HEAD.—People are too prone to regard nasal catarrh from the fatalist's point of view. It comes: it must be endured. This is wrong. The recurrence can be prevented, the intensity diminished by the use of a nasal douche and warm salt water. The nasal douche is small, cheap, and easily used. The douching does not take five minutes, and is not unpleasant. If those who are frequent sufferers would use the douche once a week, they would be surprised to find what immunity it gave them from this unpleasant malady. Frequent colds in the head cause a thickening of the mucous membrane lining the nose, and this in its turn will make colds in the head more frequent.

INFECTIOUS DISEASES.—The infectious diseases most common to childhood are measles, whooping cough, chicken pox and scarlet fever. The premonitory signs of these are cold in the head, headache and sickness, and a rise in temperature. All of them are infectious in the early stages, when as yet no rash has appeared.

MEASLES.—An epidemic of measles occurs in our large towns every two years or so. It breaks out most violently in the Infants' School, where the children from three to six years of age fall victims. Most of the elder children have been through an attack, and this has rendered them immune for the future. The majority of people are infected once in their lives.

When an epidemic occurs, the children to be most closely watched are those whose medical record shows that they have not yet been infected. Herein lies the importance of keeping a medical record. At such a time these children should be excluded from school if they show signs of a bad

cold in the head. Every fresh case acts as a new centre of infection.

Children in the convalescent stage need especial care. They are prone to such chest troubles as bronchitis and pneumonia.

WHOOPIING COUGH.—The child who has caught whooping cough does not always give the characteristic in-drawn "whoop." For some time he appears to be suffering from a bad cold. He occasionally coughs, and these coughs become more frequent and more prolonged as the disease progresses. He may cough until he is sick. During the whole of this period he is very infectious. Children who have sudden violent fits of coughing should set the teacher on the alert.

SCARLET FEVER.—The premonitory signs of scarlet fever are those we associate with a bilious attack. The child has a cold and a headache. He is feverish and feels drowsy. Sometimes he vomits. The throat is usually sore.

After scarlet fever, as after measles, the child needs the greatest care. Chest troubles, inflammation of the middle ear, kidney disease are among the ills that may come through neglect during convalescence. Again, let us utter a word of warning as to the danger of using the eyes much while they are still in a weak state. Short-sightedness is sure to result from it.

We can see how much these diseases affect children if we notice the teeth of a child who had a bad attack of fever about the sixth year of age—that is, during the period of dentition. The teeth will probably show a transverse ridge, denoting arrested development at this period. The teeth are not the only parts of the body affected. All the system suffers at the time. And yet we still meet mothers who dilate on the forethought they showed when they allowed an infected child to associate with those of the family who as yet had escaped. They explain that in this way they were saved much trouble and expense, as the course of infection was expedited, and the same physic and diet were equally good for all the sufferers. They are ignorant of the fact that every illness from which a child suffers lowers its vitality, and that the danger is not past when the period of convalescence is reached. With one child ill and another convalescing at the same time, how can the mother give to both the care they need? The children pay for the mother's lack of knowledge.

THE CLEANING OF THE SCHOOLROOM.

Every schoolroom should be swept daily. Dry sweeping is to be condemned; it sends a cloud of dust into the upper layers of the air, and this settles on walls, furniture and floor. Sawdust should be scattered over the floor before sweeping begins. This sawdust should have been watered some hours previously, so that it may be thoroughly damp; and the sawdust and dust that are swept up should be burnt. Dusting should be done with a damp duster, and this duster should be washed after it has been used. To let it dry is to set free some of the dust upon it. After the floor has been swept it should be wiped with a wet mop that has been dipped into a disinfectant solution.

The schoolroom windows should be flung wide both evening and morning, so that the children come into fresh and not into stale air. Many caretakers keep the windows shut after the room has been dusted, for fear that dust may blow in and necessitate a second dusting of the room. The teacher might arrange for a child to do this second dusting, provided that the room were aired. Windows should be more often cleaned than is usually the case. They should be cleaned as soon as they are dirty. How much light a dirty window can arrest the amateur photographer can ascertain when he prints from behind a dirty and a clear window respectively.

During the long holidays the whole school should be disinfected. The walls should be sprayed from below upwards with a forty per cent. solution of formalin. By spraying in this way the walls become damped equally all over, and are not disfigured or damaged by streams of the solution. The furniture and floor should be washed with hot soapy water to which a small amount of paraffin has been added—two or three tablespoonfuls to a bucket of water.

After an epidemic in addition to this cleansing, all books and school apparatus should be disinfected. Modelling clay should be first burnt and then thrown away. Here is one of its advantages over plasticine. It is so cheap that the sacrifice of a quantity does not involve much loss. Books can be treated at a disinfecting station. It would be wiser to have them burnt, for they are difficult to disinfect, and many of them are so cheap that their replacement is not costly.

In schools that are subjected to this periodical disinfection

there is a notable freedom from infectious illnesses; the number of cases of colds in the head are considerably reduced.

ANNIE HOME.

BOOKS OF REFERENCE.

- Manual of Elementary Physiology.* Leonard Hill. (Ed. Arnold, 6s.)
Hygiene for Students. Willoughby. (Macmillan, 4s. 6d.)
Child Nature and Nurture. Drummond. (Dent, 1s.)
Elementary Physiology. Drummond. 2s. 6d.
Children in Health and Disease. Forsyth. (John Murray, 10s. 6d.)
School Hygiene. Newsholme & Pakes. (Swan Sonnenschein.)
School Hygiene. Lyster. (University Tutorial Press, 3s. 6d.)

THE BABY-ROOM

THERE is a danger of considering work in the Baby-room as something separate, something apart from the rest of school life ; less important, because here less formal instruction can be carried on. This is probably because the teacher's ideal is an ideal of instruction rather than one of education ; because the result of work in the higher grades is more easily measured, can even sometimes take concrete and visible form, whereas the results of Baby-room work are entirely intangible, can never be tested or examined.

To understand the importance of Baby-room work teachers must realize that education is to be measured in terms of growth, and not in terms of mental content. This point of view of the child as something growing, and, moreover, as something which must do the growing for himself, is essential to teachers of all grades. Without it the school is apt to become solely an institution for handing on formulated race-experience, whereas social development¹—the ultimate end of all education, including in its wider scope all minor aims—demands that the child be educated as a social being, and for this purpose brought into contact with a miniature world of people and things. In dealing with large numbers, and for purposes of instruction, it is necessary to divide the school into classes, but it is contrary to the social ideal that these should work entirely in isolation, as is too often the case. Child should help child, class help class, and the school should be a real community.

Each stage in child life demands its own peculiar experiences, and it is the special work of education to provide these as the need for them arises. In the Baby-room this is essential. The best place for a baby below five years is a good home. If teachers would picture to themselves the day of a fortunate baby in such a one, and then contrast it with a day spent in

¹ See Bagley on the Social Aim, *Educative Process*, ch. iii.

the average Baby-room, they would find an explanation for the restlessness and listlessness too often apparent among our school babies, and perhaps be led to modify the demands made on these undeveloped infants.

At home the baby is free. He toddles up and down with his mother, or sits on the floor at her feet playing often with toys which are imitations of the very things she uses. The mother makes a pudding, or cuts out material, or washes and irons, and the baby spasmodically imitates. The mother chatters to him about their doings, putting quite naturally his active experiences into words, so he learns in the only natural way what these vague sounds mean, uses them himself, and his power over language grows. The mother sings to him, or tells him about other children or about animals, keeping always in touch with his experience, yet widening it, and so the happy day is full of real experience, and therefore of real learning. It is hardly necessary to picture the average school Baby-room. The weary babies seated in rows, hands behind their backs or at least under the desks; the weary teacher, endeavouring to teach by words with the help of an illustration or an object, *shown* to the children; her constant appeals to the babies to attend, or to listen, or not to fidget. No wonder so many teachers would "rather not undertake babies," or that so many children learn to be lazy.

The baby who comes to school is a real baby—a toddling, tottering, uncontrolled, inarticulate bud of a person, only just beginning to know himself as separate from the vast world of wonderful new things around, and certain only in one direction, namely that *he*, the centre of it all, wants to *do*, to *make*, to *control*. At this age baby is essentially a little egoist. The idea of himself as a power is beginning to dawn, and is necessary to his development. Naturally he spends all his time exerting his power, often of course in wrong directions, as he discovers from the consequences. In school this sense of power is generally crushed, and then its development goes on unguided in playground and street with undesirable results.

The most noticeable characteristic of a young healthy child is ceaseless activity, activity involving the whole self. The homelike environment which the teacher will provide will stimulate the child to be purposefully active, but she must look for the result of this activity in the child himself, and not in the things done or the objects made: these will

and should be crude and inartistic, but they mark a stage, and the study of racial development will show their importance.¹

Again, the child's interests centre round *things* rather than *ideas*, and especially round things which move or change. His attention is passive, therefore drudgery and drill have no place at this stage. It is natural for a young child's interest to flit from one thing to another—especially where unchanging objects are concerned—but as soon as he is able to modify these objects, make them active, or be himself active upon them, his attention is held for longer periods. If teachers could encourage and guide, instead of checking this activity, children would more readily gain the power to concentrate.

Since growth is the chief need of life at this stage, what conditions must be fulfilled if the child is to grow healthily?

I. He must be occupied in playful activity which will bring him a variety of experiences and also allow free expression.

II. He must be provided with healthy physical conditions.

Play in the Baby-room may be considered under three chief headings:—

(1) Constructive and movement plays—including handwork, free play, imitative and dramatic plays, rhythmic plays and romps.

(2) Nature work—care of animals and plants and gardening.

(3) Language expression—story, song and chat.

I. PLAY ACTIVITIES.

(1) **HANDWORK.**—Babies' handwork should be of the very simplest, and much freedom must be allowed. Teachers who look for accurate or artistic work will do well to consider the child at this stage in the light of his relation to racial development. Another point to be remembered is that the work of very young children should chiefly involve the use of the larger muscles, and not require fine co-ordinations of the smaller muscles.

Sometimes in occupational play the teacher limits the choice of material and definitely suggests and guides the children's work; at another time each child or group of children chooses materials or toys and directs its own activity. Occupational play may be individual, each child making a similar

¹ See Chamberlain, *The Child*.

object, or it may take the form of group work, where several or all of the children unite to carry out different pieces of work to illustrate a common idea. In both guided and free play several kinds of material and toys can be used together. Among those occupations most suited to the children will be the playful imitation of activities carried on in the home, such as the care of babies (doll play), cooking, washing, and house cleaning. The aim here is twofold: the representation of life around and the getting of experience through activity—doing for a purpose. The children must not be expected to formulate their knowledge on the subject, and no direct teaching should be given. The children *play*, and in the play come to know more of their environment, thinking and acting upon it in a natural purposeful way.

Sandwork.—The value to young children of digging and constructing with sand is well known, but provision made for this in school is not always satisfactory. Sand trays, if used, must be sufficiently wide and deep to allow free handling of the material. Small trays—about 10 in. by 12 in.—supplied with a thin layer of *dry* sand are totally inadequate; it is better for two or three children to share a larger tray and to have plenty of damp sand. Better still is a sand pile in the play garden, and in the room a trough or box, such as those described below in the paragraph on furniture of the Baby-room.

Brick-building is too often limited to the use of Froebel's "Gifts"; surely it would be an advantage for the children to have larger bricks of varying lengths; for example, cubes with $1\frac{1}{2}$ in. faces, and bricks resembling Tillick's, but again with $1\frac{1}{2}$ in. base and no graduation marks. This variety in size will give a wider experience and greater scope to the children's activity. It is unwise at this stage to expect the children to keep the bricks neatly in boxes, as fine muscular adjustments are required to do this, baskets or larger boxes where no arrangement is necessary might be used. In the next grade (children over 5 years of age) the same kind of bricks may help the children to form their first ideas of ratio, and make their first measurements,¹ and now the orderly arrangement of the bricks will help to centre attention on the relation of one to another.

Toymaking.—Babies can only make very rough and simple toys, such as the following, all of which have been attempted. Rag or paper dolls—prepared shapes may be stuffed by the

¹ See Dewey, Speers, and Tillick.

children, or a small ball (for a head) can be covered with material, the ends being left to form body and limbs, or a clothes peg can be used in the same way. Again, dolls can be dressed in paper or material, paper trumpets, scrap-books, paper kites, cardboard carts (without wheels), flags, etc., can all be made. Match boxes are useful for dolls' beds, boats, chests of drawers, punch and judy shows, etc. Whenever possible waste material such as cotton reels, wall-paper, tram tickets, etc., should be used.

Free-play is a very important factor in child life, because in the free choice and control of his play the child is learning to think and act independently. What is now baby play will gradually develop into self-directed work. A period in both morning and afternoon sessions might well be devoted to free-play, the children choosing their own toys or material; but having once made the choice they should be encouraged to abide by it for the time being. Some may choose dolls, others dolls' houses, others again toy animals, trains or go-carts, or sand, bricks or colouring materials; in this way the Baby-room will approximate as nearly as possible to an ideal nursery. The teacher's chief work is now to observe the children, notice the bent and peculiarities of each, their powers and limitations, and to help those who are lacking in initiative. She will do well to give little actual direction to the play, making suggestions only when really needed.

Rhythmic Plays.—It is often felt that there is a scarcity of suitable games and plays for the Baby-room. Surely this is only because teachers are looking for something elaborate, something which expresses a definite sequence of ideas, something which is effective, and pleasing for the adult to witness. But these are *not* the natural games of little children. At this early stage pleasure comes largely from physical movement, it is not necessarily the expression of an idea. Jumping, hopping, dancing about, clapping, and use of the vocal organs are the child's natural games. Here is the teacher's opportunity to use this impulsive activity, and by introducing the controlling power of music, help the children to regulate and gradually develop this wild energy till it becomes the rhythmic and purposeful expression of ideas. Instead of attempting to teach set dances and steps, would it not be far better to play simple music, and encourage the children to move quite freely in response? The music of the *Baby's Opera* and *Baby's Bouquet*, published by Warne, and a book

of Scotch dance music—Kerr's collection—are excellent for this purpose, being simple yet good in quality. Such simple games are Lubin Loo, Oranges and Lemons, Ring of Roses, Mulberry Bush, Blue Bird, etc., if taken simply and naturally.

Imitative Plays.—These range from the simplest spontaneous imitation of animal noises and movements, to the more elaborate dramatizations of life around, or of the ideas conveyed by story, song, or rhyme.

In the early stages the child seizes upon one prominent feature of its model, and acts out that. For instance, he neighs, mews, or roars; next he may imitate the movement of the interesting object, uniting this with the noise, as when playing trains he shuffles along, using his arms for pistons and making the whistle and puff of the engine; or in being a dog he runs on all fours, barking and pretending to bite. A still later stage shows a series of complex activities; he will play at tea parties; at brushing, stabling, and feeding his horse; at travelling in tramcar or train, and many also of the home industries are imitated in this simple way. Thus the child comes into touch with his surroundings, and so by actually living out in this way the experiences of others, does he reach a true understanding of and sympathy with life around. In the Baby-room these simple imitative plays are sometimes neglected; teachers will do well to encourage, suggest and lead the children in such imitations, playing freely with them as one of themselves. The dramatization of story or nursery rhyme is often attempted; and if babies are ready for it, this is excellent—but when it is found necessary to *teach* the actions, either the children are not sufficiently advanced, or else their originality has not in the past been given opportunity to develop. Dramatization must always be free and original, however poor the apparent results; the teacher's work here is to help by suggestion and guidance, and by herself taking a part in the play.

Music and words are not always an advantage in games. The former is sometimes helpful as an accompaniment, for example, when children dramatize sleep, or fairy life, or soldiers marching; but usually the words written for young children hinder rather than help free representation of their ideas.

Ring Plays and Romps.—In these it is the simplicity and vigour of the movements rather than the expression of ideas which gives pleasure. Words, if used, should be simple;

children often enjoy nonsense syllables in these games. Songs which introduce ideas foreign, and therefore harmful, to little children, such as love-making and parodies on death, are unsuitable and should be rigidly avoided.

(2) NATURE WORK.—Little children are naturally very fond of animals and plants, but at this stage they are workers rather than observers, so that they love to take care of and play with their pet animals, but do not notice structure. Structure is the result of use, therefore the activity should first be known; until this is understood, knowledge of structure will have no meaning or value. Let the children live as much as possible with Nature, provide them with pet animals, growing plants and a garden. The question of the keeping of pet animals by children in school is a much debated one. Some Nature lovers feel that far from there being any benefit from such a practice, it may not only bring suffering to the animal, but physical and moral harm to the children. Whenever this is the case, it arises from grave fault or misunderstanding on the part of the teacher in charge. If the keeping of pets can only be undertaken at the cost of injury to the children and animals, obviously it is wrong, and must at once be abandoned. It is essential that teachers should understand the needs of both children and animals in order that this danger be avoided. The points of view of the lover of children and that of the lover of animals are not antagonistic, they are one and the same. If life is ever to be cared for and revered as it should be, we must bring children into sympathetic relations with living things during their most impressionable years—while anthropomorphism is at its height. If we let children grow through the infant stage without personally caring for and tending animal life, we shall find them at the girl and boy stage interested, no doubt, but along the lines of curiosity and inquiry without the background of intimacy and love, to lack which is to lack the greatest essentials of the Nature lover. They will bring to the study of Nature the head without the guidance of the good heart.

Again, it must be remembered that children do come in contact with animals in the home and in the street, a contact which is generally extremely detrimental to them morally, for the home cat, or dog, or rabbit is too often merely the plaything of the children, to be tormented and worried regardless of its nature or happiness.

It is for the teacher, then, to choose whether she allows this point of view to colour the children's attitude towards animal life, or whether in her devotion to both children and animals she will take the necessary trouble, great though it may be, to ensure a happy life for the pet animal and beneficial contact with it for the children. This is already being admirably done in a few of our Infant Elementary Schools, where only one or two permanent pets are kept, which enjoy almost complete liberty.

Certainly the most real Nature study can only be carried on by going to the habitat of the creature and studying it in its free native environment, but neither his own nature nor circumstances permit such a study for the four-year-old child; his observation comes only as a result of close personal contact, he cannot long be still and watch and wait, but by taking care of his pets and helping to provide for their comfort he comes to love them. The necessity for personal contact, for living with his possession, is fundamental to the child's real interest in it—a comparison with his social relationships will show the same need here.

The baby's interest in animal life will centre on his personal pets, the dog, cat, hen and chickens, rabbits or guinea pigs, goldfish, frogs, tadpoles, and perhaps a dove or canary. Any of these may be kept easily and comfortably, provided the teacher realizes their needs, and is sufficiently enthusiastic to take the necessary trouble. It is far better to have one or two pets, give them large cages, plenty of liberty and constant care, than to attempt more, with less comfort for the animals and a less intimate contact between children and pets. Wild native animals or birds should *never* be caged or kept; in such cases the cost in suffering to the animals is in no way compensated for, and the harm to the children is great.

To children below the age of five years plant life has not the same attraction as animal life, but flowers are enjoyed for their colour, and the Baby-room should always be supplied with these, to be arranged and re-watered daily by the children; bulbs and the larger seeds, such as chestnuts (of both kinds), acorns, sycamores, etc., may be grown indoors. The interest here, as with the animals, will be largely personal, not scientific.

In the playground the Babies' garden is important; narrow strips of bed with little paths between are convenient. The

gardening at this stage does not aim at artistic effect, it is rather a purely educational occupation, its chief values being the joy and the life experience it brings the children.

If the class is large, all the babies together cannot water the plants, make holes, or put in seeds; those who must be onlookers for the moment can "pretend," imitating the activity to the accompaniment perhaps of such a song as, "In my little garden bed" (E. E. Poulsson—*Finger Plays*), or an adapted version of "The Mulberry Bush," "This is the way we sow our seeds," etc. If it is impossible to have a garden, boxes and pots can be substituted. Whatever the disadvantages under which a school labours, it is always possible to provide some gardening, and the culture which results to children of all ages from this activity makes any effort it may cost, worth the trouble. Under the heading of Nature work may be classed those plays with water, colours, sunlight and shadow, which, suggested by Froebel in his "*Mutter und Kose Lieder*," are still to many teachers an unexplored region, but one which gives scope for much thought and originality.

(3) LANGUAGE TRAINING has an important place in the Baby-room, but it is incidental, a part of the environment; and any formal teaching of the subject is out of place. We are too apt to rush children through this important stage, imagining that the making and translating of symbols is the foundation on which language is built, whereas gesture and speech, used to convey ideas, are the real foundation. Ideas to be expressed and freedom to express them are essential for language culture. Actual experiences are in the early years more potent factors in language teaching than even story, rhyme and song, though they, too, have an important place. Children should be encouraged to talk very freely about the things which interest them. The language of the story, above the level of the children's own powers of expression, must yet be simple enough for them to realize the ideas which it conveys, so that new ideas and new forms of expression are gained. Of course, stories for this stage must be very short. In song and rhyme it is not necessary that every word shall be understood by the children, so long as the ideas are either within their comprehension and of a kind interesting to them, or, if incomprehensible, such that delight is caused by the mere jingle of nonsense words, for example, "Hickory dickory dock," or "Hey diddle diddle."

Number Work.—What has been said regarding the place of

language teaching applies equally to number. The only number work that babies are ready for is the counting of actual objects of interest, and the ideas of form and size that underlie all play with toys. To count small groups of these is a legitimate activity on condition that it is done in play, and that there is a purpose which appeals to the child as real. The teacher should use the many natural opportunities which arise for the children to count their toys, etc.; for instance, their soldiers when setting them out to march, the children on the rocking-horse, the number of bricks carried in the toy-cart, the visitors at their tea-party, the plates and cups to be set for them. Number plays and rhymes may be helpful, provided the counting is spontaneous and natural as in: "This little pig went to market," "Five little dickybirds," "Thumbkin says, I'll dance," "The merry little men," etc.

The teacher in the Baby-room, if she introduces number work at all, must realize that it has its beginning in measuring by counting *for a purpose*, and a purpose which is realized by the individual who counts.¹

II. PHYSICAL CONDITIONS.

SLEEP.—In considering the child's physical needs, the teacher must not lose sight of the home conditions; she must treat the child's life as a whole, doing her best to compensate in school hours for deficiencies in home life. One of the most neglected conditions of child life at present is the need for abundant and peaceful sleep, a neglect which is noticeable in all classes of society.

It is difficult to prevent the over-excitement and over-stimulation from which children too often suffer, but teachers can do something to counteract it by giving to all the younger children opportunities for sleep during school hours. In the Baby-room a period in both morning and afternoon sessions may well be devoted to sleep; for children of five years the afternoon rest should be regularly continued; while it should be possible for any older child, who may temporarily or occasionally need sleep, to join the younger ones in this daily rest. When it is remembered that the majority of children waken with daylight and spend about fifteen hours in incessant activity, often amidst noise and confusion, it cannot but be

¹ See Dewey, *The Psychology of Number*.

considered beneficial to ensure that they should have periods for absolute rest and quiet. A lullaby sung or soft music played while the children are settled to rest, will help to ensure peaceful sleep and add to the children's enjoyment.

LUNCH.—Time may well be spared in the Baby-room to make the lunch a dainty meal. If the authorities will provide inexpensive cloths, plates and mugs, the children can arrange these and place flowers on the tables. The lunch, provided by the school where possible, or by some arrangement of small payments, can be handed by the children, and in this way refined and courteous habits will be formed. The clearing away and washing of the articles should be done by the children under the supervision of the teacher and with the help of an older child, who may be invited by the little ones.

FURNITURE AND APPOINTMENTS.—We are now prepared to consider the room, apparatus and playgarden suitable for the use of a babies' class. Remembering the importance of early impressions in the formation of ideals, taste and habits, and their influence on physical and mental health, we realize the necessity of careful choice in the surroundings of young children.

With regard to situation, a south aspect is best, with large, low, clear glass windows looking on to the garden, and a door leading directly into it. Plain short curtains can be drawn across the lower part of the window when the older children are using the garden and playground.

Besides the usual heating apparatus, it is advantageous to have an open fire with a secure high guard before it. The walls of the room may be painted in some suitable light, soft colour, with an enamelled dado of a corresponding darker shade: the colour determined by the aspect of the room. The glazed brick dado found in many Baby-rooms in elementary schools, though cleanly, is too cold for such young children. The most satisfactory floor covering is thick cork carpet; it is both warm and hygienic. Where this cannot be provided a large piece of floor-cloth, with a shiny surface from which dust is easily removed, should be laid on the floor at times, so that groups of babies may sit on it to play in the position most natural at their age. Some schools already make use of a cheap straw matting for this purpose; they have two or three dozen mats of this material, which are warm for the babies to sit on, are easily rolled up, and can be washed.

Small tables and chairs, light enough for the children them-

selves to move easily, are the most convenient furniture; for cupboards, long low ones will be found useful where the babies keep their toys and materials, the top of which, being not more than three feet high, can be used as a side table for flowers, growing seeds, plants, or other interesting possessions of the children.

A piano is a necessity.

In large classes the difficulty of accommodating many sleeping children has to be faced, and there are various arrangements for this. Perhaps the most satisfactory is the provision of a small hammock for each child. Hanging to a hook in the wall is a canvas hammock, the opposite end of which is fastened to an upright rod, which is held in position by being let into a deep socket in the floor. When not in use the rod is lifted out of its socket and hung, together with both ends of the hammock, on the hook in the wall, while the socket hole in the floor is covered by a sliding lid. When in use the hammock should be not more than $1\frac{1}{2}$ feet from the floor. In this way, without encroaching unduly on the floor space, it should be possible to accommodate all the children for their daily rests.

A sand trough 18 inches wide, 6 inches deep, and $1\frac{1}{2}$ to 2 feet high, fixed along one wall and filled with damp sand, is a valuable addition to the Baby-room. Penny buckets, spades and wooden moulds of different shapes will add to the children's intelligent experimental play.

Pictures.—Practical experience shows that children of this age are not attracted by pictures which are more than four feet from the floor. One sometimes sees a Baby-room crowded with pictures—this gives a confused impression harmful to the children; it is far better to have a few—perhaps three or four—good pictures illustrating the chief interests for the time being, and change these as the interests change. Could the Caldecot pictures be enlarged to a suitable size, some of these would answer the purpose admirably. The excellence of the Caldecot illustrations will be realized if teachers compare his "Sing a song for sixpence," for example, with those pictures often used, where the whole setting is matter of fact, and artistic imagination entirely wanting. In the one case the imagination is stimulated and uplifted, as is possible only under the inspiration of an artist, while in the other the onlooker's thoughts are hampered by the commonplace, or at best left just where they were.

Toys.—Toys must be simple. One of the great dangers of the present age is the over-stimulation of young children. This is partly caused by a super-abundance of playthings and their lack of simplicity. Elaborate toys put the child into the position of spectator rather than of operator. In this way the play loses its value, and becomes a mere amusement instead of an educational process. Toy play should be a great feature of the Baby-room. The child should have material which he can understand, mould, alter and with which he can carry out activities. This is a plea for the simple and "natural" toy; for example, instead of one expensive factory-made dolls' house, several smaller houses made from boxes or small packing cases, and furnished with a few pieces of strong rough furniture, would be infinitely more valuable. When one house only is provided it is impossible for many children to have the experience of playing with it, and when at last his turn comes, the child cannot plan and organize for himself, as the toy has to be shared by several. Besides this, the introduction of expensive toys spoils the child's taste and limits his imagination. The following toys are suggested as suitable for baby-room play:—a safety swing if space and supervision allow, rocking horse, wheel-barrows, dolls (one for each child), cradles, dolls' perambulators, horses, carts, trucks, go-carts, engines, milk-carts, stables, farms, balls, boats, reins, teddy bears, toy animals, soldiers, skittles, Noah's arks, etc. Nearly all these can be made by children in the upper classes, giving opportunity for a united school life, giving purpose to the handwork lessons, and enabling the children to use waste material which many homes provide and shops are often willing to give for such a purpose.

The needs of the Baby-room offer other opportunities for community life in the school as a whole. In the cookery class biscuits can be made for lunch; overalls and table-cloths made in the needlework lessons can be washed in the laundry class, the making and mending of felt slippers and of toys is suitable work for the handwork classes: in this way the work of the school will be more closely in touch with real life and real needs, and become increasingly educational.

The Playground.—Any playground which is to be of educational value to young children must include a garden, even if it should be necessary to rail this off as a special place in which the rougher forms of play may not be indulged. There

should be grass—if possible partly shaded by trees, and in fine, warm weather the babies should bring out their tables and chairs, so that many of their plays may take place in the open air in a more natural and healthful environment than the best planned room can provide. The children's gardens will be here, the sand pile, and possibly a long sand-trough at which many children can play together.

Time Table.—The time table, if existing, should be extremely elastic. A general scheme will help to ensure variety in the children's experience, but the teacher should be free to prolong, shorten or omit any activity when her observation of the children makes her realize the wisdom of this. Below is given a scheme for a Baby-room time table, not in any way as a model, but to indicate the lines on which the suggested ideas could be carried out. A break of five minutes has been arranged after each period to be used at the teacher's discretion for play, singing, games, or, on the other hand, for lengthening a period if this has proved too short to satisfy the children's needs.

9-9.20	Wash hands, etc. Register. Singing and morning chat.
9.25-9.40	Nature work.
9.45-10	Story, chat or song.
10.5-10.20	Play.
10.25-10.40	Lunch.
10.45-11	Recreation.
11-11.30	Sleep.
11.30-11.50	Free play (for those who wake naturally).
11.50-12	Wash and dress.
2-2.15	Wash, singing. Registers.
2.20-2.35	Games.
2.40-3	Occupational play.
3-3.15	Recreation.
3.15	Sleep (all who can, will sleep till 4 o'clock).
3.30-3.50	Free play.
3.50-4	Wash and dress

E. B. COLE.

BOOKS OF REFERENCE

The following books will be found useful from which to *select* songs or stories suitable for very young children:—

- Baby's Opera.* (Warne, 3s. 6d.)
Baby's Bouquet. (Warne, 3s. 6d.)
Nursery Songs. Keatley Moore. (Routledge, 3s. 6d.)
Holiday Songs. Milton Bradley. 10s.
Music for the Kindergarten. E. Heerwart. (Boosey & Co., 2s. 6d.)
Boston Book of Songs. Walker & Jenks. (Curwen, 4s. 6d.)
Songs, Games and Rhymes for Kindergarten and Primary Schools. Hailmann. (Milton Bradley & Co.)
Mother Stories. M. Lindsay. (Milton Bradley, 5s.)
More Mother Stories. M. Lindsay. (Milton Bradley, 5s.)
In the Child World. Emily Poulsson. 7s. 6d. net.
Peter Rabbit. Beatrix Potter. 1s. net.
Little Black Sambo. (Chatto & Windus, 1s. net.)
How to Tell Stories to Children. Sara Cone Bryant. (Harrap, 2s. 6d. net.)
Stories to Tell to Children. Sara Cone Bryant. (Harrap, 2s. 6d. net.)
Two Bad Mice. Beatrix Potter. (Warne, 1s.)
In the Children's Garden. Schofield. (Philip & Son, 5s.)
Heart of Oak, Books I and II. (Heath & Co.)

LITERATURE

(a) STORIES AND STORY MATERIAL

IN the search for fitting material with which to educate, the teacher naturally studies the child, with a view to understanding his interests and needs, in order that such material may be chosen and brought into line with them as will secure the conditions which make for right development. One of the results of such study is the discovery of the hunger which all normal children show for stories. "Please tell me a story" is a constant request on childish lips—indicating a natural need, which, if rightly satisfied, promotes the mind's growth and development. A proper supply of nourishing food and alternations of exercise and rest are absolutely necessary for the body's well-being. Equally so are these conditions necessary for the mind. From good story material such food is obtained, and of a most appetising kind, whilst the opportunity for exercise is unique. The truth of this is obvious to any student of child nature who watches children during a story period. Their absolute absorption and intentness during the recital is a marked characteristic of attitude, which is strong testimony of the fitness of this form of mind food.

Imagine yourself watching such a group. There is an utter absence of self-consciousness. Each child makes his own special effort to lose nothing of the narrative or the charm of interpretation. One turns round a chair to get a better view of the teller's face. Another hugs his knees as though it helped to increase his pleasure. A third, drawn by the spell of the teacher's art, leaves his place and gradually draws nearer and nearer to her, as if by so doing he could intensify his delight. You notice a thoughtful little face looking at the narrator with moving lips, repeating some phrase that has caught her fancy. Stifled expressions of sympathy or

disapproval come from different parts of the class, sometimes an eager question from an impatient child who finds it hard to wait for the end, or a timid protest from a sensitive one who is in trembling doubt as to the fate of the hero. Real delight is variously expressed when all goes well—if the story has been one of stress and fight; if, on the other hand, the incidents have treated of the quieter things of life, the pause at the end, followed by the long-drawn sigh of appreciation, given with so much sincerity and heartiness, makes the teller revel in her art and all the joy it brings.

Froebel says that the child's delight in the story is due to the fact that he uses it as a means for finding and understanding himself. Self in the early days has no meaning for him. He has not sufficient knowledge or experience to interpret that self. So he unconsciously seeks for that interpretation in the light of another's experience. A story portraying a phase of life similar to his own, though not so similar as to create self-consciousness, helps to make that phase intelligible. One knows that it is so by his questions and his expression in free play. His questions are usually of a personal kind: "How old was the little boy?" "What was he like?" "Could he jump like this?" suiting the action to the word. His free play is another attempt to realize himself in terms of somebody else. He personates the character that most appeals to him, and for the time being lives the life of his hero. Constant comparison of himself or others with the experiences that are passing in review before him goes on; the tearful sorrow of a particularly dainty little girl at the dirty condition of Tom in the *Water Babies* as she sobbed out, "Will he never be clean again?" illustrates this; as well as the attempt on the part of another child to find some one with whom she could compare Mrs. Do-as-you-would-be-done-by, which resulted in her asking an onlooker, "Are you that little old lady?"

At first the child is quite content with itself. Its own physical needs, its own powers of activity, satisfy it. But as soon as it begins to understand its connexion with outside things, then is begotten within it a craving for the experiences of others in story form. The reason for this is easily understood when one considers how dim must be its own realization of its place in the world, and its total ignorance of what this connexion may unfold. Everything lies beyond it. The vague consciousness of a vast unexplored land, in which there

is no limit to possibility for him, makes the experiences of others, when unfolded in story form, an illuminating and satisfying joy. Readers of Lavengro will remember with what affection and gratitude Borrow speaks of his first story book, *Robinson Crusoe*. Its fascination and delight he seems never to have forgotten, and the stimulus at the time was so great, as to induce effort of the most drudging kind in order to master its contents, and so satisfy the raging curiosity with which he was filled. In writing of this experience he says: "My progress, slow enough at first, became by degrees more rapid, till at last, under 'a shoulder of mutton sail' I found myself cantering before a steady breeze over an ocean of enchantments, so well pleased with my voyage that I cared not how long it might be ere it reached its termination."

Think what the story must mean to the child of the slums with his limited environment—so meagre in suggestiveness and so lacking in interest, and all that might be called vitalizing power in outlook. Such a child's activities alternate between home and school. The sum of the home activities would probably work out thus:—running errands for mother or neighbours, taking care of baby, doing odd jobs, varied by short spells of play in street or yard. The usefulness of such experience no one questions, but its barrenness in interest, thought-producing power and stimulus to anything like fruitful endeavour, goes without saying. If to such a life we add the charm of a story like *Hiawatha*, *Robinson Crusoe*, *The Cave Dwellers*, we supply the needed interest. We give the child something to think about, which seizes his imagination and quickens it to new life. He begins to live in a world of his own creation, and clothes much of his activity with the charm of fancy. Play now is more often than not an attempt to realize certain phases of the story—those phases which have most deeply impressed him. The scanty leisure is frequently used in constructive effort to satisfy the new hunger, and the power of ingenious adaptation shown sometimes astonishes one. Handy oddments like pieces of fire-wood, string, scraps of cloth, bits of cork, twigs and feathers are all used. Nothing comes amiss to the child in this new stage of his awakened life. Crusoe's raft is fashioned, his rough bench and table, the cooking vessels, or Hiawatha's wigwam, canoe, bow and arrows, head dress, each and all are attempted.

The value of this self-induced effort is difficult to assess.

We are sure that it has widened the mental horizon, broadened interest and deepened sympathy; further, it has started the habit of linking thought and expression, with its attendant developing reaction upon the whole organism. It has given the hands an opportunity really to become the servants of the mind, and above all has brought increased joy and happiness into the young life. Into the fabric of daily routine he weaves the threads of fancy to such purpose, that his doings become a part of the charmed life into which he has stepped. His errands no longer mean merely fetching a loaf of bread or a can of milk, but his imagination pictures this as one of Crusoe's journeys to the ship in search of needed treasure for the lonely home, and so the daily tasks become clothed with such richness and joy as is inconceivable to the adult mind. What all this does by way of developing appreciation and starving, because supplanting, less worthy thought, it is impossible for us to know. We can only conjecture. The child has all to learn, and though he learns partly through his own experiences, he learns as much through the experiences of others presented to him through this medium. His open mind offers exceptional opportunity for the formation of a good basis from which his ideals will eventually develop. The story helps to get the child's soul ready for the possession of some lofty idea in order that he may have a suitable place for its lodgment.

"It behoves us, the first thing of all, to prepare in our soul a place of some loftiness where this idea may be lodged—as the priests of ancient religion laid the mountain peak bare and cleared it of thorn and root for the fire to descend from heaven—and the admirable will enter our soul, the volume of its waters being as the depth of the channel that our expectation has fashioned" (*Maeterlinck*).

By its power we can stir "the sleeping spirit of hero worship and aspiration" into new life, and intensify the hunger for beauty and goodness. "In days of old it was almost the only way in which records of great deeds were handed down from one generation to another as a means of incentive, inspiration and warning."

A good foundation of story material should offer such a background of moral training as is possible in no other way. Morals are the result of experience, the laws and rules of life which experience has formulated and found correct. If

we wish children to understand and appreciate other people's knowledge, we must present them with other people's experience, which we do by stories. In presenting types of conduct embodying courage, truth, self-sacrifice, or worthy and desirable action of any kind, it is very important, however, to remember how crude and undeveloped is the child's conception of these. His idea of bravery attaches itself to one kind of action only—the action in which something very much out of the ordinary is done—such as the killing of wild beasts, the slaying of giants and dragons. He can appreciate the courage of St. George in killing the dragon, of Perseus in destroying the sea monster; but it is a much more difficult and complex process for him to realize the heroism in such a story as "The Leak in the Dyke." The teller has to make much of such details as the night vigil, the solitude, the long spell of quiet. The child must be helped to understand the physical suffering, the cold, the cramped position of the limbs and of the whole body, the strain which all this involved, and lastly the suspense and wondering fear as to whether or not the threatened disaster will be averted. In this, and in other examples of quite a different kind, the power of the story is unique in developing and broadening the child's moral sense, and enabling it to grasp a new and, to him, difficult situation. It offers effective training in other ways. Language is helped, and the child's understanding is incidentally built up. The gift of imagination is intensified, for in the story the child lives again.

WHAT THE STORY DEMANDS IN THE TELLER.—To ensure wise and educative interpretation of a story, it is necessary that the teller should have absolute belief in its power to enrich and satisfy. A background of conviction and earnestness is of paramount importance to her. By means of this she is placed on a higher level with regard to what she sets out to do, and the effect is very striking on the children. This attitude of strong desire frees the teller from all self-consciousness, and enables her to give herself up entirely to what she is doing. She lives in the story. This earnestness emanates from her in all possible ways, and helps to initiate a corresponding mood amongst the children. It modifies tone of voice, facial play and gesture, indeed, every expressive act comes naturally under its spell. That which is best in her radiates to the class, and warms into life seedlings of appreciation and desire, which a colder attitude would have

left untouched. The atmosphere thus created unconsciously affects the child for good ; but a simulated earnestness or artificially created manner only results in an artificial atmosphere which children are quick to feel.

The next important demand is realizing point of view—by which is meant ability to appreciate the attitude of others towards any particular thought or action. This is especially difficult for the young teacher, but it is possible. The cultivation of a habit of looking at life from more than one standpoint, and remembering that every question has two sides, is helpful toward this end. To get to know as many types of people as one can, and to hear their views upon subjects in which we have a common interest, is of value. The more we know of human nature, the better are we able to act as interpreters to the children. Such study makes us careful in the way we put things—more charitable, less hasty in our judgments, better able to see things as they really are. Many young teachers fail to get at the child's mind because of their inability to realize its point of view. Preparation for this is given by a study of the outlook of those nearer to us in development than the child. Their different views make us first aware of the fact that people can have very varying opinions about the same subject, and bring different experiences to bear on it. This begets in one a habit of watchfulness when telling a story to a class. We note in all sorts of ways the individual response to what is being told. Power to do this becomes increasingly sensitive with practice.

BREADTH IN OUTLOOK is also most necessary. Without it there is a lack in sense of proportion, right judgment and power to give due place and weight to the essence of the narrative. One must be appreciative of values in order to do justice to the wealth of material which the story in its all-round aspect gives. It is of vital importance to remember that our choice of details and method of presentation is helping the child to construct its theory of life. If we fail through poverty of outlook to give him his data in such a way as to make his constructive effort less rich in hope, joy, and incentive than we might, we are doing him a grievous harm. A right grip of principles and their bearings upon life puts one in the position of a seer to the child. He learns through our interpretation that each phase of human life has its difficulties, its compensations, its sorrows, that each is necessary to the whole. We inspire him to live nobly and well. It would

be impossible, for example, for one with breadth of outlook to give to a class the impression that old age was a condition to be deplored, and hard work a burden too heavy to be borne.

A good visual imagination is a valuable factor in the story-teller's equipment.¹ It gives reality to description and makes the story live. A ready command of language is another important adjunct. This can be improved by memorizing good poetry and prose, by rich reading and oral practice in telling stories to an imaginary class. The cultivation of a literary consciousness is a necessity. With beginners the vocabulary is often limited, and the power to describe with clearness and ease slight. Perhaps the most general fault is that of trusting to words alone to initiate states of feeling. It means but little to the child mind to be told, "Tom had a very cruel master," if the teller leaves it at that. She must in her telling incorporate some activity of the master characteristic of the attribute. If we wish our children to realize that a thing is beautiful or the converse—the treatment must give the beautiful setting, and equally so must it make the undesirable things unlovely. The listeners should *feel* the cruelty and decide for themselves the character of the man. There should be no formulation by the teller.

Beauty of voice and cultured speech are of more than average importance in equipment for this side of educative work, because of the subtle shades of meaning which they are all to convey, and the intense delight which they evoke. Children are keenly responsive to beauty of voice, and all possible means should be taken to render this supple instrument increasingly more delicate as an interpreting agent.

The use, however, both of speech and voice, must be simple and natural—the expression of genuine feeling

SELECTION OF MATERIAL.—In choosing story material, the age and probable development of the children must be considered, together with their environment and possible experiences. A class taken from the slums of a big city finds it difficult to understand and enjoy a story dealing exclusively with the sights and sounds of country life. As a rule the young teacher lacks the needful skill to adapt and present such material in an intelligible form to these children. This does not mean the exclusion of such stories from all town

¹ "You must see what you say."

schools, but only in extreme cases, when intelligent enjoyment is impossible through lack of experience. The same principle should govern the choice of stories for very young children. For such stories it is wise to draw upon one's own experience. Early childish pleasures when re-told to a class of babies are a source of great joy. "Little ones especially delight in stories of what father and mother did when they were little, or what happened to grandmother when she went on a long journey." They also like to hear about themselves some little event in their own lives. Nursery rhymes offer good story material at this stage; they have a fixed form both in thought and expression, which must be strictly observed.

The story must appeal to the teller. She must love it if she is worthily to interpret all that it has to give. "Every story-teller has her lines of limitation," as well as an aptitude toward stories of a certain type. She would not, of course, confine herself to these, but would experiment with all kinds, because appreciation grows with effort; but until she has developed some skill, she would be wise to keep to those which make the strongest appeal to her. What she enjoys she is more likely to make others enjoy. They see the beauty through her appreciation.

She should not be content with any but the best in her search for story material. Watered-down classics hinder rather than help; young students who lack the necessary knowledge and discrimination which right choice of material demands for such stories, would do well to confine themselves to those stories which bear the stamp of traditional excellence.

PREPARATION.—It is of great help to the beginner after reading a story through, many times, then to make her own notes and to re-adapt these under certain headings.

A story can be naturally divided into four parts, as suggested by Mr. St. John.

1. The beginning, which serves as a means of introduction, and brings the children's minds into some sort of relationship with the types of thought and action which the story is to unfold. Further, it rouses interest and creates an attitude of expectancy. It should never be too long. It occasionally happens that a so-called story is all introduction in the hands of a poor teacher.

2. The second part, which consists of a series of ordered

steps leading to the climax. These must be clear, definite, and of increasing interest, so as to prepare the mind for what is to follow.

3. The climax—the culminating point of the story's interest. Here the movement of the child's mind rises to its highest. This is the crux towards which everything is working, and here the mental life for the time being finds complete satisfaction. It must satisfy all the expectancy which has been aroused, and therefore its demands upon the skill of the teller are severe. All her art has to be called into play. There is no more common weakness amongst story-tellers than inability to give the climax its full value.

4. *The end*—the last step in the process. This is somewhat reiterative in character. It gives opportunity for revision of certain details, which in a sense completes the whole, and subjectively indicates a condition of finality, without which the listener loses much of his enjoyment. A thoroughly satisfying ending is given in Mrs. Ewing's story of *Timothy's Shoes*.

HOW TO TELL.—The first requisite for educative telling is to know your story—know it in the sense that you are saturated with its thought and feeling. You have lived in it and thought about it so deeply that it has become a part of yourself. An experienced story-teller has said: "A story that belongs to me is the one I love to tell. It belongs to me because I have so often enjoyed it with the children. The first time I tell a story is never so successful as the eleventh or twelfth time." The more you tell a really fine story, the more it means to you; you get at the heart of it—the core—and its effect on the class is more abiding: "you have felt its power and identified the quality of its appeal." We want our children to share in this—how are we going to do it? Something can be done to accomplish this at the outset. Start with the conviction of power to beget a corresponding response in the minds of the listeners. This is a helpful means. Let the whole of yourself be expressive of interest and enjoyment in what you are going to do. If you are not actually feeling it try, to. If you cannot, refrain from telling that particular story. This also goes far towards inducing the required conditions. There is a great deal of the subjective in an attitude of suggestion which unconsciously reacts on the children. To know your story in this sense is the only way to give you confidence and that ease which begets spontaneity in treat-

ment. It obviates the necessity of fumbling for words, or of thinking twice about what comes next.

Be simple and natural in manner—be yourself. If you know your story and really feel its power, you can leave the expression of that background to come freely at the behests of the moment. A studied form of telling is unnatural, and may not at all suit the needs of the moment; the appeal is so much stronger and healthier if it is direct and unstudied.

Don't memorize the words. It cripples the vitality of your appeal when you recite. The adoption of such treatment prevents that freedom in interplay between your mind and the children's, so valuable as a means of development. When you are clothing thought in your own words at the moment, unconsciously your choice of language is modified by the unspoken needs of your listeners. This will be evident to you if you consider some of the experiences common to all tellers. The class is in front of you—intent and eager—drinking in not only what you have to say, but what you have to suggest, by means of eyes, play of features, a turn of the head, a movement of the hand; the whole body shares in this expressive activity. What can you do, whilst apparently engrossed in your interpretation? As you are not wholly so, you have had time to note a puzzled look on the face of a child. Immediately and almost unconsciously you know what that means—something has not been understood. So you readjust the form in which a thought has been given; the difficulty vanishes, and the little face is once more serene. Adjustment as the result of intellectual and emotional interplay is always going on; the form it takes may not be verbal; frequently a look, a gesture, a change in the inflexion of the voice does all that is necessary. Such interplay is hardly possible when the words have been learned, the reciter is no longer free. She is, therefore, less likely to be sensitive to the child's needs. The obligation of the set form of words, and the effective utterance which the memorizing has brought along with it, set up a barrier between her and the children, and she is no longer at liberty to look out for and respond to their signs of need, because she is too much engaged in getting rid of the burden which her memory has imposed upon her.

Just as it is important to be natural in manner, so is it of equal importance to be natural in speech. Never insult the dignity of childhood by adopting a coaxing, wheedling tone,

or one suggestive of superiority. The voice is capable of so much by way of expressing subtle and delicate shades of meaning, that one should make every effort to develop its full beauty and get such mastery over it as artistic use demands.

As an instance of effective use of the voice, take that part of the *Water Babies* where Tom is listening to the sound of the church bells. Imitate the sound of distant bells as softly and sweetly as you are able, and then give: "Those that wish to be clean—clean they shall be," as a sort of recitative. If the spirit of the teller is right, and everything that leads up to this is equally so, a most profound impression is made upon the children, who grasp in a very crude way the meaning behind it all. But such attempts must never be imitative, they must rise spontaneously as the result of the feeling and need of the moment created by the children who are the inspiration.

Distinctness in enunciation is most essential. The rate at which one speaks is largely determined by the thought and feeling in the material, and sympathy with the audience, right pause and emphasis being the outcome of these. For example, to return to the *Water Babies*: Tom taking the sweets from the cabinet is an episode which demands deliberation in treatment. His attitude is one of caution and hesitancy throughout; he does not at first give way to temptation; the whole process is very gradual, and his attitude can most effectively be brought home to the children by establishing the right relationship between the character of the episode and its means of communication. On the other hand, when treating of Tom's meeting with the *Water Babies*, the whole idea is full of movement and joyful anticipation, therefore the speed in telling is accelerated, establishing a harmony between itself and the narrative. All this is instinctive to the genuine story-teller.

Gesture, in story-telling, is very much a question of temperament; if instinctively used it is right, but if only imitatively used its value may be questioned. Children never respond in quite the same way to external touches which are not genuinely felt.

The same idea holds good with facial play; some need it and use it instinctively, others would be doing an injustice to themselves in attempting it. We must be true to ourselves if we desire to be really helpful to the children.

A word as to the pointing of the moral. If the story has

been properly told, this is quite unnecessary, and if it has not been, it is useless—the children being unready for its declaration. In any case the moral should never be told. When the teller meets the needs of the children, they follow every step, and each assimilates what it can and what is necessary for it in its own way. For the teller to step in with a formulated moral is suicidal to any kind of ethical development.

The ending of the *Water Babies* offers excellent opportunity for following the working of the children's minds in coming to their own conclusion as to the righteousness of conduct. The confinement of Mr. Grimes in the chimney is a time of distress for them; they feel the situation keenly from Tom's point of view; they cannot imagine how he is to be released, and they do want Tom to have some return for all that he has gone through. For a time there is an element of dread in their minds. They are much impressed by Tom's unselfishness in giving up what was pleasant to him, to go to his old master's assistance, and they quite realize all that he suffers in doing this. The fact of having to go alone—to leave Ellie—makes a profound impression; children understand that this was not an easy thing to do, and they are quite proud of his accomplished effort. The part he plays in setting his old master free is much appreciated, and there is considerable expression of satisfaction when Mrs. Be-done-by-as-you-did commends him, quite apart from the reward which is to follow. The reward comes as a pleasurable surprise—only the more thoughtful ones grasp its purpose.

Nothing more is necessary—the story has done its work.

The following suggestions may be useful to young and inexperienced story-tellers.

The position of the class is important. Children should be so seated that each has opportunity of enjoying to the full a good view of the teller. The latter should not be too far away from the listeners—nor so near as to give the idea of being on top of them, but at an easy speaking distance; right nearness aids sympathy.

Everything must be done for the physical and intellectual comfort of the child. Restlessness and impatience are frequently the outcome of wrong position; the child wants to see and cannot, and is losing much of the interpretative charm if the teller's face is outside its range of vision; and if the strain is prolonged, interest goes.

The interruption of the thread of interest by questioning in any part of a narrative hardly seems justifiable. If there is any part of the story not likely to be understood, embody the explanation of this as part of the whole ; but to interrupt the mind movement of the class in order to satisfy one's self as to the intelligent grasp of one detail or group of ideas, seems unwarrantable.

The treatment of children's questions during the telling is a matter that must for the most part be left to the discrimination of the teller, and the needs of the moment. It is difficult and unwise to draw hard and fast rules of any kind: there must be freedom. Much questioning, however, on the part of the children, shows weakness in the teller ; she has failed either in clearness or interest. In treating questions which do arise, the teacher should in her answers lead back to the thread of the story, thus incorporating them as a part of the whole, so that there shall be no impression with the class of a break in sequence. In any case, digression should be carefully guarded against.

The use of pictures, too, is very much a matter of individual judgment. One would like to suggest that the imaginative activity of the child may be spoiled by the lavish use of pictures, and its enjoyment and appreciation modified by unwise choice.

Information giving is not the aim of the story at all. The story is a work of art, and its primary function is to furnish ideals of life. Any information that is given is purely incidental.

In meeting the common demand of children, "Is this story true?" one must understand by this question: "Did these events actually happen?" Here, as in all one's dealings with children, nothing but absolute honesty is right. No one is more keenly aware of subterfuge than a child, and no one more generous in its realization of a teacher's inevitable limitations. Underlying truths will always be grasped by the child as far as its development admits, but it is not to such a generalized form of truth that the question refers. Many mistakes arise because the teacher puts an adult construction upon a term used by the child in a very limited sense.

Any discovery of what appears to the child as dishonesty on the part of the teacher, acts as a serious deterrent to its moral development.

(b) POETRY

Froebel tells us that rhythmic language belongs to the early youth of man—hence verse constitutes a factor in the development of the race as much as the story, and children show an instinctive need of it. It must have been within the experience of most of us to note how much we increase a baby's enjoyment of his inarticulate babblings when we help to make them rhythmic. If he knocks one object against another the same keen manifestation of delight is seen if he is helped to do so with regularity. The early utterances of little children are often merely rhythmic repetitions of apparently "meaningless syllables." This need for rhythm which such examples show partly explains the enjoyment of the young in dancing; the world-wide existence of this enjoyment and the equally wide existence of Nursery Rhymes and Cradle Songs, mark the love of rhythm as a common hunger of human life at an early stage. So that training in rhythm is absolutely necessary if we base our choice of educative material on instinctive needs. Rhythm is one manifestation of law—regularity—order and sequence are its dominating features. The child has to live in a law-governed world, and it is of vital importance to him to be got ready for the recognition of this fact if he is to live in harmony with it. It is an idea that can only come to him very slowly because of its vastness, but its significance is so great that no means should be overlooked which will help toward this end. Appreciation of rhythm is one of these. During this preparation time for the reception of the idea of law; more immediate, direct good, results. The re-action upon the moral side is the chief of these. There is begotten a tendency to respond to different types of order and regularity; this tendency develops with the child and later shows itself in more controlled action. By the help of good verse, in which rhythm plays a dominating part, the teacher is able to increase the child's sensitiveness to beauty—especially to the beauty of language—the music of words begins to mean something. It is another medium for inducing delicacy of response to light and shade, for broadening sympathy and calling into play many of the finer feelings of life, and as a final result of its teaching it should create a taste for literature and put them in possession of an abiding interest. For quite little children nothing is better than old world rhymes and cradle songs. They are

simple, direct, and full of action. It is a good plan to sing a great deal to very little children. To be able to do this one needs to have a large stock of rhymes, jingles, lullabies and simple songs, so as to have material suitable for all sorts of occasions. I would advocate its use at any time if the teacher felt its helpfulness and need. When the babies are nursing their dollies, nothing gives them greater pleasure than to softly sing a lullaby to them; they instinctively move with the rhythm, and it gives a completeness to what they are doing which makes that doing more educative.

It is not necessary for them to sing—if they spontaneously join the song well and good—but it is of the greatest moment to them to have this kind of experience which listening, and incorporating the spirit of what they are listening to, involves. The teacher need not fear the wear and tear of the voice. She has only to sing softly, and there is no more strain in doing this than there is in ordinary speech. It is also helpful to recite all kinds of poems to children of different ages; this they enjoy equally with the singing, and it helps to make them much more conscious of the lilt and power of verse. It is good, too, to give them the right of choice as to what they shall learn after such an experience. They are so much more alive to what they like. The following are a few of the things which our little ones ask for again and again:—

Weley Wiley had a hen,
She laid eggs for gentlemen—
Gentlemen and ladies too,
Weley Wiley's ain hen.

Weley Wiley had a coo,
Black and brown about the moo,
Open the gate and let her through
Weley Wiley's ain coo.

Poor old Gee.
Beneath the willow tree
She went to bye-bye,
On her soft grassy pillow;
And there she lay till the dawn of day
Sent all the dark away
From under the willow.

These two are sung. They were dictated to us by a very old lady who was in the habit of singing them to her grandchildren.

The two following are favourite recitations with children of the same age:—

Speckeldy hen, speckeldy hen—
 What do you do in my garden pen ?
 You scratch up my flowers, indeed you do,
 And what in the world shall I say to you ?
 Mother will scold you—you know she will,
 And father will beat you for doing ill.
 And I'd just like to know what you'll do then,
 You dear little naughty speckeldy hen ?

Lullaby, baby,
 Go to sleep.
 Eyes, oh ! how naughty,
 Still to peep.

Lullaby, baby,
 Curl up your toes,
 Cuddle your little knecs
 Up to your nose.

Lullaby, baby,
 Eyes shut tight,
 Little mouth open,
 So, good-night.

But all this is only by the way, for developing the child's appreciation ; when it is intended to teach a rhyme or poem, some different method must be followed. The poem offers a definite series of ideas in a fixed form. For the children to understand these and to enjoy this mode of expression, they must be got ready for it. This entails preparation which will give them the necessary experience. The preparation is of the greatest importance. It must give them necessary data for the understanding and enjoyment of what is to follow. There are various ways for giving this experience. A Nature lesson, a story, a picture talk, or a conversation serves the purpose admirably. I once heard the story of Mrs. Tabby Grey given to a class of young children. It was most suitable in preparing for the enjoyable memorizing of the words of the song which followed. This was it :—

Mother Puss-Cat sits and purrs,
 Says no cat has kits like hers ;
 While her babies roll and play,
 In a cradle of sweet hay.

Furry, Frisky, Dinkey, Droll,
 One wee kitty's black as coal ;
 One's as white as morning milk—
 One is grey and soft as silk.

For children between five and seven years old, poems should be chosen which are simple in content, treating of

incidents in which action plays an important part. The appeal must be direct, and the rhythm well marked. Such poems as R. L. Stevenson's "Block City," "From a Railway Carriage," "The Wind," "My Shadow," "The Lamplighter," "Bed in Summer"; Eugen Field's "Wynken, Blinken and Nod"; Kingsley's "Lost Doll"; "The Fairies," by Allingham, are examples of suitable use. The following are favourites with my own children:—

THE ROBIN TO HIS MATE.

Said Robin to his pretty mate,
 "Bring here a little hay,
 Lay here a stick and there a straw,
 And bring a little clay.

"And we will build a pretty nest—
 Wherein you soon shall lay
 Your little eggs so smooth, so blue—
 Come, let us work away.

"And you shall keep them very warm,
 And only think, my dear,
 'Twill not be long before we'll see
 Four little robins here.

"They'll open wide their yellow mouths
 And we will feed them well,
 For we shall love the little dears,
 Oh! more than I can tell.

"And while the sun is shining warm,
 Up in the summer sky,
 I'll sit and sing to them and you
 Up in the branches high.

"And all night long, my love, you'll sit
 Upon the pretty nest,
 And keep the little robins warm,
 Beneath your downy breast."

By MRS. CARTER.

STOP, STOP, PRETTY WATER.

"Stop, stop, pretty water,"
 Said Mary one day,
 To a frolicsome brook
 That was running away.

"You run on so fast,
 I wish you would stay,
 My boat and my flowers
 You will carry away.

“ But I will run after,
 Mother says that I may ;
 For I would know where
 You are running away.”

So Mary ran on ;
 But I have heard say,
 That she never could find
 Where the brook ran away.

By MRS. FOLLEN.

SONG OF THE FARMER'S CART.

O, to ride ! O, to ride ! with the farmer at my side,
 Bramble brushed along the lane, and snow swept o'er the down !
 When it's, “ Up, Robin, up ! ” and it's, “ Trot, Robin, trot, ”
 Out along the open road that takes us to the town.

Winding 'twixt the tangled hedgerows,
 Narrow is our path and steep !
 Snow beneath our wheels lies deep,
 Snow from every spray hangs light ;
 Rich and red amid the white,
 Holly high on either hedge grows.
 Where in summer-time the rill,
 Ran to work the water-mill,
 All is silent now and still—
 Pines, snow-laden, crown the hill.
 “ Come up, Robin ! up ! ”—and so—
 Onward through the driving snow—
 O, now we go galloping over the heath !
 The flakes are above us, the drift is beneath ;
 There's miles and there's miles of it, far as you see !
 No sign of a cottage, nor sight of a tree.
 In all the great world of white, only we three—
 Just Robin—old Robin—the farmer and me !
 The wind carries back as we gallop along,
 The joy of my shout and the sound of his song.
 But oh ! all too soon it is over—we pass—
 A field and some trees and a cottage—alas !
 And now from the top of the hill, looking down,
 See, just where you wouldn't expect it—the town.
 And downward winding, steady, slow,
 Three other carts before us go !
 Woa, Robin, Woa !

By F. V. BARRY.

It has been suggested to me by a literary friend that the old simple ballads offer the best material for the next stage. In these one finds the narrative given in the simplest, most direct way, the feeling and style quite primitive in most cases, and when the verse is imperfect the rhythm is nearly

always strongly marked. Some of the fairy ones about Robin Goodfellow give the myth-making element, and the heroic ones in all the collections make a strong appeal to the older children. Some of the simpler modern ballads, such as "How they brought the good news," are delightful too. The ballads would lead on to the novel in verse, such as "The Lady of the Lake," and probably children who had already had stories from Morte D'Arthur would appreciate the beauty of "The Idylls of the King" later on. After they have begun history, there are the numberless historical ballads to choose from. Children in the early stages need stories in verse with a straightforward hero and chain of incidents, plenty of action, and not much description.

Nature poems, however beautiful, are not in these early stages always suitable. Many of them are too vague or full of "mature feeling and complex ideals," for which the children are absolutely unready. In the teaching of verse, as was mentioned in a previous paragraph, the preparation is of vital importance. Such experiences must be offered as will enable the class to grasp the ideas which the poem sets forth; then might follow the reading or reciting of the same by the teacher: the children being now in a position to realize and enjoy its beauty and power, the actual memorizing with very young children would be done in class, and could be made one means for forming a habit of concentrative effort, and a training in visualizing power. *There should be little or no simultaneous work.* Such a method is dull and mechanical, stifling anything like individual thought, and offering a premium for slovenly speech and the tendency to follow a leader rather than to work on the lines of independent effort. No little child at this stage of its development should be expected to recite poetry for effect. In this, as in all other interpretative work, freedom makes for strength and independence. It is best to do all that is possible in the preparatory stage to let the children get hold of the thought, and to leave the working out of the expression to the individual.

E. M. MINHINNICK.

BOOKS OF REFERENCE

- Hearts of Oak*, Book I and II. Rhymes, Jingles and Fables. (Heath 9d.)
- The Story Hour*. K. D. Wiggin. (Gay & Hancock, 2s. 6d.)
- Andersen's and Grimm's Fairy Tales*. Everyman Library, 1s.
- English Fairy Tales*. Jacob. (Nutt, 6s.)
- Beatrix Potter Books*—e.g.
1. Peter Rabbit and
 2. Squirrel Nutkin.
 3. The Tailor of Gloucester, etc.
 4. Mrs. Tiddy Winkle. (F. Warne, 1s.)
- The Water Babies*. Kingsley. 6d. Illustrated by Linley Sambourne. (Macmillan.)
- Mother Stories and More Mother Stories*. (Maud Lindsay, 2s. 6d. each.)
- How to Tell Stories to Children and Stories to Tell to Children*. S. C. Bryant. (Harrap, 2s. 6d. net each.)
- Timothy's Shoes*.
The Brownies.
Daddy Darwin's Dovecot.
Lob-lie-by-the-fire.
The Little White Bird. (Barrie, 1s.)
The Fairy Book. Miss Mulock. (Macmillan, 4s.)
Kingsley's Heroes. (Gowan, 6d.)
Kipling's Jungle Books.
Ruskin's King of the Golden River. (Allen, 6d.)
At the Back of the North Wind and The Princess and Curdie. G. Macdonald. (Blackie, 3s. 6d.)
Carrots.
The Cuckoo Clock. } Mrs. Molesworth. (Macmillan, 2s. 6d.)
The Celtic Wonder World. L. C. Thomson. (Horace Marshall, 1s.)
Legends of Greece and Rome. Kupfer. (Heath & Co., 2s. 6d. net.)
Fifty-two Stories of Classic Heroes. Storr. (Hutchinson.)
Tales of Ancient Greece. Cox. (Kegan Paul, 6s.)
A Child's Book of Saints. W. Canton. (Dent, 1s.)
Hiawatha Primer. (A. Bird, 22, Bedford Street, Strand, or Harrap, 1s. 6d.)
Two Little Savages. Seton Thompson. (Constable, 6s.)
The Greenwood Tree. (Arnold, 1s. 3d.)
A Book of Saints and Friendly Beasts. A. F. Brown.
Wood Magic. Jeffries. (Longmans, 3s. 6d.)
Bimbi. Ouida. (Chatto, 2s.)
Fairy Tales. (Ginn & Co., 1s. 6d.)
Pilgrim's Progress. (Ginn & Co., 1s.)
The Book of Romance. A. Lang. (Longmans.)
The Heroes of Asgard. Keary. (Macmillan.)
The Story of the Iliad. Church. } Seeley, 6d. each.
The Story of the Odyssey. Church. }
In the Children's Garden. Schofield. (Philip & Son, 5s.)

POETRY

- Hearts of Oak Poetry Books.* (Heath, 1s. 6d. each.)
A Child's Garden of Verse. R. L. Stevenson. (Longmans.)
Little English Poems. Lettice Thomson. (Horace Marshall.)
The Golden Staircase Series of Poems. Edward L. Chisholm. In parts.
(Jack, 3d.)
Series of Children's Poems. Miss M. A. Wood.
Lyra Heroica. W. S. Henley.
C. L. Thomson's *Book of Ballads.*
Edgar's Treasury of Verses for Little Children. (Harrap.)
A Book of Verses for Children. E. N. Lucas. (Grant, Richards, 6s.)
Poems for Junior Schools. L. Thomson. (Horace Marshall, 1s.)

HANDWORK

(a) THE CULTIVATION OF ARTISTIC TENDENCIES IN YOUNG CHILDREN

IN the course of our studies of child art, we can trace the growth and development of rudimentary tendencies as they are exhibited in the free and unaided constructions of the children, and our observations will be a guide in the planning of a scheme of work which is to form part of the school curriculum.

At first those activities which later on result in artistic effort form three distinct groups:—

GROUP I. PICTURE LANGUAGE.—The kind of drawing in the course of which the child produces outline pictures representing human beings, animals, plants and industrial products, is made constant use of from infancy to the age of eight or ten years. Every one of these objects represents a type and shows few or no signs of distinctive individuality. Thus the body of a man is a square, triangle, oblong, the head is round, legs and arms are generally represented by straight lines, but no attention is paid to exact place of attachment: buttons in a long row are often the only indication of clothing. This is simply an enumeration of some of the features which are common to the class *man*, and the number of these features depends on the extent of the child's observation and knowledge. Each child has a particular drawing for man, tree, chicken, dog, flower, house, etc., and these drawings are symbols to him for all he knows of these particular objects, and he will use them always in the same form in a process of graphic description. More and more he will tend to record incidents in his daily life by means of suitable grouping of such symbols, and can communicate his thought to others by their aid. The whole process is clearly a form of picture-writing, and possesses none of the qualities of perceptual representation.

As the little artist grows older these pictures will increase in complexity of symbols, the children's wider experience and range of observation supplying ever new elements.

It is for the telling and illustration of stories that this form of drawing is generally employed by the children in school; and inasmuch as this mode of expression is of their own choosing and is quite universal among children, teachers are fully justified in encouraging it, and should, in all but the earliest stage, give help and guidance. This help does not take the form of drawing on the blackboard, so that the children might copy, but in leading the children to notice and record more characteristic details, and especially showing them how to introduce movement and action into the figures of their picture. With the help of a critical study of pictures, and by actually grouping objects, the children should learn to record space-relations, such as foreground and background, differences in relative size due to distance, etc. Throughout it will be necessary to stimulate the children's imagination by suitable questioning and general conversation, and by sympathetic interest.

GROUP II. DECORATION.—From the half unconscious rocking to and fro to the clapping of hands and stamping of feet, to the punctuation of time in poem and song, rhythm has ever played an important part in the aesthetic education of children. Whenever children involuntarily and often unconsciously move some part of their body repeatedly in the same way, they become aware of it, show every sign of pleasure, and continue the movement rhythmically for some time. They will in the same way often sing or shout the same word or group of words for some time with evident enjoyment. This pleasure in regularity and rhythm is of an aesthetic nature, and is of great importance in musical and artistic education.

The making of borders and other patterns is an outcome of this same innate tendency. They show the rhythm of space and form. The children may make the spots, rounds or other units in a haphazard way, but as soon as these form a row or some other regular arrangements, they will express pleasure and continue the process. Since such arrangements give pleasure, they are consciously adopted whenever opportunity presents itself. Thus often in picture writing, when the man-symbol is used with a triangular surface for the body, so as to represent a woman, the base of the triangle is

decorated with a deep border to show that the woman is a queen with richly trimmed garment. In the same way, if the children play on the sandheap and mark off a particular area for their garden, they generally make the boundary line into some sort of a pattern. Observations seem to lead to the conclusion that the earliest traces of activities that have artistic value, both in the history of the individual and of the race, seem to be picture writing and pattern decorations.

GROUP III. CREATIVE ACTIVITIES.—Whatever is strikingly beautiful awakens a desire for imitation. We find that even little children want to make things that appeal to them very strongly. If they are supplied with material that can easily be manipulated, such as sand, clay, paper, etc., they will of their own accord "make" things in which they were specially interested. It will be noticed that here, as in the case of picture writing, the models produced are again rarely likenesses of particular things but simply type forms. Since this is so, and the model only represents an enumeration of essential features, we can understand that the children can dispense with colour.

It is not only in actual clay-modelling that the children can "make" things, but paper-cutting and cardboard modelling afford similar opportunity. All these occupations form the basis of that section in the school curriculum which is called "handwork."

In accordance with these general observations, and by the aid of constant reference to the children's free and spontaneous activities, it is possible to prepare a scheme of instruction which has direct relation to child-nature and must make for good.

Such a scheme must be graduated, keeping pace with the growing, changing children. It is impossible to make the different stages correspond to definite years of life, as the whole work is so strongly affected by general conditions of home and school life. As the sequence of the stages, however, is fairly constant, and the difference is chiefly one of rate of development, the scheme of work can easily be adapted to the needs of a class by any discerning teacher.

STAGE I (AVERAGE AGE, 5-6)

FREE DRAWING.—(a) The children should be given exercise in drawing perfectly freely whatever they like. During this process the teacher should go from one child to another in

class and hear what the children have to say about their drawings. If these drawings are executed on paper they should be kept for reference. The teacher may glean from them the general taste and inclination of the class, and discover the special difficulties with which the children have to contend. In this, as in every other form of drawing, the children should be supplied with crayons, chalks or soft pastels, all of which offer little resistance and require a light, well controlled touch. In order to get the best effect, rough paper should be used. Fairly stout brown paper produces good results.

CLAY MODELLING.—(b) In Nature lessons specially, objects are presented to the children that make a strong appeal to them, exciting their curiosity and wonder, and awakening in them a desire for imitation or for some constructive act in which the object plays an essential part. Both these impulses should be encouraged, and should find expression.

The most suitable material for purposes of "making" given natural objects is clay or plasticine. Such modelling should follow immediately upon a nature lesson. It will be found here, as in the schematic form of drawing, that the children will not model the particular object in front of them, but will state their knowledge concerning the distinctive features of the class to which the object belongs. Thus a child may make an oblong potato, although his own is nearly round, and the "eyes" that he carves into it correspond neither in number nor in position with those of his model. Many teachers look upon this as an act of carelessness, but inasmuch as it is a universal feature of baby-art, it cannot be looked upon as a defect. It is the teacher's function to lead the child from making conventional models to modelling from nature or at least from memory. This requires persistence, patience and individual attention. The teacher should point out one or more characteristic marks of the individual and suggest its being recorded. In later years the children will themselves wish to represent their own particular specimen, and will therefore refer to it to find out its peculiarities.

We would advocate that the children were shown from the beginning right methods of procedure. Thus, though a little child may pick up a lump of clay from the bank and fashion it into the likeness of a dog, it is as well that as soon as he is able to receive instruction in this work, he be shown how to produce models that are more permanent. Some

sort of a base should be provided. As the making of a clay base is in itself a fairly difficult exercise and one that takes much time, the teacher should obtain a number of little boards that have a rough unplaned surface, such as may be cut from any deal packing case. If such boards are moistened they form an excellent foundation for models. The clay must not be too wet, so as to soil the hands unnecessarily, but it must be wet enough to adhere well.

The model must be built up from small pieces. Each of these must be worked and rolled first between the thumb and the first finger. This process ensures, first, that the clay is well kneaded, and, secondly, the sense of touch is employed in estimating quantity. The latter is important training, and often shows marked results in the development of children. Care must be taken that all projecting parts, such as the petal of flowers, ears, etc., of animals rest upon a clay support, which in its turn has been firmly built up from the wood or clay foundation.

PATTERN MAKING.—(c) Since the inherent sense of rhythm in children, showing itself in movement in time, becomes gradually more complex, we find that rhythmic movements of the hand holding a pencil or brush will produce marks that show rhythmic space relations, and the marks constitute a pattern. As soon as the desire for decoration awakens, patterns are used for this purpose. At the age of about five years there is not yet any marked desire for decoration, but ample opportunity and exercise should be given in rhythmic activity, be it in song or muscular movement. As regards the making of patterns, it is suggested that the children make spots on paper with chalk or brush at regular intervals of time, or that they make pits with their finger tips in sand trays, or lay split peas, counters or shells upon millboards. Later, when the children are conscious of space rhythm apart from muscular movement in time, the patterns may be considerably increased in complexity and manipulative difficulty. Thus pebbles, large seeds, shells, small leaves, petals of flowers, counters might be arranged in patterns on sand, millboards or paper.

Other aspects of the process of pattern making may be dealt with in some time-honoured play. Thus the making of chains of various natural and other material may be begun at this stage, and carried out in more complicated form at successive later periods. The children may be supplied with carpet

thread and blunt needles, and string large seeds that have previously been soaked to render them soft. Thus black, yellow, crimson and white haricot beans may be bought quite cheaply; scarlet runner beans, butter beans, green and yellow peas, sunflower and pumpkin seeds are all suitable material. Interesting colour schemes repeated regularly can be devised by the children. This will be excellent practice in counting. The question of expense is always serious, especially where very large classes are concerned; but the fact that there are teachers who cannot find ways and means of supplying the children with such material, must not prevent others who are more fortunately placed in this respect, from attempting such work.

STAGE II (AVERAGE AGE, 6-7)

PICTURE WRITING.—Instead of the unguided free drawing in the lower stage, when even the subject is left to the choice of the children, the teacher should now direct the work, the teaching taking the form of suggestion and later of definite instruction. Following upon every nature lesson a drawing lesson should be a ranged. In this the chief and characteristic features of the object should be enumerated, so that they may all be mentioned in the drawing; and it should be suggested to the children that they should next show the object doing something, e.g., bunny eating a cabbage—the rabbit and the cabbage having been present in the previous lesson, and being still in the room and available for reference should this be necessary.

In connexion with story lessons, be these of a literary, geographical or historical character, drawing is of great value, as it is an incentive to clear mental picturing; or at least, in the case of children who have little or no power of visual memory, the orderly arrangement of definite ideas is ensured.

As regards figure drawing, so constantly required in the illustration of stories, some elements of pose and action might gradually be introduced. To ensure this the following mode of procedure has had excellent results.

In many Kindergarten and Infant schools, stick-laying is an exercise in handwork often adopted in connexion with pattern making and in picture writing, involving muscular control of the fingers. If sticks are not available, matches with the phosphorous end removed answer the purpose. It

is best to provide the children with millboards or brown paper, as the matches move too easily on the polished desks. A counter or a chalk mark may represent the head; the neck and body, being fairly rigid, will be described by one or two sticks vertically below the head. Arms and legs are then arranged so as to touch the body a little below the top and a little above the bottom of the sticks respectively. It requires some demonstration by means of a child in the class to lead the little artists to discover that two sticks are necessary for each limb. The advantage of this picture is that the position of the parts can be changed in imitation of the change of the position of the person to be represented. Much and varied practice should be given in the translation of the pose of some child standing as model into the corresponding arrangement of sticks. After a considerable period of time, when the pupils have learnt to lay their sticks with certainty and precision, they may attempt to make chalk lines of uniform length instead of laying down matches. From the outset the children should draw the lines very lightly, so that when they can draw the pose of their model correctly, they can draw garments in colour and in mass treatment over the chalk lines, thus making their figures available for use in the illustrations of their stories.

A problem arising out of the work in this stage is exercising the minds of many teachers, viz., whether the picture should be executed in mass or in outline.

It will always be found that picture writing is a form of outline drawing both in the case of the little children with whom we are concerned, and of the more primitive people who have made use of it. We cannot, therefore, insist on mass drawing quite apart from the fact that the forms represented are often too complicated to colour without the use of outline. It will, however, be found that at this stage the mere outline no longer satisfies, the pictures are passing from the symbol stage to pictures of real things; consequently colour can no longer be dispensed with, and the surfaces representing clothes, bodies, etc., are invariably coloured. Since this is the normal and natural mode of procedure, it might as well be adopted in school work.

The case is somewhat different with those drawings that follow upon Nature lessons. Most of the objects studied have no symbol in the picture alphabet of the little child, the symbol "flower" is not adequate when daisy, buttercup

and daffodil are studied in succession. The children, therefore, are predisposed to draw either from memory or from the object. In both cases the representation is a picture, and colour plays a most important part; in fact, form is only the boundary of colour. It follows from this that brushwork or crayon work without outline is a natural form of expression.

It is only in the later part of the stage that painting in water-colour, using more than one colour, can be adopted in schools where the classes are large and funds limited, as the loss of time and of material that is incurred is a serious consideration. Good crayons are therefore preferable if they are supplied in boxes and the children allowed to select their own colours. This opens up a much vexed question. Expense is a great consideration in almost all educational institutions where the scholars are admitted free or at very low fees, and consequently cheap and often quite unsatisfactory material is supplied to the children. Not only are cheap crayons either gritty and so powdery that only untidy work can be the result, or they are so hard and waxy that the children develop the habit of hard, forced drawing. In addition to these defects the colours are crude and muddy, so that the children's colour taste must be perverted. Soft pastel crayons, such as Reeve's Greyhound Pastels, supplied in tin boxes in twelve colours, answer the purpose specially well. It cannot be urged too strongly that the greatest importance be attached to the subject of colour presentation to children. When the time comes for brush-work with water-colours, this same problem becomes even more serious. Theoretically we desire that the children are supplied with paint-boxes, containing three to six colours, and that from the outset they are allowed to prepare their own paint, constant and careful directions being given to avoid waste. This is quite possible in Kindergartens where classes are small, and where the children generally supply their own paint-boxes. In our elementary schools the teacher, for want of adequate supply of material, is generally obliged to mix the colours to an average tint and give it to the children in this form. Needless to say, no individual differences in colour can be recorded, if noticed, and worse still, wrong colour must often be used. The children are thus deliberately taught to make untruthful representations, and their colour sense and judgment must become perverted.

CLAY MODELLING.—As in the case of drawing, modelling

from the object will, by degrees, take the place of modelling from memory. It is important that very simple forms are studied for this purpose, such as will exhibit very few distinctive features. Thus a particular potato differs in very few respects from our general notion of a potato. Those few points must be the subject of special attention.

PATTERN MAKING.—Exercises should be given to children in the arrangement of geometrical patterns showing individual taste. Thus fragments of coloured paper of particular shape may be prepared by the children, and these arranged in a symmetrical way upon pieces of paper with or without squares or other guiding lines. The fragments can easily be moved and altered in arrangement, hence the children can experiment to their heart's content. The paper shapes may finally be pasted down, or the pattern reproduced by means of water-colours.

C. VON WYSS.

BOOKS OF REFERENCE

Principles and Methods of Teaching. J. Welton. (W. B. Clive, 5s 6d.)
Die Entwicklung der Zeichnerischen Begabung. Georg Kerschensteiner.
 (Carl Gerbes, Munich.)

(b) INDUSTRIAL HANDWORK

To trace the gradual growth of the principle which has resulted in making handwork an educational factor is interesting and instructive. It is difficult to say when or by whom the idea was first propounded, but as an idea, first only in theory, but later in practice, it has firmly gained ground. Outside the field of recognized educational reformers, parents have held that children must learn to do, and have often undertaken this part of their children's education themselves. Handwork doubtless constituted the sole education of the primitive boy; it was a large part of the education of the apprentice, and at the present day the child of the farmer and the fisher takes, as a rule, an active part in his father's work, and profits accordingly, not in the skill he acquires in farming or fishing, but in all round capacity and intelligence.

To return to the more professedly educational field we find a strong plea for handwork in Comenius' *School of Infancy*, in the whole of his chapter on "Activity and Expression." The following shows his estimate of its value. After suggesting

tools and materials he says : " With these they may amuse themselves, thus exercising their bodies to health, their minds to vigour, and their bodily members to agility . . . in a word, whatever children delight to play with, provided that it be not hurtful, they ought rather to be gratified than restrained from it, for inactivity is more injurious to both body and mind than anything in which they can be occupied." We find Rousseau rather takes for granted that in his free life Emile shall work with his hands : but a most interesting phase through which the principle passes is developed by Pestalozzi. At first he regarded the teaching of handwork as a means by which the children of the rather degraded peasants who lived around him, should be self-supporting and consequently self-respecting. So far was he from regarding it as educative in itself, that he tried to educate the children as they worked.

At Stanz he gave up this attempt, for he says :

" I tried to connect study with manual labour, the school with the workshop and make one thing of them. . . . I saw clearly that, before any fusion could be effected, the two parts must be firmly established separately—study, that is, on the one hand, and labour on the other."

We are left uncertain as to his ultimate views on its value, but some kind of educational sensitiveness evidently urged him to continue, and handwork appears in various forms in his school, sometimes in the incessant drawing with red chalk on slates, which he permitted during any kind of lesson, and sometimes in the gathering of clay by the children from the banks of the Buron in order to construct a model of the river bed.

Not only was Pestalozzi unconsciously recognizing the value of this side of education, but he was among the first to include handwork as an actual part of the work of the school, and not simply as the definite preparation of a particular workman for a particular craft. Thus he prepared the way for the growth of the idea that handwork is in itself a method of education ; and that only in the later stages of education may it be regarded a subject of instruction, or as an end in itself, or as definite technical training for a definite trade.

It is to Froebel largely that we owe this view : he shows, in the *Education of Man* the high opinion we ought to have of a workman and his work, and more especially of creative,

self-initiated work. He points out the value to the growth of individuality, of this creative work, and estimates it as one of the highest points to which man can attain. He says much about the need for expression in material, both because it is valuable in building up ideas, and in helping men to recognize and appreciate beauty; this has been so commonly accepted as to become almost a truism. It was as an outcome of his ideas that he planned his course of gifts and occupations, crudely described by him in the *Education of Man*, and often applied with an interpretation much narrower than the principles expressed in his book; and it was he who made manual work an important part of the work at Keilhau among older boys, thus instituting probably one of the first examples of such work in a boys' school.

In a less degree Froebel indicated what has since been more fully recognized by Professor Dewey—the effect of social industries on the development of a child, and their relation to the rest of his work. In sketching out the work of the father, and to a less extent of the mother, when they allow children to take part in home duties, Froebel shows that he appreciates the training that this gives; but it is to Professor Dewey that we owe the fuller working out of this principle on experimental lines, in his University School at Chicago, and later in the School of Columbia University, New York.

It seems as if handwork could be regarded from two points of view which are by no means mutually exclusive; these are represented in adult life by such contrasting types as the sculptor and the potter, the painter of pictures and the house painter, the art needlewoman and the dressmaker, the designer and the architect. On the one side we have work done for the sake of expressing an idea, generally an idea of beauty in some form; there is no immediate need or desire for the thing done except the need to express, in order that the worker and other people may know more fully and feel more deeply. On the other side we have work done to supply a need, to satisfy the desire to construct: beauty may enter into this kind of work, and certainly it is an expression of the worker, but it is a different form of expression, undertaken not so much for its own sake, as for the desire to fulfil a utilitarian aim.

Now the handwork of the school, if it is to run parallel to the life outside school, should, and naturally does, fall into

two such distinct lines ; though only the liberal-minded teacher can see at what points they may run together.

Children desire to paint, to draw, to model in clay, to cut paper reproductions of things which they think beautiful and interesting ; it forms a large and important part of their way of getting to know about these things ; often in the act of reproducing their appreciation grows. In painting the forget-me-not a little girl first became aware of its heavenly blue, and a strong emotion which is almost intoxication with colour, sprang up and never left her. No one realizes the complexity of the shape of an egg until he tries to model it, or the beauty of a leaf till he patiently draws it. But all this is more fully treated in the chapter on Art Work.

It is the other aspect of handwork that this section seeks to deal with more fully ; what may, for want of a wider name, be termed industrial or constructive occupation. It would be a pity to try to repeat here what has been so admirably written by Professor Dewey, both in his *School and Society*, and in certain chapters in the collection of papers from his *Elementary School Record*, notably the one entitled the " Psychology of Occupations." To grasp thoroughly the modern view of this aspect of handwork, these should be studied ; and while many of us may feel the impossibility of working actually on the lines of the Chicago University School, and even may realize that some important sides of education receive scant attention, yet there is something so inspiring and enlightening in this way of regarding active work, that it is not too much to say that Professor Dewey is, in a sense, an originator. He has found how much more than we ever suspected, motor activity with a purpose is one of the most vital factors in education ; he has raised occupations from the place of a rather trivial subject, of doubtful value, into a method which we dare not ignore ; and he has made clear how, by means of this, the race has in large measure reached its present state of progress. For the sake of clearness it might be well to consider, in summary, what he has said : that by the growth of machinery we have lost much both individually and as a nation, in thought, in direct knowledge, in initiative, in responsibility, and in power to do ; and that in order to compensate for this, and to make children realize their place in race development and in social life, we should as far as possible put a child into the position of a responsible industrial worker ; he should feel the need for his work, find

the means to carry it on, and thus experience, in some degree at least, what is meant by being a serious workman.

His definition of an occupation is enlightening:—"By occupation is not meant any kind of 'busy work' or exercises that may be given to a child in order to keep him out of mischief or idleness when seated at his desk. By occupation I mean a mode of activity on the part of the child which reproduces or runs parallel to some form of work carried on in social life."

"We must conceive of work in wood and metal, of weaving, sewing and cooking, as methods of life, not as distinct studies."

Here, then, we arrive at what we may regard as our present position; we have a long inheritance of ideas and a shorter one of experimental practice, and each of us should use the legacy in our own way. It might be useful at this point to indicate some of the ways, in the hope that they will be taken only as indications and suggestions, and not as anything more permanent and stereotyped.

Apart from the drawing, painting and modelling now almost an inherent part of every Infant School and Kindergarten, we have, in a more limited number, occupations such as the making of objects in paper, cardboard or wood, the beginnings of needlework, and the weaving of mats and baskets. Now this is the nearest approach to what has been described as industrial handwork, and as far as choice of material goes it seems sensible, though perhaps rather limited. But the main test lies in the way in which the teacher and, consequently, the children regard such work, and the place it holds in relation to the rest of the work in the school. One is safe in assuming that, as a rule, it is simply regarded as a subject, and has a place on the time table as such, that by the doing of it children are supposed to become neater, more capable with their hands, more accurate, and also as a by-product happier, since they like doing this work. If the teacher is painfully honest with herself, there is also another motive, always kept safely in the subconscious region: "that such handwork is in vogue, most up to date schools are taking it up." If she is very human she will also desire to see good, tangible results.

Now, granting that all this is justifiable and even right, is there no deeper reason and no stronger motive for introducing this kind of work? First of all, how is it usually conducted? The following is a fair example of many hundred lessons.

The teacher has put paper modelling on the time table for Monday afternoon from 3.20-3.50, therefore whatever may be the main interest in the children's minds, paper modelling must be done. Last Monday they modelled a barn, to-day she decides they shall model a cupboard, which is a little more difficult. Materials and tools are given out, and, as a rule, the procedure resembles the following:—

“To-day we are to make a cupboard. What does your mother do with a cupboard?” “Put things in it,” is the universal reply. Such is a sample of the introductory inspiration. In better cases, a finished model is shown. In worse cases, where the teacher is either dour or unimaginative, no information is vouchsafed of the nature of the object to be modelled. In either case the next stage consists of a series of directions or advices which have to be translated into law. Such are: “Crease the paper from top to bottom,” “Crease it now from side to side,” “Fold the right hand division in halves,” “Fold the left hand division in halves,” “Fold the top division in halves,” “Fold the bottom division in halves.” “Now how many squares have you?” “Now I shall draw a big square with sixteen squares on my blackboard, and show you where to put the cuts. The white chalk lines are cuts, and the dotted ones are folds. Now be sure you look carefully where the cuts are, and *don't make a mistake.*”

We will here presume all have arrived at this stage successfully; indeed, unless they were idiots, or very unregenerate, they could not do otherwise, and they have probably arrived at a simultaneous stage of hardly restrained desire to go on quicker. The teacher continues: “Now fold upwards the *two middle bottom* squares, now the *two middle top ones*, now the left side, now the right side. Now you have a cupboard.”

Mysteriously, out of chaos and a confused medley of commands, a cupboard has suddenly appeared. Cupboards do not appear in that way in real life, nor did the very first cupboard evolve itself out of a tree by a number of vague choppings; but we have sixty good results, carefully made cupboards. What have the inward results been? Obedience, imitative activity, and some slight hand training. This is not in any way parallel to life's industrial training.

It might be useful to consider an example of another industry. A class of little girls is being taught to sew: they are supplied with rags of calico about 2 by 6 inches, red cotton

and needle and thimble. Careful and minute directions are given about the holding of the needle, manner of threading, manner of using thimble. The rag is already tacked for hemming, though there is no apparent reason why it should be hemmed, or why the children should begin with so difficult a stitch. The needle is placed at a certain angle, and the ceremony is begun. Neither interest, enthusiasm nor intelligence accompany the performance of this industry; when a strip has been hemmed the hem is frequently torn off, and the whole performance gone through again, until the art of hemming is nearer perfection. Wonderful results in the sphere of hemming arise out of this barren activity, but what has happened to the children? Obedient boredom, and a certain muscular control which it is pretty certain they were not ready for; the quenching of any interest or intelligence that may have arisen in connexion with sewing. What happens later? Are the present generation of poor mothers, who have had years of this kind of thing, famous for their making or mending of garments? Do children leave school passionately attached to the needlework industry? Do teachers of young children long for the needlework hour?

That these types of lessons are not educative any one can see, and yet how may they be bettered? We cannot allow children to have unfettered freedom and unlimited material; children need help as we all do, and that help is greatly appreciated if it comes just at the time it is needed. Doubtless most of us remember the experience of irritability and impatience when somebody insisted on showing us how to do a thing that we could do for ourselves, or, at least, thought we could do. If this feeling ceased, and we were content to be shown, the interpretation must be that we had ceased to desire to do independent work, and the next stage was that we could not do it. And all the reason behind in the teacher's mind was that children must not be allowed to make mistakes or to waste time and material; they must form the habit of doing the thing right from the beginning. No account was taken of the habits of dependence, indolence and blind obedience, that were all being formed rapidly and successfully.

What really happens when a child sets out to work on his own initiative? First of all he wants to make a particular thing in connexion with a particular interest of his own; or he may wish to make something for somebody else. First, then, there is a particular need, then an attempt to

consider how this can be accomplished, with the tools and material to his hand. If a boy wishes to make a small cart he first of all sees a glorified cart of imagination: he may find a box to form the body of the cart; bits of tins, or empty reels of cotton, or old button moulds for wheels; skewers for shafts; these are either nailed or glued together; but meantime he has paid particular attention to carts on the road, and possibly his first attempts at nailing have split the wood. Thus imagination, observation, responsibility and all that accompanies experiment, have been exercised and developed, and the finished usable article gives a sense of power and capacity that means he will begin at a higher level next time. "The will grows with courage of the deed."

A little girl desires to make a pinafore for her doll: like the boy she sees a vision, but hers is of a pinafore complete and beautiful, and then she sets out her plan; she must have material, and this is generally obtainable. She must observe her own and the baby's pinafores. Then she must try the material against the doll; perhaps hasty enthusiasm leads her to cut out rashly, and fitting shows that it is too skimpy; she forgot the doll must be able to move freely and walk in it; the material is spoilt, and the child's sorrow is bitter. Fortune smiles and new material appears on the scene, not so good, perhaps, as before, but just possible. She is duly impressed by her sad mistake, it is interwoven with the subject of pinafores for ever, and the second attempt is a great improvement; she knows nothing about hemming or running, but she just sews, some of it holds and some does not; she pricks her finger frequently; after the first washing of the pinafore much of it had to be re-stitched, and the raw edges remain an unsolved difficulty.

Now these are cases of the kind of industrial work a child would usually do at home, and they are, so to speak, a reflection of the way the race learnt its industries. It is needless to analyse them further; any one can see that they involve complicated experiences, both physical and mental in character, to say nothing of the moral discipline they engender. Both children realize a need, both feel the constructive craving, both try to satisfy it, and both are probably in a state of mind to be ready to learn a little but not too much, just enough to help on to the next stage.

This, then, should be our guide for industrial work in school. The application is fairly evident, especially in the light of

one of Froebel's foremost principles: "Education in instruction and training, originally and in its first principles, should be passive, following (only guarding and protecting), not prescriptive, categorical, interfering."

Viewed in this light, how then should the industrial work be conducted? First of all it should arise out of the children's everyday needs and interests. If the whole class were engaged in making a co-operative doll's house or a village, then a cupboard would be a natural and necessary thing, and would probably be suggested by the children themselves. But simply following a barn, in order of complexity, it has little relation to anything but the logical sequence, and we have already shown the fatal results to education of a blind acceptance of this order. Probably a pencil box or case for stamps or box for private string, or in the case of a girl a wardrobe for doll's clothes, or a doll's trunk, would be a natural thing to make. Then, following the natural method the children might, even at the expense of a little extra brown paper, make the first experiments themselves; they would soon discover the need for measurement and various kinds of elementary mathematical calculations; indeed, this industry might well be a direct application of number work, and could often justifiably be taken in the time set down for that subject. Having made the necessary calculations, which presumably are not all alike, the class could then proceed to try various plans for making the desired object; they will utilize former experiences, and they will work towards an ideal which they alone can visualize; there might be a finished model of the teacher's which to the unimaginative or inexperienced would serve as an end to be worked for, but it should never be set before them as the only possible cupboard or box, the pattern of which is laid up in the British Museum. Indeed, the main aim should be originality, and only where a child is not yet ready for this, should a model be provided.

Now the results as cupboards or boxes will be various; all idea of a uniform class standard must be banished as completely as it has had to be done by workhouse authorities in the matter of children's clothes. The class consists of a number of individuals, not a number of types.

The best work should of course be left as its maker has finished it unless obvious help is needed, and he might be allowed to continue alone; but probably the bulk of the class will have found various difficulties, and will be just

ready and willing to be helped ; the right moment has come when they can both appreciate and assimilate. As time goes on, this help should become less and less, especially as a general practice. Again, after the children get accustomed to the material and realize their power over it, they should be allowed to make various objects, according to their varying interests. From the first the main thing to keep in mind is that they have a great deal more power than we imagine, that from the first we must allow them to feel the responsibility of the situation, and that experiment rather than passive obedience should be the general aim set before the children. If there is a waste of material in this way, it is soothing to reflect that it is better than a waste of brains and energy, which the other way undoubtedly promoted.

Perhaps the other case of the needlework lesson suggests a greater problem ; but it is inconceivable to think that, as industrial handwork, needlework should be treated in a less educative manner than any other social industry. It began as experimental, and in the hands of the best workers it is still a matter for experiment and intelligence, rather than for passive executive uniformity. If we wish to encourage people who will submit to being sweated workers, or rule of thumb performers, then it is better to cease to pursue the educative side and continue the policy still almost universal, and almost universally encouraged by those in authority.

We might, however, sketch what can be done if the subject is regarded as to its high rather than its low possibilities.

The girls of a class aged at least seven are generally interested in this side of home life, and wish to make something for their dolls, or the home babies. They might be allowed to choose, either individually or as a class, what they would make. Perhaps at first, if the class is a large one, a teacher might be compelled to make the choice uniform, but this should be recognized as a compromise with conditions, and not what is really desirable. We will suppose they have chosen a doll's cloak. There might be some possible choice of material, and any child might be free to bring a piece from home. All would bring their dolls (in the case of very poor children the dolls from the baby room might be borrowed), and the class would proceed to consider ways and means. They might be supplied with sheets of newspaper, and be allowed to cut a paper pattern of *their own*. If, in the number lesson at any time measures had been made, they should now

be used ; or the very need for one might afford an opportunity for making a cardboard measure if not a tape measure during a contemporary number lesson.

When each member of the class is fairly well satisfied that her paper pattern will do, and the teacher has seen that they are fairly reasonable, the material should be given and the children allowed to proceed without a break. When the cutting out is completed they should simply go on to the making, and then will arise various difficulties in a natural way. Some will look at their own garments, some will reflect on their mother's methods, some will use their own judgment. Probably the raw edge of the material will be either left or turned down once, and a running stitch used. The seams, if there are any, will be simply run. Many of the cloaks will doubtless fail to meet when put on to the doll, and some may be too large. As far as possible the children should be encouraged to solve these difficulties, and if the garment turns out to be rather a failure, it will in reality be a "high failure," because it is the product of the best thought and activity of which the child is capable. The next will be better, and gradually the right time to learn a stitch or a method will come. It will be done on a real thing, not a useless rag, it will fulfil a real need, the reason for it will be apparent from the beginning, and as in the case of paper modelling the help given will be appreciated and used. But the help should always follow the need, never precede it, and so it may constantly appear as if the children are bungling and wasting material ; but the bungling is really experiment and invention of a high order, and the waste of material means economy of mental power.

We must trust children more. Probably the greatest value of this kind of lesson is the training of character.

What other place, then, can industrial handwork take in the school ? Besides being a method of experience, it has already been incidentally connected with number, and much more can be done in this direction, as the number section will indicate. Other subjects are greatly improved by this method of learning, e.g., early history, early geography, and possibly the beginnings of natural science. By gathering the only materials possible to man in early times, and by trying to form them into such tools and weapons as he needed, children get a far more real grip of his conditions ; they are projected into the time ; similarly with geography, for by trying

to make of wood, grass and clay the hut of the child of tropical regions, they realize far more clearly his life in the attempt to imitate some of his industries. The same course of investigation, observation, experiment, is followed before they accomplish these things, and when thought and action directly bear on each other both are undoubtedly strengthened and enriched. Dewey has made this idea more permanent in the words: "The concrete logic of action long precedes the logic of pure speculation or abstract investigation, and through the mental habits that it forms is the best of preparations for the latter."

Industrial handwork is therefore more of a method than a subject in the Infant School or Kindergarten. When used as an aid to the better understanding of any subject matter it is quite clearly so, and when used apparently without such connexion, as in weaving, paper modelling, needlework and gardening periods, it is still a method, because the aim at this stage is not to make weavers, carpenters, needlewomen and gardeners, but people whose physical skill has been developed side by side with their capacity for intelligent investigation.

The moral significance of industrial handwork is perhaps nowhere better discussed than in a paper by Miss Alice Woods, Principal of the Maria Grey Training College, which appeared in *Child Life* of April 1902. There one realizes how much steadiness of aim, concentration, strength of will and serviceableness are developed from motor activity of this kind; above all is cultivated what is so often lacking in the elementary school child—the sense of responsibility and power to work independently. But all this will be negated and even destroyed if a teacher continues to be categorical and interfering, continues to value mere executive skill above intelligent imitation or experiment, fears childish mistakes instead of valuing them, and continues to mistake the form for the spirit.

Interference is undoubtedly, in the case of really intelligent teachers, a form of selfishness, and in the case of less intelligent, a form of laziness or ignorance. With many average teachers the cause lies in lack of thought.

Perhaps a few practical suggestions might come at this point:—

First with regard to material: it is not always easy to get sufficient from headquarters for the rather lavish use suggested here; enthusiasm and imagination will find other sources. Wall-paper pattern books of any but the current year are

almost costless. A self-coloured wall-paper is often cheap. Brown paper can be procured from many sources; people will willingly give away cardboard boxes if the children are old enough to use cardboard. It is much better for the children to realize in this way that odds and ends can be used than to connect their work always with regulation material.

If the children are not of a very poor class, they should be encouraged to bring their own material for specific purposes, as well as for general use.

It is a good plan, and one which is becoming more universal, to have a class box as a receptacle for odds and ends; a kind of universal rag bag. Children can bring things, provided they are moderately clean, that are generally considered mere rubbish, such as Sunlight Soap boxes, Lux cases, empty match boxes, and burnt matches, the cylinders of incandescent gas mantles, odd pieces of wire, string, stamp paper, button moulds, empty reels of cotton, corks, and many other things too numerous to mention. From these they may be encouraged to make their own toys, or utensils, or to make things for other people. This is done with great zeal at Devons Road School, Bow, where the idea probably originated in this form.

Wholesale cloth warehouses ought to be bombarded by teachers for their old pattern books; the patterns are cut on a much larger scale than those supplied by retail shops, and would give an inexhaustible store for needlework material, and allow for considerable exercise in judgment. If this source of supply is not possible, unbleached calico, soft and loosely woven cloth, flannelette, casement cloth, nurses' cloth, are among the most suitable for young children. Anything that has much dressing, like book muslin, should be avoided, or anything that would dazzle a child's eyes; but on the latter point there has been a good deal of faddism prevalent lately.

For weaving, up to the present the best and cheapest medium seems to be bast or raffia. It can be dyed by the teacher or children with Dolly dyes, or even some natural dyes, e.g., onions, tea, beetroot, etc. It adds greatly to the interest in the article if colour is introduced. Children should, of course, approach actual weaving in the same experimental spirit as other industries, and they should realize by inquiry and observation the primitive methods of weaving. Later, when they have done all they can for themselves, they will be content to learn definite stitches, but much can be left to

them, such as the shape and use of the article, and the introduction of colour and pattern. Wool, if it can be got cheaply, can be used for weaving at a later stage, and some beautiful effects can be got by joining all the pieces woven by a class into a large blanket. In the light of this form of industry it is surely unnecessary to criticise paper mats.

With regard to pottery the children should realize something of its origin, either by a visit to pottery works, or by means of a model potter's wheel. Such a story as "How the Indians learnt to make Clay Dishes" (*Nature Myths*, by Flora Cooke), would interest them in this connexion. In America, the home of educational experiment, the children can have their school work fired, and afterwards they are able to enamel it themselves. This solves the great problem of all kinds of clay modelling, the difficulty of keeping the work. It would be very desirable if each distinct or group of schools had a furnace or access to one, so that this industry might be completed. Perhaps by saving on material, this might seem possible to authorities. It is strongly advised that clay and not plasticine should be used in schools. Various kinds of clay besides that in common use can be got, e.g., red clay mixed with a little sand from Surrey, and a rather dark grey variety from Cheltenham. There should be little or no formality of procedure in this lesson; necessity will soon tell a child how to use his hands. The use of clay as a more artistic medium is described in the section on Art.

Gardening is more possible than at first appears. In a London school situated in the heart of a crowded and congested neighbourhood an experiment of a very simple character was made. The usual concrete playground was looked at by one of the assistant mistresses with the eye of imagination, and she was able to open the eyes of her class to possibilities. For weeks every child who possessed the merest semblance of a back yard brought daily his offering of a little mould in a paper bag; a substratum of slack or some form of clean rubbish had been laid on the concrete in a corner of the playground. On this was daily deposited the bagfuls of earth. In a wonderfully short time it became a kind of raised garden, and gradually extended its borders along the wall.

Now, after about a year's time, it is a very satisfactory garden strip, full of plants brought by the children. It is so essentially theirs that no one could venture to suggest the fear of neglect; it forms one of the most satisfactory of their forms of indus-

trial handwork ; their own penny spades and pails can be handed round ; rakes can be made by elder brothers with wood and nails. Fortunately no one has formulated methods of gardening yet ; there is no rake-drill, or digging spade by spade after the teacher, so the activity can be a perfectly natural one.

The suggestion has been made to one local authority and has been received, we believe, favourably, that it would be advisable to grant to each head teacher if she wishes it, a small sum of money to be laid out in handwork material, instead of doling out all her allowance in kind. This would mercifully deliver us and the children from the monotonous round of objects so similar and so unimaginative in every school, it would make experiment possible, and it would make the burden of obeying their consciences at the expense of their pockets less heavy to many teachers who spend very considerable sums, which they can ill afford, throughout the year.

To foster the real spirit of social work it is good to introduce side by side with individual work some form of co-operative work ; this may centre round the garden, of course, and garden tools might be made ; or a doll's house or stable for the babies forms an interesting motive.

Individual members of a class can make the pieces of a rug which can be afterwards joined. Groups of children may make smaller things, such as a pair of knitted reins, or they may dress a doll.

If a fairly large object is planned it is better to give it to a group than to put too great a strain on the concentration powers of one child. As in other directions the educative value of group work depends on the amount of organization and responsibility given to the group ; there should be a leader or foreman, and much social training will be given by the obedience and co-operative spirit.

Thus we hope to train the worker who is also an educated and responsible social being, intelligent enough to direct or to be directed, to initiate or to copy, but never to lose his individuality. We do not want another race of men and women workers like those we can see in the evening trams of the cities, or the muddy roads of the villages, whose work has conquered their spirit, and whose sole aim is to keep alive the weary body. Their work is not of themselves, and they have nothing to put into their leisure. Neither do we seek to develop the opposite type, those whose work so

dominates them that the individual is lost ; it was said of one such : " He was born a man and died a grocer."

Rather than this, we are seeking to raise up a race who will feel the need to work, not the need for material self-support, but the natural craving for growth, which can only be thus satisfied. And work that is an outcome of this will enrich the individual in the worker, and, through him, the community in which he lives.

HENRIETTA BROWN SMITH.

BOOKS FOR REFERENCE

- The School and Society.* Dewey. (University of Chicago Press.)
The School and the Child. Chapter on the " Psychology of Occupations." Dewey. (Blackie, 1s.)
The Place of Elementary Industries. Dopp. (University of Chicago Press, 5s.)
New Methods in Education. Liberty Tadd. (Kegan Paul.)
Indian Basketry. G. W. James. (Henry Malkan, New York, 8s. 6d. net.)
Principles of Design. Rhead. (Batsford.)

MUSIC

HAPPILY in these days it is not necessary to justify the inclusion of singing as a subject of instruction for young children ; even the most unmusical teacher will admit that a school in which music did not assume a prominent position would be a very cheerless and uncongenial place both for teachers and scholars.

In the following pages a large proportion of the space available is devoted to the technical aspects of singing, because the teacher who wishes her class to make any real progress must be conversant with the general principles of the subject. Singing comes quite naturally to children, and the main business of the teacher is to see that this natural ability does not develop on the wrong lines.

Nevertheless, it must be constantly borne in mind that the recreative aspect of singing is more important than the technical side, although exercises, if carefully chosen and intelligently performed, need not be at all uninteresting. The course of instruction in singing involves :—

- (1) Voice-production.
- (2) Rhythmic training.
- (3) A small amount of preliminary instruction in reading written music.
- (4) Ear training.
- (5) Musical invention.
- (6) The acquisition of a large number of simple songs, and this is the most important section of all.

VOICE PRODUCTION.

The organs involved in tone-production are—

- (1) The breathing apparatus ; i.e., the lungs.
- (2) The tone-producing apparatus ; i.e., the larynx.

(3) The resonance apparatus ; i.e., the mouth and nasal cavities.

The voice, being a wind instrument, requires a column of air as its motive force, and may be roughly compared with a harmonium. In this instrument the bellows are expanded by the pressure of the feet of the player ; air rushes in, and is stored in a reservoir at considerable pressure. On the depression of a key, a connexion is made between the reservoir and a thin tongue of brass called a reed ; and a stream of air rushes past the edges of the reed and sets them into vibration. Thus a musical sound is produced.

In the human voice the place of the bellows and reservoir is taken by the cavity of the chest and the lungs, while instead of the pressure of the feet we have the tension of the muscles which govern the movement of the ribs and diaphragm, and in place of the brass reed there is the pair of vocal cords contained in the larynx. Now, every one who has played a harmonium with the "expression stop" drawn, i.e., with the safety valve on the reservoir closed, knows how difficult it is to play the instrument effectively, and this difficulty arises from the necessity of keeping the air supply at a suitable pressure. If the pressure of the feet is too great, the tone is loud and coarse. If too small, the tone comes in gasps and is feeble and flat. So that to play such an instrument demands a course of practice in "breathing with the feet" ; for exactly the same reason voice production of the right type demands a course of breathing exercises.

On account of the uninteresting nature of such exercises there is a great temptation to ignore them with the younger children. But good singing cannot be secured without them ; all authorities are agreed on this point. The truth is that the kind of breathing required for singing purposes is quite different from that usually employed. In the former case inspiration has to be deeper and expiration much slower, the air being also emitted at a higher pressure. Moreover, the action has to be conscious, or at any rate sub-conscious instead of automatic.

Very elaborate courses of breathing exercises are sometimes prescribed by enthusiasts, but their study by the ordinary teacher is happily not necessary. She can quite easily devise her own scheme by remembering the main objects of such exercises, viz. (a) to increase the capacity to take deep inspiration, (b) to strengthen and secure control of the muscles

which prevent the ribs from collapsing, and so enabling one to emit the breath very slowly and at just sufficient pressure to produce the required note at the desired strength.

Breathing exercises being designed to strengthen certain muscles are, like all exercises of this type, dependent for their success on the following conditions:—

- (1) They must be done regularly; twice a day will suffice.
- (2) Not more than two or three minutes at one time should be devoted to them.
- (3) They should be done in a pure atmosphere.
- (4) The children, if old enough, should know what the object of the exercise is, so that they can concentrate their thoughts on the muscular efforts they are making.
- (5) The exercises must be brought into relation with other work, e.g., reading, story-telling and recitation. In these lessons children must be made to breathe deeply and to economise the breath.

The normal breathing exercise is this:—

POSTURE.—Erect but not too strained; feet slightly apart, toes turned outwards.

INSPIRATION.—The teacher counts “One, two,” quite slowly, during which the children take a deep inspiration, preferably through the nostrils, without “sniffing.”

Cautions.—(a) The abdomen must be drawn slightly inwards, while the chest itself expands.

(b) The shoulders must *not* be raised—this is most important.

(c) The action must not be violent enough to make the child look unnaturally distended or uncomfortable.

EXPIRATION.—The teacher continues, “Three, four,” etc., while the children exhale through the mouth as slowly as possible.

Cautions.—The necessary check on the natural outrush of breath must be effected by preventing the ribs from collapsing too rapidly; the mind must be concentrated on this. If the children look as if they were being suffocated they are checking the outflow by closing the throat. In such a case, let them say slowly such a sentence as, “Please don’t make me laugh so much,” in a monotone while exhaling.

At first the children must not be expected to extend expiration beyond six seconds; this period may be gradually increased.

The variations in procedure necessary to keep alive what

little interest is possible in breathing exercises, can be obtained by choosing musical notes or ordinary words and sentences to be sung or monotoned during expiration. E.g., the letters of the alphabet or the days of the week may be sung to a simple phrase, or the children themselves can be invited to suggest a sentence.

An obvious, though very necessary, remark is that the teacher must insist that the method of breathing adopted in breathing exercises must be consistently employed by the class when songs are being sung.

THE LARYNX.—This is the tone-producing organ, containing the vocal cords which correspond to the vibrating reed of the harmonium. But in the case of the voice, one pair of reeds has to do the work of the whole row of reeds in the harmonium. Very delicate muscles are connected with the vocal cords, which, by altering their tension or their vibrating length, determine the pitch of the note produced. These muscles are, as usual, actuated by nerves which are under the control of the brain. The chief points to be noticed by the teacher of young children are :—

(1) The very delicate structure of the larynx makes it extremely liable to overstrain ; and this results in a coarse and “ grating ” tone which marks the singing in many Infant Schools and Kindergartens.

(2) The inability of so many children to imitate accurately a musical phrase is not always due to the lack of a musical “ ear,” but to the impossibility of making the exceedingly delicate muscular adjustments necessary. With practice this difficulty usually disappears.

RESONANCE.—Every one is familiar with the fact that the sound produced by a vibrating tuning fork is very feeble until its lower end is placed on a hollow box, when the volume or resonance is largely increased. The reason is that the vibrations of the fork are then communicated to the box and the air contained within it, so that the vibrating area is immensely increased. In the case of the voice, the nasal cavities, the walls of the chest and the bones of the head correspond with the box ; the vocal cords vibrating by themselves give but a small tone.

This problem of resonance can be dealt with by the teacher of a class of young children only in an indirect way. The best methods available here for securing resonance are :—

(1) A good posture must be assumed; the chest well expanded and the head not allowed to droop.

(2) The position of the tongue and lower jaw proper for the production of the various vowel sounds must be accurately assumed; this is primarily a matter of phonetics and is dealt with in the reading lesson.

(3) Humming a tune is a very useful and pleasant exercise, but the sound must be felt high up at the back of the nose and not in the nostrils, otherwise a disagreeably nasal tone will be the result.

VOICE EXERCISES.—These are necessary, but care must be taken to make them attractive. They must have for their object the attainment of some specific virtue or the eradication of some acquired defect. They should not be employed for long at a time, and can be effectively used at odd moments during the day. A set of such exercises is appended, although this list must not be considered exhaustive, but merely as a model upon which others can be based.

A word may be added regarding soft singing. It is generally stated that soft singing should, as a rule, be insisted upon. Quite so, but is there anything morally or artistically wrong in singing loudly? Certainly not, except that experience shows that loud singing is nearly always harsh. Loud singing without harshness is as artistic as soft singing. To sing loudly without coarseness is an accomplishment only attainable after much careful practice under good and constant supervision. Therefore a teacher must be ever ready to combat harshness with the command "Sing softly!" Few children understand the term "harsh," but all realize the meaning of "loud" and "soft." An ever-recurring difficulty is that children do not understand the signification of "good tone." They imagine that the more loudly they sing, the more credit they ought to get. All voice exercises, then, should be sung softly, except those which are expressly designed to increase the volume of tone, e.g., exercise 7, page 126, and these must be introduced very cautiously.

VOICE EXERCISES.

1. *mf* , ,

oo oo oo etc.
oh oh oh
aw aw aw

Also to other vowels.

2. *Slow* , , ,

oo oo oo etc.

Also to other vowels.

3. , ,

I saw you smile, I saw you smile, etc.
Rock me to sleep, Rock me to sleep.

4. *p* , *mp* , *mf*

Cuck - oo! Cuck - oo! Cuck - oo, cuck - oo, cuck - oo!

* The comma denotes the points at which breath should be taken.

5. *mf* , *p*

I hear the mer - ry church bells ring, One, two, three, four, five, six, seven, eight.

6. *mf* , *pp*

Lul - la - by, Lul - la - by.

7.

loo, loo, loo, loo.

APPLICATION OF VOICE EXERCISES.—It is a common experience to find a class performing its breathing and voice exercises in irreproachable style, and yet singing songs in such a way as to render nugatory all the previous work. The remedy is obviously in the teacher's own hands, but a few hints may be useful.

(1) The places for taking breath should be distinctly understood when the song is being learnt.

(2) If the tone is inclined to be coarse, let the melody be sung softly to "oo" or "aw."

(3) Use the words of a song during the recitation lesson, and see that the vowels are correctly pronounced.

(4) It is useless to talk to children about voice production; teach it by imitation. If there are a few children whose tone is thoroughly satisfactory, let them sing by themselves while the others listen.

(5) If the tone of any particular child is coarse, do not allow him to sing with the others, unless he sings very softly.

(6) No good vocal tone can be produced if singing is accompanied by violent physical exercise. See the remarks on "Singing Games"; page 135 (g).

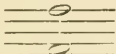
VOCAL REGISTERS.—Nearly all children have two distinct qualities of tone within their vocal compass; one is that characteristic of their ordinary speaking voice, another is observed when they produce high notes. In the case of some children—boys especially—the difference is as marked as that between the tone of a violin and that of a flute. The terminology generally employed to describe the phenomenon is "chest voice" and "head voice." Space does not permit any detailed discussion of this topic, and it is hardly necessary, as the distinction is not so clearly marked in the case of young children as when they reach the age of ten and upwards.

This much can be said, however. The practicable compass

for small children lies between



The notes above D on the fourth line, if not sung too loudly, can only be produced in the "head voice," and are of a pleasant flute-like quality. The lowest notes from C to E on the first line can only be sung in the "chest voice" and the tone-quality is more robust—not to say coarse. The middle notes lying between F and the D above *can* be sung either as "chest" or as "head" notes. If sung as "chest" notes they are inclined to be very rough, and the higher the note the worse the quality, until the note is produced only with considerable strain. The aim should be to get all notes

between  sung in the "head voice." Of course, this

technical explanation will not be given to the children, but exercises will be given to secure the desired result. The voice exercises given previously will amply suffice for this purpose. Loud singing will, with an untrained class, produce just the opposite result.

Another good way of cultivating the "head voice" is to pitch the songs rather high. Although as a rule the compass given above should be adhered to, there is no objection whatever in occasionally exceeding this in an upward direction, provided always that children are told not to sing the highest notes if they "hurt."

RHYTHM

Rhythm is an essential of music. It has its origin in the alternation of effort (accent) with relaxation (non-accent), which is a fundamental feature of all movement. Up to a certain point rhythm is instinctive; we perform many acts, e.g., walking, without being conscious of their rhythmic character. There are two correlated aspects of rhythm: rhythm which we *feel* and rhythm which we *hear*. Of these two varieties, that of movement—"feeling rhythm," as it is called, is the more primitive, and should receive special attention in the Infant School or Kindergarten. Singing games and physical exercises done with musical accompaniment contribute towards this end.

Many songs, e.g., "Three blind mice," depend for their effect more on their rhythm than on the melody, and unless they are sung in such a way as to bring the rhythm into prominence all the charm is lost. How is rhythmic singing

to be secured? Simply by developing the two kinds of rhythm together. As a simple example take a lullaby. The children, as soon as they begin to learn the song, should perform a simple rocking or swaying movement in time with the music. Even if the song be sung subsequently without movements the original rhythmic idea will persist.

It is a good and not a bad thing for children to move their limbs when singing in the ordinary way. The command, "Sit quite still!" given as the prelude to a song is quite out of place.

Formal, but not uninteresting exercises in rhythm may sometimes be given. The children may imitate a simple rhythm, e.g., { | d :— : d | d : d : d | d :— :— | d :— :— || clapped by the teacher, but it must be distinctly understood that rhythm implies accent, and the accented notes must be very clearly marked. After the phrase has been clapped, words may be fitted, e.g., "What are little boys made of?" and then a melody can be added, thus:—

{ | d :— : r | m : f : s | l :— :— | s :— :— ||.

The teacher must not assume that suitable phrases can be invented on the spur of the moment; they must be prepared beforehand.

It is very interesting if children themselves are encouraged to suggest suitable movements to rhythms sung or played by the teacher. Some children are quite clever in this direction.

There are two fruitful sources of *unrhythmic* training: one is found when children are allowed to march "out of time" with the music played. The march tunes played on the piano should be performed at such a speed that even the smallest child can comfortably keep in step; small children have to take short and comparatively quick steps. The other warning has to be given in connexion with so called "Action songs." It is pitiable to think of the vast amount of time wasted over most of these effusions. Generally the actions are forced and elaborate, while the tunes are *banal* to the last degree. Unless the actions are natural and rhythmic in character, they are quite out of place in a song; they are merely a species of physical drill without even the saving merit of helping physical development. The majority of "singing games" are not open to these objections.

Many small children have a keener sense of rhythm than

of melody, as evinced by their ability to recognise a song when its rhythm alone is played or sung. This exercise is amusing, and is a valuable form of ear training.

MUSICAL NOTATION

There seems to be a great diversity of opinion as to whether children ought to be taught this subject at all in the Infant School. It seems to me that this question can be solved by reference to the teaching of reading, as the two cases are nearly parallel. Children learn to talk long before they are taught to read, and similarly they should be taught to sing first and learn how to read written music at a later stage. But by the time that children have reached the higher classes of the Infant School or Kindergarten they are quite able and willing to sing from a modulator, provided always that the time devoted to this part of the work is not felt to be filched from that which ought to be given to songs. Such instruction ought to be recognized as a pleasant little interlude between the other more important sections of the lesson. Every possible resource must be employed to prevent such teaching from becoming dull; the actual amount of matter to be taught is very small, but it has to be gone over again and again, so that the problem to be solved is how to present the same material in as many varied forms as possible.

How much should be taught? Syllabuses generally agree in restricting the amount to the notes of the *doh* chord in any order and the notes of the complete major scale in stepwise order. (This, of course, applies only to the highest classes: the "babies" will not be bothered with any notation at all.)

The teacher has to choose between two notations, the Staff and the Tonic Sol Fa. Whichever is chosen, the Sol Fa principle must be adopted, i.e., the first note of every scale must be called "doh," the next "ray," and so on. Space will not permit the insertion here of any details as to the exact method of teaching; reference must be made to one of the Manuals on the subject. The one fundamental fact is that we have to forge a link between a sound and a written or spoken symbol; this is a process constantly going on in other than music lessons, and the same general principles will apply, *mutatis mutandis*, in all cases.

All such teaching in the early stages will be solely by imitation. The scale itself is quite an arbitrary series of sounds, and could never be discovered by reasoning.

The sound is more important than the symbol, therefore children must by practice learn to realise what *d, m, s, d* sound like before they are shown what these notes look like.

EAR TRAINING

This is sometimes spoken of as if it were a highly technical branch of musical education only. Ear training really begins soon after birth, and a sensible advance has been made when the child can recognize its mother's voice. In fact, long before the child has reached the school age it has had an enormous amount of valuable ear training.

Our concern here is simply in a formal way to extend to musical sounds the process which the exigencies of nature demand from every individual in the wider sphere of sounds in general. The course of musical ear training will include :

- (1) The imitation of little tunes sung or played by the teacher.
- (2) The recognition of differences of pitch, length, quality and volume of notes.

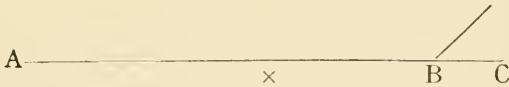
Most children evince remarkable aptitude in imitating musical phrases, but the teacher must not be misled into imagining that the process is therefore a simple one. Take, for instance, the phrase { | d : m . s | d' :— ||. The children first of all have to perceive the phrase just as the teacher sings it ; i.e., the process of hearing must be exact. Some may not be able to imitate it correctly, because they merely perceive four different sounds without really detecting the exact interval between them, so that they sing something like { | d : r. m | f :— || without knowing that they are singing wrongly.

Again, imitation involves musical memory. In the case of eye training it is possible to keep the object before the eye for a long period ; musical sounds are fleeting, and the differences between them are often more minute than those involved in the most delicate variations in form and colour. Therefore we find that a musical phrase, even if quite successfully imitated immediately after the pattern is given, is often forgotten after the lapse of a few seconds. Indeed, all the conditions governing the acts of memory and forgetfulness are present in an acute form in the particular case under consideration.

Musical memory is often *too* good, as most teachers sometimes find to their cost. For example, suppose this phrase is given for imitation :—

{ | d :—r | m : r | f : m | r.s : m | }

It will be found that quite a number of children will sing the last two notes wrongly. During the singing of the first bar and a half they will be gradually recognising, with increasing assurance, the first line of the familiar tune "Austria," and this feeling of recognition will be strong enough to overwhelm practically any perception of a change in the two last notes of the tune. The situation may be shown diagrammatically thus:—



The line ABC represents the first line of the old tune: the phrase given for imitation is shown by the line ABD. The longer the line AB the stronger tendency there is to proceed in the direction ABC rather than ABD. The remedy is to subdivide the phrase at any suitable point X, and practise the phrase XBD several times before the whole phrase is attempted. This is perhaps an extreme case, but the number of tunes which have the first two or three notes alike is legion.

Children generally have less difficulty in remembering rhythm than melody, provided that the rhythm is not too involved. A very good form of ear test is for the teacher to rap the rhythm of a familiar tune and see if the children recognise it.

Lastly, imitation involves reproduction. This necessitates minute and exact adjustments of the very delicate muscles of the larynx, so that the vocal cords assume just the right tension to produce the note desired. The necessary control over these muscles seems to be acquired quite early in the life of most children, but there are some whose powers in this direction are of slower growth. These are the children who, although looked upon as quite unmusical when in the babies' class, yet seem to make abnormal advance later on.

Imitation has been spoken of in some detail because it is the only method of teaching children music in the early stages, and it is well that the teacher should recognise that its seeming simplicity is deceptive. The following practical hints may be of service:—

(1) Since the process is elaborate, the children's attention must be thoroughly secured before the phrase is sung by the teacher. Sometimes better results are obtained if the children are instructed to close their eyes.

(2) The phrase must be sung incisively but not loudly, and the rhythm must be well marked.

(3) The phrase must be repeated several times before the class attempts to imitate; do not assume that mistakes are bound to be made, but try to secure exact imitation at the first attempt.

(4) Do not give melody without rhythm; rhythm is a help, not a hindrance.

(5) "Keep the pot boiling," and do not trust that a sudden inspiration will suggest a phrase suitable for imitation; have all the tunes ready and preferably written down.

Another side of ear training involves exercises in distinguishing tones of different pitch, length, quality and volume. Such exercises are valuable as the quickest method of training the ear to detect small differences between musical notes, which would otherwise pass unheeded.

Exercises in distinguishing difference of pitch are easily devised. Two or more notes are sung, and the class asked which is the highest or lowest. At first the difference will have to be great, say not less than the interval of a fifth—*doh* to *soh*, but afterwards the interval may be reduced until even so small a difference as a semitone is detected. Not till the highest class is reached will the children be expected to give a name, *doh*, *me* or *soh*, to any note.

Exercises in detecting the difference in length and volume of notes will be given on similar principles.

The difference of quality between notes may be illustrated by striking a note on the piano and then a bell of the same pitch. For class purposes, a set of common instruments, e.g., a small bell, a glass tumbler, a tuning fork, a whistle and a mouth organ, with a screen behind which to hide them, will provide all the necessary apparatus for most amusing as well as instructive lessons. After being made acquainted with the particular tone-quality of each instrument in turn, the children are expected to discover which instrument is being sounded without actually seeing it. The exercise can be made quite difficult by employing two or more instruments simultaneously.¹

¹ The "Glockenspiel," to be described presently, lends itself well to a variety of uses in connexion with ear-training.

MUSICAL INVENTION

This is unaccountably neglected in most schools, probably because few teachers suspect how great are the powers of many small children in this respect. Children in the nursery will "croon" (that is, invent tunes of a kind) hour after hour. With a little encouragement children will do the same in school, and there is no exercise so calculated to quicken and develop real musical intelligence. The tunes thus made are not infrequently of actual musical worth, but this is not the real point; it is the effort itself and not the immediate fruit which is of value. No details as to procedure need be given. The only problem is how to encourage the children to do what most of them are perfectly capable of doing unless deterred by excessive self-consciousness.

The best plan is for the teacher to say, "Now two of us are going to make up a little tune. I will sing the first half, and some one else shall finish it. Who shall it be?" After a volunteer has been secured, the teacher sings a very simple two-bar phrase like this:—{ | d :— : d | d : r : m | f :— : m | r :— :— || and the child adds a corresponding phrase. No notice should be taken if at first the added phrase seems quite incongruous; the point is to get the child to add *something*; after a very little practice the additions will be more suitable.

Rhythms can be invented similarly, and I have met with several children who were quite adept at making complete tunes to simple verses. In all cases spontaneity is essential; if the child stops to think, the result is either silence or a quite unsuitable phrase.

SONGS

All musical instruction in the Infant School or Kindergarten is merely preparatory to the effective singing of songs, and most of the time devoted to singing will be taken up with songs and singing games. What has to be said here in this connexion may be conveniently stated in the form of advice under the headings: (1) Selection; (2) Method of teaching; (3) Rendering.

I. (a) Songs should as a rule be quite short: it is better to teach two short songs than one of some length.

(b) Avoid choosing songs which are intended to impress

prosaic facts ; geographical and historical songs are abominations.

(c) While the words should be generally intelligible, a song which has an attractive tune need not be rejected merely because it happens to contain a few hard words.

(d) Songs with elaborate and artificial actions should be eschewed ; if a song cannot stand on its own merits without actions it is not worth singing at all.

(e) The old nursery rhymes sung to their *traditional* tunes are excellent in every way, and should be used constantly in every school.

The short bibliography at the end of the chapter may assist teachers in making a suitable selection of songs and games.

II. The safest method of teaching a new song is as follows :—

(a) Sing the song two or three times to the class, adding such verbal explanations as will contribute towards a complete understanding of its drift.

(b) Take the first line or phrase, sing it *three* or *four* times to the children, and *then* let them repeat it. Teach words and tune together, and do not subdivide the phrases into minute and meaningless sections.

(c) Proceed with the second phrase similarly, and then take the two phrases together. Repeat until this section is thoroughly known, and then proceed with the rest of the song in the same way. Do not be afraid of too much repetition ; try not only to teach the whole song in one lesson, but also to impress it on the memory so forcibly that it will not be forgotten before the next lesson.

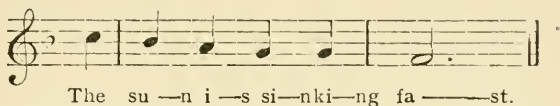
(d) The correct stage for the introduction of the piano is when the tune is *nearly* known. Thenceforward use the piano accompaniment as often as possible.

(e) After the class has made acquaintance with the words and tune combined, the words may be employed in the recitation lesson, and the tune may be sung quietly to a single vowel sound or hummed. If the tune is strongly rhythmic it may be utilised as a piano accompaniment to physical exercises.

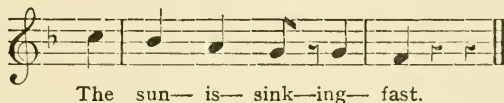
III. RENDERING.—(a) The principles of voice production must be borne in mind throughout.

(b) The words must be clearly enunciated, but a common fault in Infant Schools and Kindergartens is to exaggerate the consonants and to introduce the final one too soon. In some quick songs this is of small importance, but in many—

and always in hymns—this is a fatal defect. It is on vowels, not on consonants, that musical tone is produced. The correct place for the consonants to be introduced is shown in the following example :—



Compare this with next example, which indicates the wrong method :—



(c) Details of expression should be added one by one; often the children themselves can suggest when it would improve the general effect to change the tempo or volume of tone.

(d) The continuous beating of time is unnecessary, but conducting in a wider sense is essential. This means that the teacher has a code of signals, perfectly understood by the class, to indicate changes of expression. The gestures need not be ungraceful.

(e) To secure a unanimous start have a clear understanding that every child is to watch the teacher, and that the singing is to commence directly she moves her hand. Do not have any preliminary beats.

(f) Some songs are stronger in rhythm than in melody : in these cases apply the principles given on page 127.

(g) An immense amount of harm to the voice is done in singing-games, when children are allowed to sing and perform *violent* physical movements at the same time. This is easily avoided by arranging that some children do the singing while the others do the movements.

It is to be feared that few teachers realise the importance of allowing children to hear music as well as to sing it. After all, there is quite a considerable section of the population whose musical education has been obtained almost entirely by intelligent listening, and these are people who count in the musical world. The teacher should frequently sing little songs to the children, not necessarily with the intention of teaching such songs, but merely of allowing the children to hear them. Naturally, teachers who are trained vocalists

are in the minority, but a concert-room performance is not required. Any one who is incapable of interesting a class in this way is *a fortiori* quite incompetent to teach singing.

The same principle is applicable to pianoforte and violin playing. The number of teachers nowadays who cannot play well enough to delight small children with some easy instrumental pieces is comparatively small, but it is doubtful whether the educational value of such performances is sufficiently realised. Indeed, one can quite imagine a most instructive lesson being occasionally given in which the children do nothing but listen.

A valuable instrument which should be in all Infant Schools has lately been introduced. It is a modified form of Glockenspiel,¹ and consists of a set of steel tubes or bars, each of which when struck produces a note of the major scale. A number of uses to which this can be put will readily suggest themselves to the reader; e.g., a particular phrase played on the instrument can be understood to mean "Stand!" another "Dismiss!" and so on. For ear training the instrument is invaluable.

Lastly, it cannot be too strongly urged that if the singing of the school as a whole is to be satisfactory, there must be cordial co-operation between teachers of the different classes. A syllabus should not be drawn up for each class separately, but for the whole department, so that there will be continuity and no overlapping. Certain exercises, e.g., those for breathing and voice production, will be common to all classes, the necessary simplifications being introduced for the youngest children. Also a number of songs, nursery rhymes in particular, will be taught to all children so that occasional combined performances are provided for.

R. T. WHITE.

BOOKS OF REFERENCE.

The following list is by no means exhaustive, but it contains sufficient material to provide for most contingencies.

The School Teacher's Music Guide. By Venables. This is a text book dealing comprehensively with the full course of instruction pursued in schools. (2s. 6d.)

Boston Songs and Games. A large collection of songs with piano accompaniment. All easy and tuneful. (4s. 6d.)

¹ This is supplied by Messrs. Curwen of Berners Street, W.

Songs for little Children. By Eleanor Smith. A collection similar to the above. (4s. 6d.)

Guild of Play Books. By Mrs. Kimmins, three parts. (5s. each.)

Brahms' Children's Songs. These are German Folk-Songs arranged by Brahms. (1s.)

Stevenson's Songs for Children, set to music by Edith S. Swepstone. Two parts. (1s. each.)

(All the above are published by Messrs. Curwen & Sons.)

Dulce Domum, a collection of the Nursery Rhymes, with their tradition tunes and piano accompaniments. (Cassell & Co. 5s.)

This can be obtained without the accompaniments for a few pence.

Song Garden for Children. Music by Norman O'Neill. An English version of traditional French and German Nursery Rhymes, furnished with charming accompaniments. (2s. 6d., published by Edwin Arnold.)

The following are published by Messrs. Novello & Co.—

Twenty-four Songs for Little Children, by Gerald Cobb. Two parts. (2s. 6d. each.)

Messrs. Novello & Co. also publish a number of small collections of songs carefully graded under the title of *Novello's School Songs*. The price of each book, containing about six songs, is only a few pence, and teachers are advised to write for a descriptive catalogue, which gives all the information necessary for making a suitable selection. Messrs. Curwen's classified catalogue is also useful.

GAMES

As a name on the time table this is probably one of the vaguest in its significance. What side of life do games represent? What, exactly, do we aim at, in making them part of the school curriculum?

We play games throughout life, and it is hard to say when we begin and when we end; probably they form one of the most universal interests. Experience is as a rule so limited, that we seek this method of widening it, sometimes in a desire to try our own skill, and sometimes to test it by competition with another.

Games constitute one of the most usual forms of play and play is, to a young child, the chief means of learning life. The other forms appear as various subjects discussed in different chapters of this book. Froebel was the first actually to apply games as a factor in the education of young children; and it is a practice as dangerous as it is valuable.

Games are so much part of a child's life and interest, that to spoil them, or rather thoughtlessly interfere with them, may be to spoil or interfere with something very vital to him. A child who is attached to those in authority over him, may be quite docile about doing what they suggest; and indeed our elementary school children are made so docile, that it is often very hard for either them or us to know what they really do prefer. By suggestion or sheer relief from greater boredom, they may be brought to think they are enjoying a game, when they are only enjoying a change.

One thing, certainly, is true—that we rush into this part of our work without enough consideration of our aim and of the extent of our belief in our work. It is enough for most of us that games form part of the Kindergarten system, that they make children happy, give them change, exercise them in some way or other. So much has the seriousness of the question weighed with some of our best teachers, that they have banished all forms of games from their Kindergartens,

except quite free play, and traditional games of the type of the Mulberry Bush. At the same time we have to consider that a very large portion of the time of ordinary children is naturally devoted to games, either alone or with companions ; and it is doubtful if we can shirk responsibility of arranging for them, especially in the case of children whose home circumstances are not favourable to much healthy play. We have to remember, too, the aim set out in the introductory chapter, of reproducing as far as possible the methods of life. And the children are with us for a large portion of their working lives.

In the Kindergarten system, as it has come down to us, games have played so important a part that a special type of performance came to be called the Kindergarten Game, and to most of us who have been teaching young children for at least ten years, this kind of game is very familiar. At first, with the fresh enthusiasm of the beginning of the movement, and all the enthusiasm that the new ideas brought, these games were doubtless beautiful, but it is doubtful if they were ever what they aimed to be—a channel of spontaneous expression for children's real interests and energies—unless they were spontaneously started by the children themselves. Grown up people who can now look back on their own experiences in a Kindergarten of quite a good type, say that they liked the change afforded by such games, as well as the singing and movement accompanying them, but they never regarded them as play, and longed for the time when they were free to go to the playground for touch, or skipping, or the ghost in the garden, or schools.

Their procedure is well known : a song, often a pretty one, with pretty and suitable music, was learnt ; the children were invited to play ; there was careful discussion and planning, presumably by the class, but too often following, by suggestion, a plan in the teacher's mind. Very original suggestions were not exactly crushed, but they were often gently ignored or sadly endured. The teacher was generally unconscious of this. Generally the game centred round a natural circumstance, e.g., birds in a wood, fishes in water, a brook, a ship at sea, bees in a garden, personified seasons, or natural forces ; probably these grew out of the games and songs of the Mutter and Kose Lieder, or such books as *Music for the Kindergarten*, arranged by Fraulein Eleanor Heerwart. People have said how touching and beautiful were these games as they were

played by the children of the early Kindergartens, and doubtless this is the case, especially if the children really lived among trees and birds and bees; but afterwards tradition so fettered them with its laws that they might well have been called "Just so games."

Some of the early children's festivals arranged by Froebel and described by the Baroness von Marenholz-Bulow, suggest a simple, happy and unrestrained atmosphere, similar to the English games on the village green. As such they were good, but in their "Just so" form, come down to us with literal interpretation and exhausted application, very little of the spirit of the game is left, and often a really wrong one is introduced. The following will show to what such games may sink.

To an elementary school, whose inspectorial report spoke in the highest praise of the progressive and admirable work done, some visitors went. In the morning a game was played in the hall by three of the large classes at once: the game was a representation of the story of Ali Baba. The children marched out of their various rooms and took their places without any direction; some had cardboard representations of jars in front of them; when all was ready a very mature conversation took place between several of the children, and appropriate actions were performed. When all was over, the children solemnly marched back to their rooms. Most of them had simply stood still for the whole time, while the others had played their parts not "themselves," as the Scotch would say. In the afternoon a similar performance was held by other classes, in which the *motif* was the hunting and killing of the stag. On inquiry it was found that these games had been played every day for three months. Between these and the festivals of Froebel are untold distances, but to this can the form without the spirit fall.

In a much less harmful degree the restricted form of game can be seen when any undesirable idea is kept out by the teacher's own good taste, but when desirable spontaneity is also kept out by her fettered spirit, and we see children leading in Spring, or fluttering as birds, or swimming as fishes, with the unintelligent movements that show no desire or power to express or to initiate.

A game should always centre round some very real interest in the child's life; it is generally an expression of some phase of life experience which he wishes to prolong or to participate

in more fully. He must be able, in these moments, to live very intensely, to be as self-active and creative as possible. If this is only simulated or mildly organized, he may cease to put his whole self into games, and thus lose the opportunity of strengthening his own powers, physical or psychical, often however increasing in a very real way his store of ideas. He should be responsible for his part in the game, and he will as a rule accept his responsibility gladly. He has to observe more closely, to imitate more intelligently, to control his body or mind ; if others are taking part his social characteristics are fostered, and he learns to take his place with others. But all this can result only if games come naturally as an essential output of the child's life, and express what he knows, or partly knows and likes. Now this has not been always sufficiently considered in the beautifully correlated schemes of work which were designed alike for all children of the same grade or age. The mistake of verbal correlation had us all in his grip for a time, and blinded us to the real significance of the idea. The brook with its fishes is not an essential part of the life of a Whitechapel child, nor the harvest field of one in Deptford. Birds in the wood are not life experiences of the Black Country, nor the ship, of a Midland manufacturing town. It is true that an extraneous interest and link was created by the Nature lesson for the week on these or similar subjects ; but however good and real that Nature lesson might have been, short of the children's being taken to Nature itself, they were not expressing in their games what was to them a living reality.

Again, it is doubtful how far, at this age, children are really interested in the *study* of Nature ; they are undoubtedly interested in the industries connected with living things ; but it is not certain that they would naturally represent the coming of Spring, the work of the wind, the falling of leaves or the swarming of bees. It is very beautiful, often, to see them do so, but it may be a beauty with an adult interpretation and the result of suggestion rather than of spontaneity. We have, of course, the case of Pierre Loti and his child friend who played at caterpillars for a whole summer, but their sole playground was a garden, and the idea obsessed them. Besides, they saw little other life to represent. If children live almost entirely the solitary life of Nature, and become engrossed in it, such representations may become a real game, but each child wishes to reflect the life around

him, and to use and develop his growing powers, e.g., in aiming, running, guessing, counting, remembering, hitting, dramatizing, and many other ways too numerous to mention. Any game can surely be called a Kindergarten game which helps a child to realize life, and develop his own individuality more fully.

It is a simple matter, then, to find out by what means the natural child seeks to do this ; he feels his growing physical powers, he seeks to use them ; he is interested in stories, he seeks to live in them and be the hero himself ; he feels the need to put himself against another both physically and mentally, and we have tug of war, rounders, and other ball games, guessing games, and games of mental skill.

Nature is economical, and a child does more than acquire physical strength ; he gets control over muscles, keenness of vision, bodily control in watching for a chance, and frequently the social training in playing for a side. Or he is interested in the life around him ; he lives in a thickly populated town or suburb ; local industries, trams, trains, shops, home life, all appear with a glamour over their activities which later they will lose. He wishes to be of them and seeks to represent them. Or he may live in the country and seek to represent the farm or the mill. In another direction we have games of skill, such as dominoes and marbles, the material of which has been provided for centuries to satisfy the desires of mankind.

Out of all this several questions arise—

(1) Should we interfere with children's games ; or by doing so are we liable to spoil them for children ?

(2) Do all children if left alone play in the right spirit ? Could their games be improved without spoiling them ?

(3) Do all children seek to represent only the desirable sides of life ?

(4) Can we, and if so in what way should we, make use of these modes of expression in our educational work ?

(1) It is a fairly common experience to find that children welcome a grown up companion in their play, provided that she is not too interfering or dominating, and that she has sufficient imagination to play in their way, and sufficient self-control to follow their lead. We have many instances on record of the way in which a well meaning adult has spoilt children's games : the mother of Jacobli, Pestalozzi's child, forgot to call him Butcher when he was killing pigs ; the

mother of another boy kissed him when he was driving an imaginary carriage, causing him to weep bitterly and say, "You know you *never* kiss the coachman." The case of Professor Baldwin's two children is interesting. They were representing the family life while he sat by, reading; when they came to the choice of the father he immediately expected to be selected as the most suitable reality for the representation; but they coldly passed him by and selected one of the verandah pillars for "the father." Evidently he had the good sense to accept his fate. Children seem to resent the introduction of properties or persons which are too near reality into their plays; it gives scope neither for imagination or effort. If we play with children we must above all things *play the game* as truly as if we were playing cricket at Harrow, and "the game" means their game, not our game, and this requires real study and experience of them.

(2) This follows naturally on the last question. It is fairly obvious that while playing an apparently subordinate part in which the office of teacher or parent is completely lost in the rôle of player, even then we can, if necessary, indirectly influence the spirit of the game; as a member of it we can insist on fairness. We can resent roughness, we can suggest new circumstances if we keep our children's background well in mind. These are usually received tolerantly if not affably, and have their merits considered with other suggestions. It is well known that a good comrade of any age may do much to raise the spirit of play in his own group and even in the neighbourhood. The story of a sand pile in Stanley Hall's collection of studies testifies to this. But unless the teacher can play this part and play it naturally, and unless she recognizes the right of the children to lead the game, and respects their rights, she has no business to play with them.

This refers to normal cases, and we must try to consider as many cases normal as possible. Where children show by their games evidences of real lack of self-control, or absolute proof of desire to cheat, then the teacher or parent must dominate as such. But this should be very rare.

(3) If children's interests have originated in a life which no child should live—this must sometimes occur—it is necessary that they should be allowed to express them as little as possible, or even to express anything that they might translate into their own terms of such a life. For example, it was found necessary, in connexion with children from one of the worst

parts of Deptford, to refrain from telling stories such as Jack the Giant Killer, and to refrain from playing games such as the rovers, because the children only understood them as murders or street fights. In their representations of the life they know, even on its innocent side, it was discovered that the milkman was unknown, and so could not be represented in the life of the street; the common practice appeared to be that of buying pennyworths or even less of Swiss milk at the shop for general provisions. In such a case ideas of life would have to be extended and amplified for the children, on the one hand, while on the other hand they would have to be discouraged from expressing and extending their personal knowledge.

(4) If the children are truly learning their environment, learning through their games to live more fully, and to cope with their surroundings more completely, then it will be natural for them to learn through games the environment that we desire they should know, also to learn to use their powers in the direction that they need, provided always that their natural instincts and rates of growth are considered. Thus to represent daily life will make them more observant of it, and help them to extend their vocabulary and to use it.

A very large part is played by speech in dramatic representation, and children are constantly confronted by the necessity of expressing themselves through speech, in a dramatic game; surely, then, this is a natural and suitable form of what has been variously known as the language or conversation lesson. Whether they are representing a story or a bit of daily life, there is surely more scope for natural and necessary speech here than anywhere else. The children really desire to speak and need to speak, and this is the only true basis for a language lesson. Nothing could be less educative than what passes for the ordinary lesson of that description: a picture, seldom a very suggestive one, is put up; children are invited to say what they see in it, whether the details are worthy of notice or not, and they are further paralysed by being told to speak in a sentence on every occasion. The teacher's mind appears to become confused as to whether she is teaching the spoken or the written language, and when remarks are scarce the lesson often becomes a language display by the teacher. The language learnt or practised at such a lesson will never become part of

the child. He will not continue to speak in sentences in daily life, any more than his teacher does ; and the new words learnt will not be retained, because he had no particular need of them, and may not use them again for a year, when that particular lesson may recur.

A dramatic game will give to a child the appropriate opportunity for expressing himself in words ; so, too, will pictures and picture books, used in the rational way in which they are at home, for then the child comments on them, or asks you to " 'splain " them. Other types of game which may, a little later, form natural and fruitful ways of helping both to use and increase the vocabulary, are those known as guessing games, descriptive games, question and answer games, rhyming games, co-operative story games, and many others of the type known as parlour games. They are played with zest, stores of words are revised thoroughly, and added to, when the need arises, the children put their whole souls into the effort ; and there is little doubt that such methods are far more effective than those that require children of six or under to discourse for twenty minutes on trees in winter, or bulbs in spring, or the robin, or a harvest field, or the seashore, even though a picture be given them as an aid.

The representative game may be made to centre round other sides of work than language, e.g., that of number. This is a fair use of the game, for it is in the operations of daily life that we use number, though from the curricula of many schools one would imagine children were being trained to be either stockbrokers or mathematical professors. Very early in life children count their toys, at a remarkably early age they " swap." Boys hardly ever escape the early fever of tram-conducting or engine driving, or girls of shopping or playing schools. In all these circumstances there is a rich field for number operations of a very real kind, but the game must be played *well* if the number part is to be well done. It is often desirable to get into the dramatic situation through a language game medium, before introducing the number elements.

One is well aware that in our elementary schools such games apparently occupy only a small part of the class, so that at most only about ten children can simultaneously take active part in these operations. And there are those who say that unless the whole class plays we cannot call the activity a game. There are surely many cases in real life where only

some can play the active part, while the rest only look on or play a minor part. But it is none the less a game for players or onlookers. A skilful teacher will invent participation ; for example, if we have a shop with shopkeeper and customers and message boy, we can surely have clerks making entries on their papers and calculating with actual coin, as well as by figures, to see that the right change is given. Of course, if self-control and self-government were sufficiently developed, and if at the same time sufficient space were provided, a number of simultaneous games might be played. Even in language games the fact that the whole class form a very critical and sometimes merciless audience, often full of comments, means that language exercises are by no means confined to the children who speak. It would be a great pity to banish these methods because the whole class cannot take proportionate part, and if we do not call them games what are they ?

Games of skill, such as dominoes, marbles, skittles, centre round the number interest, but this will be more fully considered in the number chapter.

In every form of national life the singing game appears. It is a natural thing to love to act rhythmically and uniformly with a musical accompaniment ; singing and dancing have always gone together naturally. What is the place of these singing games or rhythmic actions in the school ? The answer must be looked for in the explanation of the fact that children so constantly play them in streets, greens, playgrounds, and in the past, at any rate, at children's parties ; probably it lies in their need to express rhythmic action, and the equally strong need to exercise the body in a more controlled way than by quite free movements. Surely this at once points out their place in school. Physical movements have, or ought to have, a very important place in the school plan which approximates to the needs of life ; and besides free activity, of which there is not enough as a rule, more controlled physical movements are necessary. Children under seven must work with a direct meaning and a direct end ; they weary of obeying prolonged orders which necessitate their moving arms, legs and head, without apparent reason. To perform again and again a meaningless mechanical action means that it is performed without zest, that the will is not really acquiring power over the muscles, because the impulse is from without and not from within. The natural method

appears then to use the games that children naturally use for themselves, and let them do for children in school what they do outside. About the age of seven or eight, when physical and mental changes are rapidly taking place in a child, and he has realized more fully his own power, and therefore has developed will power, he is more ready and willing to be drilled in the ordinary sense of the word, because he is able to recognize, however dimly, something more than the power of the teacher, and because it is an unconscious relief to him to put himself at times under absolute authority, as a member of a social group.

It might be useful at this point to set out conditions necessary for the use of singing and rhythmic games and actions, for purposes of physical development.

First of all it will not do to use any old singing game, because it is old and quaint ; if the children are to benefit by the exercises they must be done with a conscious understanding of what they represent. As already pointed out, mechanical action becomes useless, because it fails after a time to give valuable results. For instance, if we take the actions of such a game as washing linen, a good teacher will consider two things : (1) the suitability of the leading idea, and whether it will arouse the dramatic instincts of children ; (2) the actions possible to produce, which should be both faithful reproductions of the main ideas of the game, and beneficial to the physical development of the children. To be beneficial in this way they must exercise those parts of the body which need exercise in the best way ; the exercises must follow in such a way that one will counteract and supplement the other. The game must allow sufficient exercise for all the class ; frequently this is forgotten, and the greater number of children spend the time for physical exercises in standing only.

But the amount of meaning the children put into these exercises will greatly improve their quality. For example, the teacher will doubtless decide that the knowledge of all the processes of washing, drying and ironing is familiar to a great number of children and suitable for representation ; she will see that the various actions faithfully performed with the appropriate objects or something like them give the right kind of exercise ; and generally when the root idea of the game grows out of a natural industry or act, the actions are suitable. If the children wash, wring, stretch, hang up the clothes with all their might, their muscles will be well exer-

cised ; to their imagination it is quite easy to see the water dripping out of well wrung clothes, but to do wrist action mechanically soon degenerates into a flabby and listless motion of the hand.

One must not be led away by the romance or history, or even the pretty music of a game ; some games are not capable of explanation within the range of a child's experience, and others imply an undesirable kind of experience. It would be useless to exemplify here what is desirable or otherwise, because that is the privilege and responsibility of every free born teacher ; we must be neither lax nor prudish, but we must be thoughtful and not just drift into any new thing.

The kind of game which has been discussed in the preceding paragraphs is not exactly an expressive game in the free sense of the dramatic game ; it is bound by the law of unity of action, a very necessary law of life. The action can be carefully discussed and individually imitated, but once formulated it should be uniform, as far as such a thing is possible with young children. Of course, a good teacher would never sacrifice either the pleasure or the usefulness of the game by insisting on an adult precision and exactness, such as we used to see years ago at the Albert Hall Drill Displays ; nor will she ever take a pleasure in a perfection of activity far in advance of the natural capacity of her class. By so doing she proclaims herself a quack teacher, and should be struck off the list of regular practitioners.

These games should not be *practised* in any sense, but should be played for their immediate purpose, just as we take food for the immediate need, not for practice in perfect eating. These games should lead the children to find out a great deal about natural industries, such as farming, pottery making, weaving, smithing, carpentry. Games are not so much an expression of what is known, as avenues for more accurate knowledge, modes of physical activity.

From all this one thing stands out as evident : that games must be regarded as a method rather than as a subject, a method of approaching many of the sides of life, and of trying and developing various powers. They cannot be regarded as a subject, and put on the time table simply as games, any more than "listening" or "looking" or "making" could appear. They are by no means the sole method of approaching or applying any aspect of life, e.g., of language, of number, of physical development, but they are one of the very natural

ways. The mechanical and unimaginative teacher abuses games, and the result is a bored and lifeless class.

It has been pointed out in the chapter on the personality of the teacher how much good taste influences method. It is very definitely so in games. Not every story, not every piece of life experience, not every song, is equally desirable for representation. Especially is this the case with stories; to represent some, e.g., the Quest of the Holy Grail, would be nothing less than sacrilege; and to represent others, e.g., parts of Alice in Wonderland, would be foolishness. A good play writer uses the same kind of discrimination. Similar remarks have been made with regard to singing games.

Games which express ideas of life should be subject to tests, similar to those applied to other forms of expression by art, e.g., drawing, painting and modelling; not everything is equally suitable to express in the same way, and we must discriminate in using the right medium.

"The plays of children often have very deep meaning, for to speak plainly and concisely, man plays only where he is a human being in the fullest sense of the word, and he has reached full humanity only where he plays."—(Schiller.)

HENRIETTA BROWN SMITH.

BOOKS OF REFERENCE

- The Play of Man.* Groos. (Heinemann, 7s. 6d. net.)
The Play of Animals. Groos. (Chapman & Hall.)
Froebel's Explanations of Mother Songs. Lord. (William Rice.)
The Education of Man. Hailmann's translation. International Educ. Series. (Arnold.)
Dictionary of British Folklore, Part I. Gomme. (Nutt, 25s.)
The School of the Woods. Long. (Ginn & Co., 6s.)

METHOD OF APPROACH IN NATURE STUDY

THE world of Nature is the children's rightful heritage. It represents an environment completely unstable, ever changing in its aspects. It requires constant adjustment and adaptation on the part of the organism, and consciously or unconsciously the latter begins to behave accordingly. Since the appeal that Nature makes upon the little child is simple, direct and exceedingly manifold, the response that he shows is expressed in constant and varied activity. From such contact with Nature the impressionable and plastic mind of the little child accumulates, through his perceptions, a wealth of ideas and experiences strong emotions, both of which are forces impelling him to action. It cannot for one moment be denied that the human environment as well as the region of Pan stimulates the young mind, and thus he also responds to the former stimulus eagerly at all times. Experience, therefore, in the wide free world of Nature and intercourse with his own kind are the two most essential conditions for happy, vigorous childhood.

In the school curriculum social relations are strengthened and widened by the humanities, while intercourse with Nature is encouraged, and the significance of natural phenomena investigated in a course of more or less formal science.

STAGE I (AVERAGE AGE, 5-6)

Formal lessons are out of place with children of this age. In country schools the little ones should be taken for short walks and allowed to make their own observations. The teacher must draw their attention to objects and phenomena that they are likely to overlook, and the children should be encouraged to express their opinions freely on any discovery, and to feel and smell wherever possible. A few specimens, the study of which had formed the special feature of the walk, might be gathered or collected, and used as material for more detailed

examination and discussion in class. It does not follow that the attention of the children is only drawn to animals and plants ; quite as valuable are their experiences and observations relating to the weather, the ground, the stream.

It is the practice in many schools for young children, especially where the great number of pupils presents a difficulty, to abstain altogether from giving out specimens to the children, to have only demonstration material or a " Nature talk." If such lessons arise out of the observations made during a walk or work in the gardens, the proceedings are perfectly legitimate ; but if all the children's attention has not been consciously directed to the subject discussed, then no personal approach to the particular phenomenon can be assumed, and the lesson does not fulfil its most essential requirements. In the case of schools where nature walks are not to be thought of, material for study must be brought into the room. Let this be either sufficiently large that the whole class can see, or else let it be supplied to the children, even though the process may involve some trouble or disorder.

Whether the lessons are based on rambles, or whether they represent the only form of instruction, they should consist of a few remarks either reminding or informing the children by vivid word description of the natural haunts of the object presented. A good coloured picture often assists this part of the lesson. A few observations and expressions of opinion on the part of the children, if possible without the guidance of questions, constitute the lesson. The latter reaches its completion in some definite record of facts observed or incident experienced. This record will take the form either of picture-writing or of modelling, and will probably be in the nature of conventional symbols or memory productions.

Throughout, the work will be seasonal, being based on real or imaginary rambles, and the pageant of the seasons is marked specially by the selection of typical topics for discussion. Thus in autumn, sunflowers and nasturtiums, together with leaves of Virginia creeper, blackberry, beech and elm, would emphasize the idea of characteristic colouring. Dandelion clocks, some tufts of wild clematis and some thistle heads would prepare the way to notions of seed-dispersal. The children would probably only admire the white, silky, fluffy material that floats in the air ; they would suggest making it rise higher by blowing it, a few children being allowed to demonstrate this fact to the rest

of the class. Out of doors the wind blows in the same way, so the seeds travel far. Teachers should be content with this, and not force the thinking beyond the range of experience, by telling the children that this process is of service to plants. Apples, pears, plums, tomatoes—together with hips and haws—form topics leading to the idea that autumn is the time of fruiting. Fruits are good food—other creatures beside ourselves find them so; for wasps and blackbirds the table is freely spread. A group of lessons on acorns and nuts will provide thinking material on the subject of hard cases, and means of opening them among men and animals. Bulbs and fleshy roots such as turnips and carrots are parts of the plant that do not die off, but remain resting underground. Some serve us as food. The Christmas tree and its peculiar leaves occupies our attention when winter comes in real earnest, and mistletoe, holly and ivy introduce the topic of evergreens. Such fruits as oranges, figs, dates, bananas, brazil nuts, and stories of the people who have gathered and sent them, appeal to the children's love of the wonderful and the far away at a time when the frost-bound earth around us shows neither colour nor life. Soon the smell of the air proclaims the coming of spring, and we review our sleeping seeds preparatory to setting them to grow. A handful of twigs from the horse-chestnut tree give an opportunity of watching the stretching and unfolding of young leaves, and lambs' tails and pussy willows open the pageant of spring flowers which we watch until the coming of tadpoles absorbs our attention. In summer we are kept busy with buttercups, daisies, cowslips, bluebells; with caterpillars and snails found in the gardens; and frog, newt and stickle-back are invited to stay with us for a little in the class-room, so that we may make their acquaintance.

It is not intended that each of these groups of subjects should be dealt with in one lesson, but rather in several short lessons. The utmost care should be taken to adopt the children's way of approaching and describing things. Systematic description beginning with form, colour, size, etc., is out of place. Fanciful interpretations on the part of the children should be accepted, but an element of sincerity should be preserved by the teacher, in that she herself does not supply fanciful explanations which she knows to be untrue. The golden rule is, of course, that the minimum amount of information on the subject in hand should be supplied by the teacher.

Her place is to be the sympathetic listener. The glamour of baby discoveries should at all costs be maintained by preserving an attitude of expectation and wonder; this is ensured only if we avoid hum-drum, mechanical, rigid lessons like poison. The lessons should be much more in the nature of play and incidental discovery rather than a process of acquiring facts.

Wherever possible, and this should be of constant occurrence in country schools and Kindergartens where the classes are not large and provision of material not so difficult, the children should be allowed to make things with their Nature treasures, e.g., make garlands of leaves by pinning them together with leaf stalks, make chains of rosehips and beech nuts, collect horse-chestnut leaf stalks and use them on the floor or ground for stick laying; find pine or better still fir-cones and make a tobacco pipe; slit up the stalks of dandelion, fling them into the water and watch St. Bride's spirals—they can be hung as curls over the ear, and do not forget a tea-set of acorn cups.

Intimately bound up with the Nature lessons should be lesson periods devoted to Nature stories. This is specially necessary in city schools where there is no opportunity of experiencing the sensation of entering a great forest, of basking in the sun, of diving into the water, and of having tremendous adventures. By vivid presentation of suitable material, the sensation and general tone of thought may be awakened, even if the body finds itself on a hard school bench. The children shall enjoy their boundless freedom in the region of thought, and shall use it more and more consciously. It is of utmost importance that the stories should not be forced, or constructed then and there so as to deal with the particular topic of the Nature lesson in senseless correlation. The unit of instruction is not the lesson, but the month or the term; and if the undercurrent of thought in Nature lessons rings through the stories selected, though they deal with different topics, the right kind of correlation is established. Needless to say, selection of stories should be confined to such as are good from the literary as well as the moral point of view. Legends and myths are specially to be recommended; animal stories and naturalists' discoveries also provide suitable material.

As a supplement to Nature lessons, and as excellent training for the children, many teachers recommend the keeping of school pets. Since the little ones take great pleasure and

interest in the animals as such, and with constant and careful supervision and help can be taught how to clean and feed them, teachers allow the keeping of pets. The teacher's point of view must be fully appreciated. To care for little beloved creatures conscientiously, is service which dignifies the servant. Intimate intercourse with the animals is the surest way of displacing cruelty by fresh and stronger interests. Opportunities withheld by conditions, from the children, of observing some habits and changes in animals, are here supplied. The cruelty of captivity in a cage can be reduced to a considerable extent, viz., by giving the pets very large cages and letting them out from time to time; by choosing creatures that were born in captivity, such as rabbits, guinea pigs, doves, or animals that are small and adapt themselves easily to conditions that imply food and shelter, such as mice.

Great though the benefits are that may accrue to the children from the keeping of pets, there are elements involved in the practice that tend to make it undesirable. From the sanitary point of view objection must be raised in the first instance. We complain bitterly of the overcrowding of classes, and the difficulties of ventilation in city schools where the traffic outside keeps up a continual din, and where high walls and narrow streets allow little space for fresh air; it is therefore not easy to understand how the keeping of animals in classrooms can be justified. They contribute considerably to the organic impurity of the air by their excretions. Again, either their cages are so large that they take away an unfair amount from the classroom accommodation, or the animals must be let out. Neither rabbits nor doves can be taught manners, and excretions are deposited in the classroom and cannot always be removed at once.

If there is a suitable landing, playground or garden, much of the above arguments against the keeping of animals as school pets lose force, and the practice has a preponderance of desirable elements.

STAGE II (AVERAGE AGE, 6-7)

The general character and treatment of the subject resembles that of Stage I. The topics must be arranged in seasonal sequence, and the objects selected for more detailed investigation must be considered somewhat more exhaustively. It is important that demonstration of a few specimens should more and more be displaced by material that can be dis-

tributed among the children. It cannot be denied that this involves much more trouble and may lead to a certain amount of disorder and uncontrolled excitement. If, however, the teacher persistently proceeds in this way, and firmly and tactfully conducts the lesson, the children will get into the habit of considering the situation seriously, and their inherent interest in discovering new things will displace the love of mischief.

Although there is thus much similarity between the work of this stage and the previous one, there are some psychological differences arising out of the fact that the children have grown older, and that their attitude towards Nature has changed. Whereas before, we concerned ourselves mainly with making fresh acquaintances; noting only those features and peculiarities of objects which will ever after constitute the signs by which we know them, and distinguish them from other objects, we now begin to see meaning in such features and peculiarities. Before we noted that the snail has a shell; and the shell was one of the distinctive features of the snail, now we see that the snail has a shell and *it can retire into it*. Last year the children saw that the frogs were greenish-brown with dark spots; now they will find that they match the colour of moss and ground, and that they cannot be seen at all easily if they keep still. In this way the discovery of facts is extended into the noting of relationships and the seeing of biological significance.

Teachers pass to this change of attitude consciously or subconsciously very readily, all the more as it corresponds more nearly to their own. The great danger is that the children are forced not only to see relationships, but to trace cause and effect in them all. Thus if the children find that the frog matches its surroundings as regards colour, and cannot be easily seen, the teachers ask the question: "Why does the colour match the surrounding of the frog?" and the answer is elicited: "So that it should not easily be seen by its enemies." This method of procedure, satisfying though it may be to the inquiring mind, has many pitfalls—the most serious being that the reasoning and conclusion is based on quite insufficient premises, and in nine cases out of ten it is false. Things are not as straightforward and easy to see as teachers would have them be, and many a pair of facts that look as if one were the cause of the other, are simply concomitant events, and the combination of them is of advantage

to the organism. Although, as a general method, we would encourage the children to look for meaning in things and to express *their* interpretation, we must be careful that we do not teach, as absolute facts, *our* interpretations superficially arrived at by ourselves, or indiscriminately borrowed from any little text-book. Further, it seems futile to note every trifling fact, and immediately to account for it conclusively. Some questions had better be left unanswered.

Arising out of this perception and appreciation of relationship, profitable work may now be attempted in the recording of weather. There is much direct relationship between the weather and our own conduct, as well as that of other living things in our environment. This is brought home most forcibly by means of some graphic representation. It is a good plan to work out some colour scheme with the children, which shall represent the different types of weather. Generally the children choose yellow for a sunny day or half-day, blue for a fine but not sunny day, grey for rain, etc. If they each have a sheet of squared paper they can colour with chalk the record of weather for each day. At a glance, later on, they can see the connexion between all the sunny days that came during some period in the year, and the kind of subjects they studied in the Nature lesson during that year, the clothes they wore then and the games they played. A class chart might show the weather colour for each day, and by the side of this record illustrations of corresponding Nature studies, clothes, games, toys—this chart has special value if it is associated with gardening occupations. A foundation may thus be laid for geographical studies later, when the climate and men's occupation are studied in close relation.

We find such entries as the following in graphic form:—

GARDEN.	WEATHER.
Seedlings droop and must be watered.	Fine, warm.
Seedlings all bent one way.	Windy.
Seedlings cast little shadows.	Fine, sunny.

At this stage, as in the preceding one, as many occupations as possible must be devised. Make pincushions out of walnut shells, make lattice-work out of fallen horse-chestnut leaves, make baskets of leaves that are pinned together, make a necklace of seeds that can be worn for dancing and games, scoop out a turnip and make a lantern for the night, lay ears of

corn on damp soil and see what happens, make dolls out of poppies and paper wheels for the wind, bore holes in shells and make an ornament, string a horse-chestnut and play at conquerors, etc.

Needless to say, Nature stories that appeal to the imagination and love of the wonderful, and such as will extend Nature knowledge beyond the realms of actual sense-experience, are still continued.

C. VON WYSS.

BOOKS OF REFERENCE

The Biology of the Seasons. J. Arthur Thomson. (Andrew Melrose, 10s. 6d. net.)

The Book of Nature Study. (Caxton Publishing Co.)

The Nature Book. (Waverley Book Co., 46s.)

Out-door World Library. (Longmans, Green & Co., 3s. 6d. net each vol.)

The Aims and Methods of Nature Study. J. Rennie. (Clive & Co., 3s. 6d.)

Practice of Instruction. J. W. Adamson.

Broad Lines in Science Teaching. F. Hodson. (Christophers, 5s. net.)

Primer of School Gardening. M. Agar. (Philip, 2s. net.)

EARLY WORK IN NUMBER

MOST of the difficulties of number teaching in the past have arisen from a misconception of what is implied by number, and in consequence from the unwise demands that we have made on little children. What is a source of intense pleasure to many children has been made the veriest drudgery, because we have asked children to memorize facts that had no reality, facts that it was beyond the power of little children to realize.

Children, before the age of six, vary very much in their capacity to grasp numerical ideas. If until they are about six years of age they are allowed to make their own pace, if they are not made to learn by rote and to repeat number statements that have no meaning for them, they will go surprisingly quickly after this. Educational authorities are beginning to realize the limitations of young children in this direction, and the last report of a conference on the teaching of arithmetic in London elementary schools is an evidence of this. In that Report the Committee think it desirable only to prescribe what children might reasonably be expected to know on passing into Standard I (age $6\frac{1}{2}$), and the Report runs "Children before passing into Standard I might be expected to have analyzed numbers up to and including 10," This leaves the teacher free as regards method, and makes it clear that no set amount is expected to be known by the children at any age before about $6\frac{1}{2}$ years. This is as it should be.

The following pages contain some suggestions which may help the teacher to reach this minimum, and all the remarks apply to the early stages of number work.

That the minimum required in the report can be attained easily and pleasurably, without arousing distaste for the subject on the part of the child, and without any undue strain, is evident if we consider the home child.

THE DEVELOPMENT OF NUMERICAL IDEAS IN THE CHILD AT HOME AND AT SCHOOL.—The home child, if left to himself,

takes great pleasure in counting, and will count things naturally and constantly. Up to the age of six a child left to himself in an ordinary home, and without any apparent teaching, can, as a rule, count as well as the child of the same age who has had formal number lessons at school every day in the week, for he has followed the rate of progress natural and possible to him, and has not had his mind burdened with names and facts that for him had no meaning. Moreover, the home child generally has a motive behind his counting—the desire to number things arises in himself, and often his counting is a step towards some definite end. Christmas is at hand, and it is imperative that Tom should know the number of pennies in his money box; Maggie is giving a dolls' tea-party, and must of necessity provide an adequate number of plates; Philip's toy soldiers are to have a pitched battle, and it is desirable that each side start with an equal number of men.

On the other hand, too frequently it is difficult for the little child at school to follow the formal number lesson—and the word “follow” adequately describes the child's part in the lesson—the effects of the teaching fade away “into air, into thin air,” and the same fact, disguised as ingeniously as may be by the teacher, has to be taught again and again.

MISTAKES IN THE PAST IN THE TEACHING OF NUMBER.—The following are some of the mistakes that teachers have made in the past. Generally the counting has been made an end in itself, and the impulse to count has come from without, i.e., from the teacher's will. Then, again, too often the teaching of number has been limited in the mind of the teacher to mere counting of single things, with a fixed unit as a starting point. If this is all that number means, its interests are soon exhausted, and number teaching resolves itself into a collection of facts to be remembered, such as 8 and 1 are 9, 3 from 7 leaves 4, 3 fours are 12. But numbering implies more than this. All number knowledge is the outcome of experiences involving comparison of amounts of material: sometimes the comparison is (i) of aggregates of separate things; sometimes it is (ii) an estimate of the amount of some un-separated continuous material. Let us take an example of (i). We have 4 pennies, and we are given 2 more pennies; we then find (if we have been able to keep the 4 pennies intact) that we possess 6 pennies. When we have had this experience several times, and with different things at different times, the idea emerges that 4 things and 2 things of the same kind

make 6 of the same thing, i.e., we know that 4 and 2 are 6. When we say this formulated truth with intelligence, and do not merely repeat sounds, we have behind us, largely unconsciously it is true, but there all the same, the experiences out of which it grew. Another mistake, then, is that children have been presented with a formulated truth such as 4 and 2 are 6, either before they have had the experiences out of which it arose, or before they have had enough of these experiences. It should be noticed that to place 4 tablets and 2 tablets before children, and to ask them to count them, is not to give experiences. It is largely because this kind of empty symbolic work has been supplemented by real experience of things outside school, that children have been able to count at all intelligently. Again, children have been presented with truths that are deducible from one another as though they were self-evident. Thus from 2 and 2 and 2 are 6 it is self-evident to the adult that 3 twos are 6, but the little child who has just with difficulty grasped what three ones means, is unable to grasp the more abstract idea of 3 groups of two, which requires increasing power of thought.

The teacher of to-day knows that her teaching must be made interesting, but she often has a wrong conception of interest; she fails to realize that the strongest interest that we can create is to give the child a *motive* for counting, and we can do this most successfully when we know what underlies our own efforts to count.

WHAT UNDERLIES COUNTING AND MEASURING.—If we dismiss from our minds schoolroom arithmetic, and think of how we use number in every day life, we find that in order to fit means to ends and so prevent waste, or simply to know how much of certain things we have in order that we may know what ends are possible, we count, i.e., say, 1, 2, 3, 4, and we aggregate things as 8 and 4 are 12. But counting in this way is in the main applicable only to those things in the world that are separate, each one usable by itself, such things as chairs, tables, shoes, ships, walking sticks, and these make up a comparatively small part of the things that are numbered.

There is another kind of material in the world that is not from its nature separated into portions that can be counted in this way—such material as flour, milk, water, the foot pathway. The amount of these latter things, as well as of the tables and chairs of the world, has to be estimated, and it is estimated in this way. A portion of the material to be

measured is taken as *measurer*, and it is repeated throughout the whole. We carry in our minds the results of our measuring, or in other words the records of our "*repeats*," and this result or record is number. For example, in measuring the length of a garden, we can select as measurer any convenient length (in the absence of any conventional standard this would probably be the human foot), and we step or repeat in some way this unit throughout the whole length of the garden. The result is that the garden is 12 or 15 or 30 times the chosen length used as measurer, and these numbers respectively record the results of the measurement. In measuring we are more conscious of our power over material than we are in counting. This measuring, of course, implies counting. In the case, then, of continuous material we measure off and count. In the case of separate things we vaguely measure by merely counting, but it should be noticed that sometimes we count in ones, sometimes in pairs, sometimes in dozens or half-dozens. The mind-process underlying what is usually called *counting* and what is usually called *measuring* is the same, but in the process of measuring continuous material, there is more physical work done; coal has to be separated into cwt. bags, cloth has to be marked off in yards, and the thought-work is more easily observed. But in each case we count because we want to estimate the whole for some purpose; and we estimate the whole by comparing it with something selected as measurer, and out of this comparison comes *number* through the counts or repeats of the measurer, whether the measurer is a dozen eggs, a brace of pheasants, or a lb. of sugar.

When measuring, one has a definite idea of the estimated amount, because the unit chosen as measurer, e.g., a lb., a foot, is known quantitatively, i.e., the exact size of the measurer is known by experience, whereas when merely counting one has only a vague idea of the estimated amount, for the measurer is known only qualitatively, i.e., by name., e.g., because of the variable size of eggs or apples: to speak of 8 eggs or 8 apples is to estimate very vaguely the amount. It is for this reason that things which used to be counted merely tend to be measured, i.e., estimated as exactly as possible.

The two ideas counting and measuring develop almost simultaneously. The child in his life outside of school counts things, and he has considerable practice in estimating size. He has 6 soldiers, 2 drums, 3 picture books. He measures:

he gives away half an orange, he is taller than his little sister, he has a gun three times as big as his little brother's. Tom, building a room with his bricks, finds he has some left over ; he can now build a larger room. He is throwing pebbles into the pond, and he finds that he can throw farther with a heavier stone.

In such ways the use of these rough measuring terms, broader, longer, etc., are gradually acquired, and, as will be shown further, on the experiences that lie behind these terms can be made material for interesting lessons in school.

THE SCHOOL SUPPLEMENTS HOME EXPERIENCE.—Outside of school, then, the child has many experiences of both counting and elementary measuring. It is the business of the school to provide many more experiences demanding numerical ideas, and of such a kind as a child would naturally get in an enlightened home. The teacher will have to see to it that the number aspect of these experiences is conscious and significant, and when the psychological moment comes, she should help the child to formulate his knowledge into concise and conventional form, and to memorize it so that it may be easily available. (A good example of the way in which labour is saved by concise formulation is the multiplication table.)

Let us consider then how the school can provide : (i), counting experiences for the child, and (ii) measuring experiences, although in practice these two often overlap, and as has been said above, measuring, after the first rough stages, implies counting.

ABSTRACT CANNOT BE OPPOSED TO CONCRETE.—It has been implied earlier in this article that it is impossible to consider separately abstract and concrete number ideas. The most elementary counting, even that stage when the counts were not carried in the mind but merely on notches on a stick or by De Morgan's stones in a pot, requires some thought ; and the most advanced counting implies memory of things. The terms, therefore, abstract number and concrete number, have long since ceased to be used by thinking people.

MENTAL ACTIVITY ARISES OUT OF PHYSICAL ACTIVITY.—Every teacher recognizes now that children cannot count unless they have the real things, but the majority expect the children too soon to be able to do without the things and to work from figures, and frequently they mainly limit the children's experience to looking at the things. The mental

activity demanded by number must have its foundation in physical activity. The children must handle the things, and must handle them as long as seems necessary to the individual child; afterwards drawing or looking may suffice. Donald in the course of a number lesson had been handling sticks. After a considerable time had elapsed his teacher said, "Now can't you manage without the sticks?" "Well," replied Donald, "I can do without touching them, but just let me *look* at them." We can see Donald nodding at the sticks, or pointing to them to help him in counting them. This kind of physical experience the children must have in order to grasp number ideas; without this physical part, this touching and nodding and pointing, they may repeat sounds, but they will not develop numerical ideas.

The problem before us then is, how can we, without becoming wearisome, provide for every child, in a sometimes large class, as many of these active experiences in counting things as he needs; and how can we create, in the child, day after day, the *desire* to count, measure, and perform operations with number.

We know from experience that it is not enough merely to give a number of counters or sticks to each child; nor is the result more satisfactory if we thinly disguise them as sweets, soldiers or marbles. If we watch the active children of the class we see that instead of following the teacher's line of thought, or in the many intervals when the class is being scolded for not working or not attending, they are constantly and more or less surreptitiously arranging their sticks according to their own ideas; they are making something; and in the familiar reproof, "David, you are playing with your sticks," we get the solution to our problem. We can see in David's activities what is natural to the young child, where his interests really lie, and from this we can learn how he will work most easily towards a desired end. It is for us to see that the natural desire of the child to play at something or to make something is not thwarted, but is directed into desirable channels.

SUGGESTIONS FOR COUNTING LESSONS

(a) IN PLAY; (b) IN CONSTRUCTIVE WORK.—There are endless opportunities for the teacher to give experience in number in connexion with (a) play, and (b) the making of things, and she will be able to formulate these experiences gradually

and without any weariness to the indeed, child; the child welcomes concise formulation when he is ready for it.

(a) NUMBER IN PLAY.—IN TRADITIONAL GAMES.—Many children's games, traditional and modern, depend entirely on number for their interest, either on a balance of sides or the number of conquests, as in Nuts in May, English and French, Hares and Hounds, Tug of War, and other line games; or on the score of the side or the individual, as in Bean Bags, Tiddliewinks, Skittles, Nine-pins, Quoits, Dominoes, etc.

A large class can play at these games in the classroom or playground with as much zest as they would if they were at free play on their own account. At the same time they will delight in the number aspect, which the teacher will see is emphasized throughout. It is of the utmost importance that the children really play the games, the educational value is lost if they are engineered through them by the teacher. When from the nature of the game it is impossible for each child to be an actor at the same time, some children, as spectators, can follow with active interest the progress of the play. They can do all the necessary counting and judging arising in the course of the game.

IN DRAMATIC GAMES.—Much of children's play consists in imitation of the grown-up life around them. The child will anticipate and rehearse, in his play hours, the ordinary happenings of adult life—

“As if his whole vocation
Were endless imitation.”

The “Train” Game and its Development.—Children play at “trains,” “trams,” “shops”; they drill their leaden soldiers and send them out in battalions on active service, and sometimes they send their “ships in fleets all up and down.” These more dramatic games can be introduced into the schoolroom, and if they are played true to life, they will be intensely interesting to children, and in the hands of an intelligent teacher they offer almost endless opportunities for variety of treatment and graduation of difficulties. Thus, in a game of trains with young children the number interest may be quite simple. Some of the children may pretend to be passengers, and, like a real passenger, each child will have his destination. A number of passengers will alight at one station, a number will enter at another. The teacher, as

guard of the train or as ticket collector (the passengers would, of course, have play tickets), is able through the play itself to command the situation.

Or all the class may go on an imaginary journey to a place chosen by themselves, using their places as carriages as they would the sofa at home. Each child might be provided with so many pennies. The number aspect of the game will arise from the price of the tickets, and if the children are going to a certain fair or place of pleasure this number is naturally the same for all; the remainder of their money can be spent on souvenirs bought at the journey's end.

Or the children on such a journey might be going to market, taking with them so many of different things to sell: 8 cauliflowers, 5 cucumbers, 3 lb. pats of butter, etc. These "train" plays can be worked out in a variety of ways, according to the surroundings and experience of the children, and if they are throughout closely related to reality, the number will arise naturally from the circumstances, and will invariably tend to increase the interest of the children.

With a class of older children more difficult reckoning can be done. The children will work day after day at buying tickets out of, say, 6*d.*, 8*d.*, or 1*s.*, in the hope of going on an imaginary journey when they are capable of buying their own ticket. The play now is highly serious—they are practising buying railway tickets. Suppose, for example, the number being taught is 12. The class could be arranged in pairs, one of each pair being a traveller and the other a booking office clerk. The traveller is provided with 1*s.*, the ticket clerk with 12 pennies and play tickets. In front of the class, so that all may see him easily, is one of the ticket clerks provided with bundles of tickets at different prices. A traveller comes out to the front and buys a ticket to somewhere, which costs say 5*d.* At the same time all the travellers buy 5*d.* tickets, and get back from their respective ticket clerks the correct change. In time it would be found that it was no longer necessary for each child actually to handle the coins. It would be enough to have the coins to refer to only in case of doubt or incorrect answers; or mistakes could be corrected if the children drew the coins and crossed out the number they had spent.

After a series of lessons with the journey motive behind, there should follow the real play, for which all the previous lessons have been a preparation. The classroom becomes

the waiting-room, all the children are travellers, many probably have their dolls with them, all must have tickets before they can board the train. The travellers take their turns in coming out of the waiting room up to the booking office, and in purchasing tickets from the clerk; occasionally there is a small queue waiting. In this little community every traveller is interested in every other traveller, and all will help the purchasers of a ticket to judge if his change is correct. It will become clear to all the travellers in the course of the play that, since trains wait for no man, they must see that the ticket clerk is efficient, that he is reliable and quick in action. The desirability of producing such a clerk from among themselves might provide an interesting motive for further lessons.

“Shop” Play and its Development.—In “shopping” lessons the different activities of the real shop may be separated with advantage, and treated in different lessons. In this separation, moreover, we shall be, as we desire, true to life.

In one lesson the children might prepare the things for the shop by getting them into convenient and usual saleable quantities. The shopman will be busy weighing out, in earlier lessons, pretence pounds and half pounds, in later lessons, real pounds and half pounds of this, and in measuring lengths of that. These activities give early exercise in dealing with continuous material, and every child can be working actively, for each child can make his own pair of scales and his own measuring stick or tape, and can use them.

In another lesson the children might make the things to be sold in the shop. Suggestions for stocking the shop are given under constructive work.

The dressing of the shop window with care and thought, so that it may prove attractive to the passer-by and convert him into a customer, provides an urgent motive either for a very elementary number lesson or for one considerably advanced. In addition to deciding how many of each thing will be displayed, and how they will be arranged, labels showing the prices, 3*d.* for 1, 5½*d.* for 2, have to be written. Every pair of children can dress a window, or there can be a large attractive window, arranged in tiers, in front.

When the goods have been prepared for sale and the shop window has been dressed, there will follow the “buying and selling” lesson, which can be worked out with the children

in pairs, as was suggested for one of the "train" lessons. It is a very simple matter to arrange these buying and selling lessons according to the capacity of the children. With very little children the first shopping lessons will be very simple. In their "buying and selling" lessons the shop might be a 1*d.* bazaar. Each child might have a number of pennies, say 4, and might buy a number of 1*d.* articles from the bazaar. If he buys three, for example, then he discovers that the three 1*d.* articles and the 1*d.* he still possesses, balance the 4*d.* with which he began. In the same way later he could realize that one 2*d.* article and 2 pennies, or that one 3*d.* article and 1*d.* account for his original 4 pennies. Later still, one 2*d.* article and one 3*d.* article account for a 5*d.* with which he started his shopping. And later still, he is consciously aware of his "change" when he has 2*d.* left out of his original money after buying one 4*d.* article, or perhaps two 2*d.* articles. When he discovers, by paying for them, that two 2*d.* articles cost 4*d.*, and that three 3*d.* articles cost 9*d.*, and that he has 4*d.* change out of one shilling (12 pennies) when he has bought two 4*d.* articles, it is evident that he is laying the foundation of the multiplication table.

It has been assumed in all these "buying and selling" lessons that each child will work with the actual coins and buy from his neighbour's shop, or from one or more large class shops, and will take away the articles bought. Gradually he will be able to manage the calculations of each stage by looking at the coins, and at length he will be able to dispense with them altogether, and use, more or less unconsciously, his mind pictures.

WRITTEN WORK.—Such lessons will lead on naturally to written work. From time to time, or for part of a lesson, the children gladly transform themselves into clerks and "keep accounts" of the amounts sold and the money taken, or they will make out simple bills.

Picture Records.—This, however, need not be the first time that written work appears in the number lesson. It will greatly help towards making the ideas permanent, and towards the necessary formulation of numerical truths, if in connexion with the simplest play lesson some record is frequently made by the child. The earliest record would be a picture of the objects (probably in some dramatic situation), that he has played with in the game. This picture will, of course, be made by the child after his own fashion. The

drawing of the objects in that picture gives the child additional opportunities for that physical activity so necessary in building up numerical ideas. Further, if the picture is free expression on the part of the child, the teacher can see where ideas are hay or wrong, and can plan her succeeding lessons accordingly.

Symbolic Records.—In a picture of the “largest score made by any one player at skittles,” say two down out of six, the record begins to be symbolic, and soon the children will delight in writing the conventional symbols, i.e., the figures, beside these groups of objects.

In playing at trains or shopping the record might be partly picture and partly figures. Thus a 3*d.* packet or article and 3*d.* = 6*d.*, or a 3*d.* ticket and 9*d.* make 1*s.*

These records may be represented thus :



and 3*d.* = 6*d.* ;

3 <i>d.</i> Ticket

 and 9*d.* = 12*d.* or 1*s.* Or the

coins themselves could be drawn. This leads on to the clerk's record—the simple statement in figures of the shopping or other transaction.

Conventional Records.—The teacher should guide the children in the making of these latter records, so that they put them into the form in use in the real world, and from these records will develop naturally the ordinary simple “sums” or operations of arithmetic. In this way the number experiences arising out of all these different “play” lessons may be formulated, and gradually they will be memorized by the children and become part of their conscious number apparatus in life.

(b) NUMBER IN CONSTRUCTIVE WORK.—But the child who plays heartily works with the same zest, and desires actively to construct and make. This desire to make things provides a motive for early number work. In the handwork lessons, instead of making things purposelessly, and destroying them as soon as they are made, the children could make things definitely to stock the shop.

The many different kinds of shops offer endless scope for the making of saleable articles, either for use or for beauty,

or for use and beauty combined. In the modelling lesson the children might make things to be sold, say, in the greengrocer's shop, e.g., bananas, apples, potatoes; or baskets to hold these things. The paper-cutting lesson would go far to stock the linen shop or the draper's shop. Table cloths, table napkins, sheets, and towels can be made by simply folding; tray cloths, tea-cloths, window curtains and yards of lace by folding and then cutting a pattern; dolls' clothes are easily made in paper, and the frocks can be ornamented in the painting lessons. The pictures of the ordinary painting lesson can make the stock of an artist's shop. For a grocer's shop, besides the ordinary stock, boxes and drawers are needed to store the things, and bags in which to carry them away.

All the articles made by the children would have to be valued and priced by them. The fact that the things made by them were actually of use, would develop in them an increased respect for their own efforts, and would engender in them a desire to improve the work of their hands.

SUGGESTIONS FOR MEASURING LESSONS.—It will be seen that both the making of things for the shop and the shopping lessons themselves provide much incidental and some direct exercise in measurement. The man at the dairy, for example, must learn to measure capacity in order to be able to sell his milk, the draper and the carpenter must become proficient in the measurement of length, and whoever heard of a grocer or a greengrocer who was unable to weigh his goods?

Of course, at first, the measuring in the shop lessons would be of the roughest character, and only gradually would the children approximate to comparatively accurate measurement and use conventional units of measurement.

Rough Measurement in Play.—But there is a kind of measurement that may with advantage precede the roughest shop measurement. It was pointed out previously in connexion with the child's experience out of school in his own home, that he acquired the use of such rough measuring terms as large, small; far, near; heavy, light; broad, narrow; thick, thin. Children advance their first step in real understanding of number when they even dimly become aware that these are what we call *relative terms*; that, for example, what is heavy compared with one thing is light compared with another. This realization can be brought about if we provide things of different sizes and of different weights for the child to experience. The size of a thing will often mislead him as

to its weight; a large empty box looks heavier to him than a small solid cube of some dense material. It is a real joy to the child to try to lift a seemingly heavy article and find it light; or to lift a large air ball and find it light compared with a small wooden one, which again in its turn is proved light when weighed in the hand with a lead one. In this way emerges the idea that the wooden ball is sometimes heavy, sometimes light. This kind of play gives the child exercises in comparison of different kinds, and as has been said earlier, *comparison is the foundation of all numerical ideas.*

It is of the utmost importance that the child does the measuring with his own hands. It is quite profitless for the teacher to do the things and tell the results. The child needs the actual physical experience. The teacher, of course, can take her part in the play. She can jump high or throw a ball high, while the child jumps low or makes a low throw. Then she is so tall that the tallest child in the class is small by the side of her.

The Development of the Idea of Measuring Units.—Out of these exercises grows the need for the more definite shop measurement. For example, we convey no idea of size when we speak of a long piece of cloth. We must, if we wish to be in any way precise, have something by which to measure it. Then the estimation of its size becomes two times or three times the measurer, the measurer being at first any stick or duster at hand. Gradually the need for a common standard of measurement is felt. Eustace can carry his measuring stick to Kenneth's "make believe" shop in the corner of the room, and can ask for 4 yards of fencing for his toy garden, but he quickly discovers that the measuring stick is a clumsy and unnecessary expedient, and he will desire to use, like people in the real world of affairs, a conventional standard of measurement.

Measurement in Constructive Work with Bricks.—Much valuable work in the measuring and estimation of length and size is inevitably connected with building and making things with bricks. By bricks is meant an ordinary toy set of building bricks of different sizes and shapes, and not Froebel's gifts. Children are delighted to bring their playbox of bricks to school, and the best work is done where each child can work with the bricks. Where this is not possible, much can be done with a few boxes, the other children having strips of cardboard or stiff paper to represent the

bricks. These bricks should have no dividing lines marked on them, for the measuring unit will be constantly changed; also if lines are marked the children tend to count instead of to compare and measure.

Some such exercises as the following would give the children practice in comparison and estimation of length, and in composition and analysis of number groups.

Analysis.—Steps have to be made up to a house (Fig. 1). The

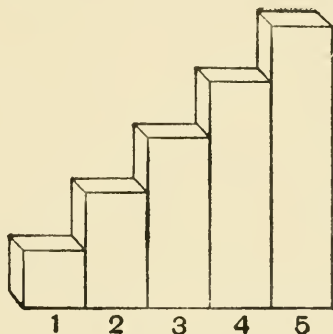


FIG. 1.

first step is selected of a convenient height; the second must be found by measurement twice as high, the third three times as high, etc. If there is a landing the children have repeated practice in estimation of the same length, or of combinations that make up this length.

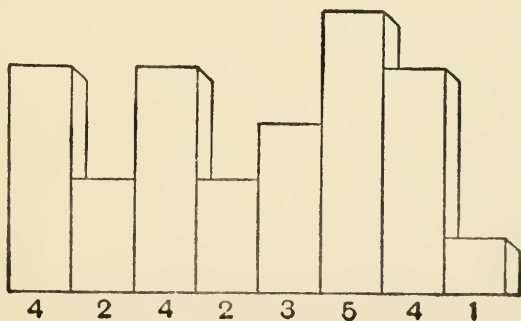


FIG. 2.

A broken wall has to be mended (Fig. 2). In copying the wall, preparatory to mending it, the children have practice in recognizing lengths; in doing the mending they would have experience in equivalent lengths or composition of numbers. In work of this kind the children are constantly making discoveries, and they can see visibly what they were vaguely aware of through counting; for example, they can see that a two brick and a four brick is the same height as a six brick, whatever the unit of measurement.

The building of houses, railway stations, bridges and tunnels gives similar exercises in measurement and counting.

Change of Unit Necessary.—In all this kind of work it is important that the teacher, from time to time, should change the measuring unit, so that numbers might be presented as relations and the outcome of comparison. It is fatally limiting if the children think of a particular brick as a one brick, of another as a two brick, and so on.

Sticks, in combination with wet sand, might be used as apparatus for measuring lessons. As lamp posts or telegraph posts or trees, they might stand up in the road of sand at definite distances apart.

As far as the children are concerned, the number work in all the counting and measuring work suggested above will be incidental. The children will have been playing wholeheartedly, or they will have been making something. The numbering helps them and adds an interest to their activities. But the teacher can make the work quite systematic. She knows exactly what point the children have reached. She can, when she thinks it desirable, be quite definite and help the children to formulate the results of their experience, and she can expect them to remember or to be able to recover the number facts for themselves.

SUMMARY OF NUMBER KNOWLEDGE ACQUIRED.—Through this work, in which for the most part the number has been introduced incidentally, the children should have made considerable progress in the acquisition of numerical ideas, and somewhat in the order given below.

(1) They should be able to count and recognize groups of things up to 5.

(2) From the measuring activities, they should have learnt such facts as that 5 is more than 4 and less than 6.

(3) Through knowledge of the lower groups, they should know the higher groups from 5 to 10. Although perhaps the

best approach to a numerical group above 5, say the group 8, is through 8 ones, yet the real grasp of 8 comes through the knowledge of it as 4 and 4, 5 and 3, etc., and herein lies the importance of the analysis of numbers. On the other hand, there is no analysis worthy of the name of numbers below 5, and much harm may be done if such early numbers are dwelt on *ad nauseam*. If the child can count 3 with intelligence, there is no need for him to say 2 and 1 are 3; if he cannot, such repetition of words is no help.

(4) They should have passed, if they have kept their records carefully and made use of them, from simple numerical statements to simple addition and subtraction of things and of measured quantities.

(5) They should have practical knowledge of a foot, an inch, a lb., a $\frac{1}{2}$ lb., a pint, a $\frac{1}{2}$ pint; they should know that a sixpence will buy what 6 pennies will buy, and that a shilling has the same purchasing power as 12 pennies.

(6) They should have begun, through repetition of the same quantity such as would occur specially in the shopping lessons, to build up the simpler parts of the multiplication table.

ANNA L. WARK.

BOOKS OF REFERENCE

- Psychology of Number.* Dewey and McClelland. (Appleton & Co., New York.)
- The Teaching of Elementary Mathematics.* D. F. Smith. (The Macmillan Co., New York.)
- Lecture on the Logic of Arithmetic.* Mrs. Boole. (Oxford, Clarendon Press.)
- Arithmetic for Primary Teachers.* Speers. (Ginn & Co., Boston.)
- Primary Number Manual.* G. E. Bigelow & Wallace C. Boydon. (D. C. Heath & Co., Boston.)
- Special Method in Arithmetic.* Ch. McMurray. (The Macmillan Co.)

READING AND WRITING,

WHICH "LIFT MAN BEYOND EVERY KNOWN CREATURE"—*Froebel*.

AN article on the teaching of reading resolves itself into an attempt to find satisfactory answers to three questions: what are children to read? when are they to begin? and by what method or methods shall they be taught?

The power to read is a key, but it is one which can unlock the doors of heaven or hell. It confers right of entry to any society; the reader may hold converse with souls sublime or souls commonplace, with the highest or the lowest. What the teacher should place before her first and foremost is that it is her duty to develop in her children, not only a love of reading, but a love of reading that which uplifts.

Mr. Huey's *Psychology and Pedagogy of Reading* is the only book known to me which deals comprehensively with the subject.¹ All teachers of reading—all indeed who have anything to do with the education of children—ought to read this book, and to ponder the pronouncement that "present physiological knowledge points to the age of about eight years as early enough for anything more than an incidental attention to visual and written language-form."

If the physiologists are right, what is to be said for our present practice of teaching children to read long before they are six?

The argument against early reading, which is likely to carry most weight with the general public, is that experts tell us there is an immense increase of near-sightedness, and that this is due to the untimely use of the finer eye-muscles. Nor is near-sightedness the worst result of eye-strain. Mr. Huey, quoting Cohn's *Hygiene of the Eye*, tells us that "short sight is almost always accompanied by atrophy of the choroid, which increases with the increase of short

¹ Stanley Hall's *How to Teach Reading* is very sane and helpful, but the writer came across it after this paper was written. He maintains that children should learn between the ages of six and eight, which accords with the experience of most teachers.

sight," and that this atrophy is quite likely to spread, and sight may be lost.

Reading is undoubtedly the most fatiguing of all near work for children, because the strain is constant. If a child instinctively rests his eyes by looking away from his book, he is reproved for losing his place.

The poorer the home surroundings and the larger the number in the classes, the later should come the teaching of reading. When the class is large, there is no room for the free movement and abundant chatter natural to young children. The children from poor homes are often badly nourished, their hours of sleep are frequently curtailed, and the mental background is meagre. There is little leisure in such homes for telling the children stories, and there is little money for picture books.

Much of the time now wasted, and worse than wasted as it is harmful to eye and to nerve, in teaching young children to read, would be infinitely better spent in telling them good stories, in reading to them good, simple poetry, and in letting them talk freely, not formally, about everything that interests them. It is greatly to be feared that children taught to read too soon will acquire a distaste for books, and this is the worst service we can render to those whose circumstances oblige them to leave school at an early age.

Though there are innumerable variations, there are practically only three methods of teaching reading, viz., the Alphabetic, the Look and Say, and the Phonic.

THE ALPHABETIC METHOD.—The alphabetic is, of course, the oldest, and as a method it is devoid of intelligence.

WORD AND SENTENCE METHODS.—The second method is the one proposed by a little girl who remarked, "I don't like it when the others know the words and I don't. I want you just to tell me the words." This is the method which gains approval from most psychological authorities just now. The children are to be told either the words or, preferably, the sentences, "thus making thought lead." Mr. Huey argues strongly in favour of this method. At the same time, he is obliged to confess that the word method "does not give the pupil power to pronounce for himself words that have not been met before, and that *phonics is finally necessary for this purpose.*" Of the sentence method he says: "The method goes famously at first, like the word method, *but it breaks down when the child attempts to read new matter for himself, so the teachers commonly say.*"

Surely, when these statements are reduced to plain language, they simply mean that by this approved method of teaching reading, the children do not learn to read!

With individual children, one child to one mother, and generally speaking one intelligent child to one intellectual mother, the method seems entirely successful. Most teachers who have tried it will agree too that it goes well at first, but Mr. Huey, who advocates it warmly, has not been able to find practical teachers who find it successful all the way through in class teaching.

THE PHONIC METHOD.—The third method is the phonic method, in which the children are taught the powers or sounds of the letters before learning their names. Many teachers use the "word" method for a few weeks, and then analyse the words into sounds.

ALL THREE METHODS WANTED.—In this article it is maintained that the phonic method is the most satisfactory as a basis and from the beginning, but that with our anomalous spelling large use should be made of "look and say," and that even the alphabetic method is wanted in some cases, if not for reading, at least for spelling purposes.

I have a very definite reason for preferring to use from the first, a combination of the two methods of the phonic and the "look and say" or word method. I have found, as so many others have found, that the word method goes well at first, but that the phonic is necessary if children of average capacity are ever to tackle new words for themselves. And I have also found, what might be expected, that children resent the change from the effortless learning which is the result of being told everything, to the more laborious method of putting together the sounds which compose a word. On the other hand, when, from the first, an appeal is made to their feeling of power, even though the teacher may tell a good many irregular words, the desire of the children is to "see how many words we can find out without you telling us." From the point of view of character forming, this is much more satisfactory.

In dealing with methods of teaching it is well to remember that one can only "be fortified by scientific certainty," so long as "no new unsettling scientific certainties happen to have been demonstrated," as Mr. de Morgan has it. The main objection made to the phonic method is that young children do not analyse. But is this true? I have watched

a child being taught entirely by the use of pictures and whole words, who knew *hen, net, cat, dogs, bat, ball*, etc., but confused *cock* with *duck*, and *dog* with *egg*. Asked for *egg* he one day showed *dog*, and then said, pointing to the *g*, "Oh, no! *egg* has two of these." He was making his own analysis.

Children too young to analyse write a continuous scribble; a little later the scribble may more nearly resemble words, with spaces between. I have seen a child writing "a letter to daddy," who appropriated a sale catalogue and carefully copied a page, "Annual Sale, Carpets, Curtains, etc." She had arrived at a stage in analysis which may well exist unnoticed in other children.

There is no sufficient evidence for attaching, as Mr. Huey does attach, the blame of "mechanical, stumbling, expressionless readers, who are poor thought getters," to the phonic method. Such readers would result from the unintelligent teaching of the duller children with the best method in existence.

THE PHONIC METHOD.—The first phonic teaching I had the opportunity of watching was that of Miss Bishop of Birmingham. Certainly in that teaching there was no "mere word pronouncing." Miss Bishop called the method she used by the cumbrous but descriptive title of "The Observing, Speaking, Writing and Reading Method," and she traced it back to Jacotot.

The phonic method seems to date back to Ickelsamer, who, about 1530, "considered the function of the letters and taught this and not the name." The *Orbis Pictus* of Comenius was intended to teach reading by associating picture and word, "without using any ordinary tedious spelling—that most troublesome torture of wits."

Jacotot (1770–1840) was the originator in France of the "observing, speaking, writing and reading" method, and Seltzam, a schoolmaster of Breslau, introduced it into Germany. He started from a sentence in the reading book and analysed that. Miss Bishop took as starting point the child's own experience, letting them talk a little, then choosing one of their sentences to analyse into words, then a word to analyse into sounds. Each sound was to be connected with the complete sentence as the expression of thought. If the sound is connected with an idea, this seems, however, to be sufficient.

As our space is limited, we must come now to practical details. There is, so far as I know, no published account of how children are taught to read with the phonic system as a basis, but with free use of "look and say" when desired, either because it adds interest and value to the material, or because it suits individual children. This is my reason for proceeding to give an account of our own methods, though I am aware that many teachers are already working on much the same lines.

CLASSIFICATION OF SOUNDS.—If we are to take phonics as a basis, the first thing to do is to survey our material. What we want is a working classification of such sounds, with their respective signs, as must be grasped before a child can be said to read. So long as he "cannot tackle new matter" he cannot read. It is clear that the twenty-six letters of the alphabet do not express the sounds we use, yet we do not want too many signs. It is better to associate one sound with *ay*, another with *ar*, and another with *aw*, than to have many sounds attached to the letter *a*. But we are not concerned with fine shades of difference, e.g., we may make a difference between the vowel sounds in food and in good, but one *oo* sound is enough for practical purposes.

The list given below is the result of experience; it has been increased and decreased at various times, and is never regarded as a fixed quantity. All are not necessary for reading;¹ for instance, it is a simple matter to tell such unreasonable words as *would*, *sight* and *brought*. But we find that if introduced gradually, the children find spelling less troublesome. We treat these as "look and say" words at first, but later we make families of *igh*, *ould*, and *ough* words, using the letter names only. A Scotswoman may be allowed to urge that the difficulties of *which* and *witch*, of *when* and *went*, of *where* and *were*, do not exist for Scotch children. Also, that if English children were trained to sound the letter *r*, it would no longer be impossible to convince them that "a wild boar" does not rhyme with "a sharp saw," and is not spelt "baw"; and they might even believe that it is unnecessary to put an *r* into the middle of "father." The sound *wa* is borrowed from Miss Dale, and we do not always use it. If the children are to learn both *aw* and *wa*, one should be familiar a considerable time before the other is brought forward.

¹ The less necessary sounds are put within brackets.

LIST OF SOUNDS AND SIGNS

17 simple and 5 double consonants—

b	k	t
c	l	v
d	m	w
f	n	th
g	p	sh
h	r	ch
j (= ge)	s (= ce)	wh
		qu

5 short vowels—ă, ě, ĭ, ǒ, ů.

10-12 long vowels, diphthongs, etc., represented by 15-25 signs—

a - e = ay (= ai, ey, ei).

ee = e - e = ea.

i - e (= y in by, my, try, why, and cry).

o - e = oa.

(u - e = ew).

ar in Arthur, farm, etc.

oo

ow = ou, in cow and out.

aw (= au).

wa in was, water.

ing (ong, ang).

Words in all, igh, ould, and ough.

NECESSITY FOR CLEAR ENUNCIATION.—As regards the exact sounds to be attached to the signs, it is certain that, unless the teacher is willing to take pains, she had better use some such system as that of Sonnenschein, with its *at, et, it, ot, ut*, where consonant and vowel control each other. To get the short vowels true, it is well for both teacher and child to think of a word of which the required vowel is the initial. We generally use the words, *apple, egg, ink, orange, and umbrella*.

The consonants require quite as much care as the vowels. The merest breath should escape with *b, p, t*, and *w*; for *m* the mouth can remain quite closed, and for *f, v*, and *s*, mouth and teeth almost meet. It is the great stumbling block to phonic reading that the teacher, in teaching for instance, the first sound in *brush*, often makes it sound like the first two letters of *but*, so that when she really means to give the three sounds of *but*, she very nearly gives the sounds for *butter*. We find the direction, "Keep the sound inside your mouth," acts well with children.

Miss Dale's plan of showing the children how each sound is produced seems too elaborate, and is unnecessary with small classes where children can learn by imitation. But in large classes it may be very helpful in the case of consonants, as the children at a distance can scarcely hear the slight sound. Still, teachers of large classes can pass quickly along whispering the sound, and those who catch it first can help others.


For good enunciation lips and tongue must grip to good purpose, and children must learn to avoid "lazy lips." They enjoy making little explosive sounds with *b*, *p*, *t*, *d*, etc., but it is safer, in giving such exercises, to deal with whole words, such as *cab*, *cup*, *cat*, *red*, and to let the stress fall on the last letter.


SIGNS SHOULD HAVE MEANING.—One of our main objects is to avoid as far as possible giving any meaningless signs. The remark that "single letters have no associative power" is not quite true. Most teachers probably teach the letter *s* by drawing a hissing snake, and it is known to every one that letters are derived from pictures. The original pictures are, of course, useless in teaching English, so we have made among us the following "hieroglyphics," which answer their purpose fairly well. Enterprising teachers will prefer to make their own, associating them where possible with the immediate interests of the children.


USE OF COLOUR ASSOCIATION.—We make use of colour associations to help the children to remember such sounds as *ee*, *ow* and *oo*. We attack the long sounds in this way. It seems reasonable that if one *e* makes the short sound *ĕ*, two should make the long sound *ee*. In bringing this sound to the notice of the children, we tell them that it comes into the name of one of the colours, then we name the colours of the chalks in the box till a quick ear catches the *ee* in *green*, after which *ee* and *ea* are always written in green chalk. In the same way we use *brown* for *ow* and *ou*, and *blue* for *oo*. The actual word *blue* we fortunately never seem to want at this early stage.


WRITING TO GO HAND IN HAND WITH READING.—It is so well known now that children learn through action that it is perhaps unnecessary to mention that writing should go hand in hand with reading. The writing is to have no pretension to elegance, but is to be a childish reproduction of the letter or word put before the class. As a rule, children express a desire to write, before they wish to read. The action


HIEROGLYPHICS FOR ENGLISH CHILDREN.

 = apple's letter = a


 = " " = a


 = brush's letter = b or b


 = curl's letter = c


 = duck's letter = d


 = egg's letter = e
(Humpty Dumpty broken)


 = feather's letter = f


 = flower's letter = f


 = glasses' letter = g


 = " " = g

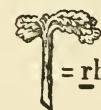
 = house's letter = h


 = key's letter = k


 = leg's letter = l


 = orange's letter = o


 = pipe's letter = p


 = rhubarb's letter = r

 = snake's letter = s

 = tap's letter = t

 = vase's letter = v

 = wave's letter = w

 = worm's letter = w

naturally appeals to them, and we usually begin by teaching our little ones the initials of their own names. Suppose we have a Fred and a Fanny in the class, they are told that they must share the flower's letter, or the feather's, as the case may be. The little picture is then made for them in coloured chalk, the letter is traced round it in white, and the children at once reproduce both. After their own initials come others which the children suggest, e.g., for father and mother, for their pets at home or at school, or for any object in which they are specially interested.

NECESSITY FOR REVISION.—These sounds must not be presented too quickly, there must be abundant revision, and this must be made interesting, and not a mere drill. One day we may make the letters for the toys in the toyshop, *doll*, *soldiers*, *ball*, *hoop*, etc. Another day we may take all the shops we know, *baker*, *grocer*, *draper*, etc., and we can follow this by the things sold. Another day we can choose animals, or colours, or flowers. The choice is unlimited, for as we are dealing only with the initial letter, elephant is no more difficult than cat and dog.

One of our devices is to put upon the blackboard several examples of the letters known, and to tell the simplest of narratives, getting the children to point out the letters as wanted. For example, at harvest festival time the letters *m*, *a*, *c*, *t*, *g*, *e*, *p*, *h* were put up and repeated several times. The "story" was that of a man, with a house and garden in the country, loading his cart to come to town. The children find the letters for man, house, and cart, then for all the things in the cart; he drops an apple, and breaks an egg, and finally starts. He can have all manner of adventures after the fashion of the old "Family Coach." Children in large classes cannot all be running to the blackboard, only a few would get the chance; but by use of the hektograph they can be supplied with the letters, or they can copy them quickly from the blackboard. Then they can put a red mark under each letter as it is wanted. As, however, children are no more fond of owning themselves in the wrong than we are, it is well to add as each letter is pointed out: "Now, we'll all make another." In a large class, too, the children can have letters tied round their necks, and jump up and turn round as in the "Family Coach" game.

It is evident that this and similar methods of revision can be just as easily applied to whole words as to single sounds.

Children who are properly provided with real stories, quite understand the purpose of this kind of narrative, which they can easily help to construct.

EAR PRACTICE.—While the children are learning the sounds and their signs, we make use of a so-called "guessing game," which gives practice in putting sounds together to make words, a power which will soon be wanted, and which to an occasional child is much more difficult than finding initial and closing letters. The other children sometimes cry: "Why, she's saying the word all the time," but "she" may not hear it.

The narrator begins for example: "Once there was a *m-ă-n*," and pauses while the children shout "man"—"and he had a *d-o-g*," and so on. For variety, she may take a picture, and without showing it she says: "In this picture I see the *s-k-y* and a very tall *t-r-ee*, and a little white *h-ou-se*, etc., or she may point to things in the room with, "I can see Tommy's *f-ee-t* and Helen's *f-r-o-ck* and Jack's *h-a-n-d*, etc.

The teacher is, of course, not limited to the signs the children have already learned, as this work is intended to appeal only to the ear.

In order to find out how each child learns, and so to give each a fair chance, large classes should be early divided and taught in sections. Special divisions can then be made of those who learn most quickly by one method or another. Instead of wasting time, this will save time. If in a large class there are certain children who put sounds together very quickly, it is clearly a waste of time for them to look on, while extra practice of this kind is given to children who, on the other hand, may be quicker at recognizing words as wholes. They would be better employed in reading silently, and so familiarizing themselves with the general appearance of words which they can find out for themselves. Later, again, large classes should be frequently taught in sections, because some children are certain to learn much more quickly than others. It is better, at any stage, that quick children should be set to draw pictures, and to write below, letters, names, etc., than that they should be bored and stupefied with want of occupation, while the slower children are taught. Also, the slower children will get more attention. At the same time, the last thing any one wants to do is to discourage the slow, nor is it desirable to put conceit into the heads of the others. In many elementary schools the quick children

are brought far too much to the front, and there is too much of the "clever little boy" atmosphere. Children can be told that all they have to do is to try, and all effort should be recognized. But quick learning or slow learning depends upon "how your head is made," and some are quick at one thing, some at another.

As soon as the children have grasped the most necessary sounds, we begin to deal with words. Again, nothing need be isolated and meaningless—we need never deal with "mere" words.

For example, the children will be pleased to draw a rough oblong to represent a toyshop window, and to put into the window the toy, e.g., *a doll, a dog, a cat, a ball*. The names can be written either on or below the pictures, and adjectives and prepositions can be introduced if the children write such phrases as "a big doll with a hat, a soft white dog, a red ball," etc.

In a rigidly phonic system the word *ball* would be excluded, but common sense sees no sufficient reason to include bat and exclude ball.

Another day, if there is an *Arthur* in the class, so that the *ar* is familiar, the oblong represents a farm-yard, within which we draw all the animals, *pig, dog, cat, hen, cow, sheep, goat* and *horse*, making a *big barn* on one side.

READING MATERIAL.—For a long time we keep to what is commonly known as blackboard reading, and this for two reasons, both of which are important. In the first place, the ordinary beginner's reading book is a thing to be avoided. It is a thing of shreds and patches, at worst a collection of inane and disjointed phrases, and at best it is seldom worth the attention of an intelligent child.

In the second place, the longer we can preserve the children from near-sighted work, the better for their eyesight. While the reading lesson is on the blackboard, there is none of the wear and tear of "keeping the place." The teacher's pointer relieves the children of this burden, and there is no interference with the work of the class when any child instinctively relieves eye strain, and nerve strain generally, by looking away for a few seconds.

Before long the teacher will find herself in a position to write up short sentences from a story in which the children are interested, especially if she feels herself free to use irregular words, treating them as wholes. Such words are underlined,

and are understood to be the teacher's words, though the children may soon pick them up, and they are triumphant when the underlining is no longer necessary.

The examples given below have actually been used with children. There is nothing remarkable about them, but they show how, from a very early stage, the reading matter may be connected with real stories in which the children are already interested.

The blackboard reading ought to have pictures as well as the reading book, and our blackboard is enlivened by making *ee*, *oo* and *ow* in *green*, *blue* and *brown*. Silent letters are lightly crossed out, and diphthongs are linked together.

In the first example, there are no capital letters except for the name of the little Eskimo girl. In the second the sentences begin with capitals, and the word *made* is told because the children have not yet learned the long vowels. It would be cruel to omit interesting animals because their names are hard, and the teacher would put up any that the children might demand.

BLACKBOARD READING LESSONS¹

Agoonack

she had a soft hood and soft boots.

she had seal skin boots.

seal skin is brown, so *she* had brown boots.

our boots are brown too.

The first Noah's ark

Franz made a Noah's ark for his little sister Lisbeth.

¹ It is not possible to represent in typography and in black and white the necessary distinctions which the teacher will make upon the blackboard to demonstrate this system. As remarked above, the double vowel sounds *ee*, *oo*, and *ow* will be written in green, blue, and brown respectively; diphthongs (indicated here by italics) will be linked together with a "tie mark," as *ee* or *th*; silent letters, such as the *k* in knife will be lightly crossed through; and "irregular" words will be underlined.

He made it of wood.

He cut *the* wood *with* a saw.

He put on a roof to keep out the rain.

When *the* ark was made, he made the animals.

Part of *the* wood was soft.

He made *the* animals of *the* soft wood.

But he cut them *with* his knife.

He made cows and sheep, dogs and cats, and elephants and tigers and lots of animals.

Water Babies

Poor Tom *was* a sweep.

He had to go up the dark, dark chim-neys.

He did not like the dark.

The *hard* bricks hurt his feet, and his knees.

A groom came one day.

He *was* so clean and smart.

He had top boots on.

He said, We need a sweep.

Tom said, I am a sweep, I will tell my master Grimes.

Tom had *far* to go.

He had to start *when* it *was* dark.

His master Grimes rode on a donkey.

Tom did not ride, he went on his feet,
and he had to take the bag too.

Three black marks on *the* table.

Odin made Loki pay for *the* pies.

Loki took three black stones.

He put *the* black stones on *the* table.

The black stones made three black marks
on the table.

The farmer's wife had to rub very hard.
She did rub and scrub, but *she* never did
rub out the black marks.

And a good thing that was too.

For now she never want-ed for any-thing.

For intelligent reading the children should, as a rule, have time given them to look quietly at what is on the blackboard, and if they cannot tell the subject for themselves they should be helped, with the title or with some other key word. But the lessons should not always follow one plan. To get repetition without dullness, one child may try how far he can go without help, another if he can read the whole. In a large class a row of children may try instead. Simultaneous reading is most objectionable, but it may be quite necessary to give a large class of children something to do. It need never, however, be simultaneous shouting, and it should not be the rule, but the exception. The lesson should *never* be read backwards. A better way of ensuring knowledge of words is "the jumping story," where a sentence is picked out from different lines by the teacher's pointer. From lines 1, 3, 7, 9, 4, 10, 2, comes the sentence, "Franz cut the cows out of wood."

THE READING BOOK.—The reading book must, of course, be good print, and it must be interesting. It ought to have pictures and not too many of these, and it ought to be a step towards good literature. The general information reading book is happily out of date.

Longmans' *Infant Fairy Readers* are excellent. The stories are taken from Andrew Lang's *Blue Fairy Book*, and have the original illustrations. But they are hardly easy enough to attack at once—a bridge of some kind is necessary. For this purpose we have tried all manner of books, new and old, and it must be confessed that the one we find most successful is quite old-fashioned and hopelessly unscientific. It is a little book published by George Bell & Sons called *Tot and the Cat*. We only read two or three of the stories, which are of the simplest, but our children always enjoy them. We do sometimes use Miss Dale's blue primer for a short time. In this most ingenious series, however, the matter is governed by the sound about to be taught, and consequently there is no real story.

Again, in Miss Dale's books, which are as rigidly phonic as is possible in our language, so many of our commonest words have to be excluded that a child has no chance with any ordinary story book, and that is discouraging.

We generally read Mrs. Craik's *So-fat and Mew-mew*, but sometimes we leave that, which is also extremely simple, for the children's silent reading.

SILENT READING.—This silent reading ought to be begun by degrees. We constantly read a paragraph "to ourselves first," then one child can read it aloud with tolerable fluency and some expression. Sometimes the children read a paragraph in silence, and tell in their own words what they have read. When children can read fluently, abundant time should be given for quiet reading, and this should not *always* be followed by giving an oral résumé.

READING WITH EXPRESSION.—For expressive reading, there is nothing like "conversations," and we sometimes block out the "he saids," which interrupt. "Pattern reading" is an unfortunate expression, and if it means that the children are to echo what the teacher does, it is altogether bad. But the teacher ought to take her turn, and to let the children hear what good reading is. Most children have some power of acting, and can enter into the feelings of the hero or heroine, and can read "in a cross voice," or "as if he was going to cry," as required. But others need help. We sometimes spend a little time over selected passages, picking out "words you must say loud," noticing that our voices usually go up at the end of a question or trying, one

after another, to make pathetic passages sound so lamentable that finally we all have to laugh.

"It's gettin' more like a story," said a bright boy, but slow reader, in the days when we thought it our duty as teachers "not to tell anything the child can find out." It is by such unconscious rebukes that the children show us our mistakes. The story must be a story from the beginning. The teacher must read a passage now and then if interest seems to flag, stopping here and there with a "Now, Jack, you be the ogre, and let us hear what he said this time. We'll see if you can speak in a big ogre's voice, and make us all shiver." Later, the teacher must not dominate too much, there may be several opinions as to how a passage ought to be rendered.

WRITING, SPELLING AND DICTATION.

As a rule far too much time and attention are still given to the mechanical part of learning to write, to the formation of the letters and to uniformity of handwriting.

There are three essentials in good writing. First, *Legibility*, for that means consideration for other people; secondly, *Rapidity*, for we live in a busy age; and thirdly, *Character*, a quality which is lost when such stress is laid upon uniformity.

If writing is kept in proper relation to reading, the children will learn with the minimum of boredom. Anything like pot-hooks, anything indeed like the old-fashioned copy book, is effectually kept out, if we are agreed that children should derive the letters from pictures, and that once these are learnt, they should only write words and sentences which interest.

In the *London County Council Gazette* for August 29, 1910, the attention of teachers and managers was drawn to the evil effects of the ordinary copy-book writing for children under seven. It was pointed out that the eyes of young children are so constructed that "to see any object nearer than a yard from the eye involves much more strain than in an adult," and that copy book writing between lines or on squared paper "leads to fatigue, discomfort and even cramp, while the similar effort involved in converging the eyes tend to produce further defects." There is the further difficulty that children under seven ought not to be expected to have control over the small muscles of the hand, and therefore ought not to be forced to hold the pen in the strained manner usually prescribed.

As no adult, except a writing-master, ever holds his or her pen in this strained manner, it is hard to see why children should ever have it forced upon them.

It would simplify the situation to give up talking about copy-books and to use merely the term, writing book. In these books, our beginners make original pictures, with the names written on and below them, and later with short sentences written below or on the opposite page. Such statements should be legible to the little writers themselves, so that long letters must be long, and short ones short, and it is also well to use one guide line. We need not worry the children to keep exactly on the line, but it will prevent such straggling as makes the writing illegible. At first the letters should not be joined, but wide spaces should be left between the words. The simplest form of letter is best, and the reading matter should be put on the blackboard in the form in which the children are to reproduce it. The difference between writing and printing letters is a mere matter of joining, as any one may see who will print such a word as *past* and then join the letters.

Whether the writing should be upright or not is a matter of little importance, but children understand "straight up and down" more easily than a certain amount of slope.

SPELLING AND DICTATION.

As "pot-hooks and hangers" are things of the past, so are "spellings." Children write about what interests them, and between this and their reading, they learn to spell. While spelling is considered of so much importance, the teacher must give it her serious attention. But she must on no account make it a serious matter to her children, and she must have endless patience with everything but carelessness. It is very easy, too, to mistake nervousness for carelessness, as both nervous and careless children have the same cry of, "Oh, I've made a mistake!" the nervous from excess of zeal and the careless from excess of haste.

There is a somewhat extraordinary idea in some schools, that because children ought to be allowed to express themselves, they should therefore do written composition at an early age. This, except for the talented few, is a fatal mistake.

If possible, children should never see, still less write, a misspelt word, so that as a class exercise there should be no

written composition under nine or ten years old, and not much then. But there must be gradual preparation for this. So long as children have to think of the shape of the letters, and of the spelling of most of the words, abundant help must be given. It is no crime to forget how a word is spelt; whether, e.g., the word *house* belongs to the "cow" family or to the "mouse" connexion. The child who wrote "good enough" as "good an uf" was within her rights. It is the words that are to be laughed at, not the child. At first hard words are avoided, or told and repeated. Later, either in reading or writing time, the words must be grouped, and associated by various devices. Our children like making a house into which they put all the words of one kind, and nonsense sentences combining these are also useful. We try to connect, for example, *here*, *there* and *where*, as referring to place, and *they* and *their*, so as to avoid trouble with *their* and *there*. Long ago we did use to indulge in such sentences as, "The maid made the pudding," but this only produces the confusion it is intended to avoid.

Transcription is of no use as regards spelling. Children copy quite correctly and placidly as if they were executing a free-hand drawing, without the slightest idea of what they are writing. We do find it useful to let them write out nursery rhymes, or any verses they know well, with all the hard words put up on the blackboard in any order. The blackboard is then the dictionary, where they may find any particular word they require, but it must first be found. Before the children are ready for this, they should have done a good deal of work with the teacher. It is difficult to correct bad spelling, so the business of a teacher is to prevent it. Our usual procedure is to begin by letting the children think out how to spell regular words, which the teacher then puts on the board for them. Very soon they require no help with common words. It is in these writing lessons that the names of the letters are by degrees substituted for the phonic sound, and that the children learn to spell.

Even young children are interested to know that the names Philip and Phyllis come from Greece, the land of Perseus, and that is why they do not begin as Frank does. They like to hear that English people used to sound the *gh* in *fight*, *laugh*, *brought*, etc., and that these letters are still pronounced by the country folk of the south of Scotland, where the language has changed less, and by the Germans, who are really

our cousins. The connexion in sound between *i* and *y* comes under notice very soon, and children of seven to eight can be shown that *y* changes to *i* when other letters are added, e.g., *they* and *their*, or with the plural of *baby*, *fairy* and *lady*, that we use the older spelling of *babie*, *fairie* and *ladie* for the plural. Children love reasons. A little discussion of irregularities serves to focus attention on the difficulty in question, and so to conquer it. Appeal should be made to many modes of learning. Irregularities should appear on the blackboard in coloured chalk: our children like to have them in red as a danger signal. Children should write hard words in the air as well as repeat the letters aloud, and finally they should be free to ask that the word should be written up again if they have forgotten it.

From so-called spelling reform long may we be preserved, but may we also, remembering our own youth, preserve the children from trouble by intelligent teaching of spelling in both reading and writing lessons.

DICTATION PROPERLY SO-CALLED.—Dictation proper has no place in the Infant School, and generally gets altogether too much attention in the middle school. If it were not begun so early, and if much less were done, there would be less need for it, as the children would be guarded from writing, that is, from teaching themselves mis-spellings and other bad habits.

Dictation ought to be more than a mere exercise to test spelling. It ought to prepare for two things: (*a*) for the intelligent expression in writing of one's own thought, and (*b*) for the intelligent taking of notes. An educated adult notes down briefly the gist of a lecturer's thought, and any statistics, etc., difficult to remember. The uneducated note-taker tries to get down all the lecturer says, with the result that no thought is committed to paper, merely unintelligible scraps.

In dictation lessons, attention should be concentrated on the thought to be expressed, and this is impossible until children can write with ease. They cannot at one moment hold within "the focus of consciousness" the formation of letters, the spacing of words, the use of capitals and the spelling of every other word. Everything, however, comes by degrees, and from one point of view every writing lesson should be a dictation lesson. While the children are being helped to write their own little statements, nursery rhymes and other

familiar verses, or popular sayings and rhymes about weather, months and seasons, they are learning the use of capitals, of full stops, commas, question marks, and "crying out marks."

To take an example, if we get stormy weather late in February, the children like to repeat: "March comes in like a lion and goes out like a lamb." Our children of seven and a half require practically no help in writing this, only a question or two by way of reminder, e.g., "Tell me the first thing you are going to write about March. What have you to remember about the names of months? Does every one remember how to spell *come*?" When the half is safely written comes, "What comes next? Who knows which word has a silent letter? Say over the words. Now write." If the little help of dividing the piece, and making the children repeat what they are going to write, is not given, half the class at that age may transpose lion and lamb.

With children still younger, the lesson is quite different, e.g., "If we are going to write about March, we must know how to spell it. Who has a birthday in March? Can you write it? Sound it first, and I will write it up for you. What two letters make the sound *ar* and *ch*? Big people always write the names of the months with a capital letter like this. Make it in the air. Now all write March on your practice papers. 'March comes in like a lion.' Some one spell lion just as it sounds, in the two pieces *li-on*. Now all write that on your papers. 'Comes' is a hard word; here it is; how ought we to sound it? Yes, like combs and brushes! Write it in the air. Look! I am making the *e* red, so that you won't leave it out. Look at it again. Can you see it when you shut your eyes? Can you write it if I rub it out? Be quite sure. Now say all together, 'March comes in like a lion.' Here is the word like—I will leave it up on the board for you. Now write these words on practice paper, and I shall write it on the board. Has any one made a mistake—no? then put it into your books tidily, make a neat little comma stop, and we will finish it to-morrow."

Next day the children will read what they have written, will shut their eyes and spell the words, and then finish the saying. Little has been done, but something has been gained; and let us hope no mis-spelling has been allowed to make a mental picture difficult to obliterate.

As the children grow older, the amount to be written, the difficulties to be tackled, must be properly graded. Always,

the children should know at least the general drift of the subject about which they are writing, and should be made responsible for keeping in mind some intelligent sentence or phrase. At first this should be repeated immediately before writing. The unintelligent parrot cry of, "What comes after March? what comes after winds?" etc., of word-at-a-time dictation, should never even make its appearance in a well-conducted classroom.

With older children, who no longer write for the pleasure of writing, as children do to whom it is a newly acquired power, dictation requires a motive. All children enjoy making collections, and the dictation book may show a variety. Different quotations dealing with one subject, a collection of folklore rhymes, of proverbs from different countries, good passages of poetry worth keeping and worth learning—all these will serve the important purpose of enabling children to write their own language with ease, quite as well as odd sentences from a reading book, while at the same time they have a value in themselves.

To sum up, intelligent understanding is the root of everything, and interest is the growing point. It is never difficulty but boredom that saps the energy of a child.

E. R. MURRAY.

BOOKS OF REFERENCE

- How to Teach Reading.* G. Stanley Hall, Ph.D. (D. C. Heath & Co.)
The Psychology and Pedagogy of Reading. Edmund Huey, A.M., Ph.D. (The Macmillan Co.)
Genetic Psychology. C. H. Judd, Ph.D. (Appleton & Co.)

A SUGGESTED SERIES OF READING BOOKS

- The Three Little Pigs.* Longmans' New Fairy Tale Readers for Infants.
Jack and the Beanstalk. } Longman's Infant Fairy Readers.
Snowdrop. }
So-fat and Mew Mew at Home. } Griffith and Farran,
So-fat and Mew Mew away from Home. }
Little Red Riding Hood, etc. } Longmans' Supplementary Readers, for
Cinderella, etc. } Standard I.
Swiss Family Robinson. } Adapted by Edith Robarts (Cassell & Co.)
Robinson Crusoe. }
Hearts of Oak Books. Parts II and III. (Heath & Co.)
Legends of Greece and Rome. (Harrap & Co.)
The Junior Temple Reader. (Horace Marshall & Son.)

SUGGESTIONS AS TO THE BASIS OF HISTORY TEACHING

BEFORE considering early methods of teaching history, we must know what we mean by the term "history"; and it then remains for us to decide whether any activities in this direction are advisable, as well as possible, for young children. Such activities will not be advisable unless they are just those which in themselves best serve towards development at this stage. If only our knowledge of young children were adequate, the question should ideally be—not, "How are we to teach this or that subject?" but—"What activities best further wholesome development?" We could then satisfy ourselves, as a later and less important matter, as to how these experiences and activities bear upon any future specific study. For the end of the whole process is life, not "subjects."

Yet our knowledge of the psychology of children is in its early stages, and we are not in a position to make a clean sweep of all the old landmarks.

Originally an investigation of any kind, a "record of facts on which to base principles," the term history was restricted to mean a record of the past of mankind "as organized into communities," and thence it has been defined as "the biography of political societies." Therefore, until lately, when a deeper conception of the substance and function of history has arisen, the subject matter of most histories has been the story of political institutions, governments, and dynasties. If the treatment of men as grouped into governments were the characteristic mark of history, then indeed the subject would be entirely removed from the understanding and interest of children of any age.

Yet even the "biography of political societies" involves more than may appear at first; for political societies have their origin in the needs and aspirations of the men and women

who compose them, and for whom they exist. They remain vital and interesting only so long as their connexion with such needs and aspirations is clearly felt. So that, taking even this restricted meaning of history, the foundation of any fruitful study of political societies would lie in a vivid realization of the life and needs out of which they arose, and of their present relation to such life. Without this, any study of them could only result in mere pedantry.

But the province of history is otherwise defined. Professor Withers gives as its subject and aim: "An explanation of the essential facts and forces in the condition of mankind, as it now is, and has been in the past: an explanation which should serve to put man into intelligent relation with the community of which he is a member;" such "intelligent relation" involving ultimately, we assume, ethical standards and moral conduct. It is in some such explanation and aim as this that we must look for the key to any possible work in the direction of history with young children.

The phrase, "essential facts and forces," gives very wide scope to the subject; such facts and forces are numerous, varied, and complex. They include matters of the inward and outward life of man; matters that are, each of them, the subject of separate and specific study, such as geography, economics, sociology, physiology, psychology. But some of the most fundamental and insistent of the facts and forces, the permanent needs which give rise to effort, are within the experience of children, and are interesting to them.

It may, at first sight, seem absurd to assert that the play of little children can have anything to do with history. Yet all social play and games, so far as they are alive with the children's imaginative and emotional activity, games about home, about father and mother's work, about a train journey, the postman, the milkman, shop-keeping, the policeman or the farmer, the blacksmith—such games may, and should, vitalize the sense of social relationship, and, guided by the teacher, lead naturally to a deeper understanding and realization of some of the "facts and forces" and inter-connexions of our life to-day.

Of course it is lamentably possible to impose operations on children from without, under the title of games; and to drown, in a gulf of boredom, all enthusiasm for what they represent. On the other hand, it is possible for a teacher whose heart and mind are alive to the relationships involved,

and to the significance of such small beginnings, to encourage interest, to stimulate curiosity, observation and sympathy, by means of questions and suggestions; and also to arouse the sense of mutual dependence and mutual service, in even the simplest of such games. The children and teacher would together construct them out of the actual experience and observation of the class, extended by anything suitable which the teacher can contribute.

This is at any rate one way in which the children's interest in those activities of others that have reference to themselves may well be vivified and expressed; and this gradual widening out of interest, from the personal centre to more distant relationships, may reasonably be said to be a good basis for the study of history in the sense defined by Professor Withers.

When sufficient dexterity allows, rough models, made and equipped by the children, may greatly assist in this imaginative play, and further widen the sense of "give and take" among workers. A miniature house can be made and furnished; also models of places and objects of greatest interest to the children in their immediate neighbourhood, such as the fire station, the railway station, a shop, or a farmyard and blacksmith's shop.

The models chosen would depend entirely on the experiences of the children, and probably no two classes would have just the same. At this stage outward resemblance is enough; until children begin to be more keen to know "how things work," such objects are merely tools for the imagination. There should be no attempt to make them very neat or carefully finished, nor need there be great exactness about the proportional size of the objects. The kind of model that pleases the uninitiated visitor may, educationally speaking, merely cumber the ground. The greater the resourcefulness the children show in adapting any material they possess for their purpose the better, however odd the appearance of the result. And while it is possible to make the work of little children too large, the commoner fault still is to make it too small. It is as well to avoid laying disproportionate stress on the feminine element, and to dismiss the term "doll's house"; for the word "doll" still refers, in the minds of many children, to a petticoated being, in whom a man child has no part or lot.

Such activities may increase dexterity, and evoke inventiveness: they should necessitate more observation of the appear-

ance and uses of things, and of the function of workers in and around the home, and thus should have a direct bearing on an understanding of the community. Their effectiveness in the direction of history is to be judged by the amount and quality of imaginative activity and interested observation and inquiry to which they give rise; and by the degree in which they in that way deepen and widen the sense of social relationship and interdependence.

This encouragement of the children's imaginative activity, in connexion with their immediate surroundings, should be supplemented by the wonder-world of legend, fairy tale and folklore, which constitute man's earliest explanation of himself and his surroundings, and in which some teachers have therefore seen the only true starting-point of history teaching. The sense of a world of mystery, of endless possibilities, of marvellous things round us, but hidden from our eyes, of great reward for great endeavour; these, and many other matters of human experience, are depicted in such stories, in just the concrete form and with just those glowing colours which appeal to the children and give fitting shape to their vague hopes and intuitions. Too exclusive employment of the imagination on actual experience might tend to develop the type of mind which leaves no room in its philosophy for factors it cannot fully understand and measure. Such an attitude would belittle history; great movements have often been started by great personalities who cannot be explained on such terms; and the sense of the possibility of daring and wonderful personal achievement is one of the many gains to be derived from myths and legends.

After the supremely imaginative stage is passed, boys and girls inquire more frequently, "Is it true?" They are keen about the "how and why" of things round them in the actual world, which teems for them with things to be "found out." "The world is so full of a number of things." In this transition stage those legends and stories on the borderline between myth and history—such as the tales of Greek heroes and the story of Hiawatha—are apt to please them most.

At this stage, when children are no longer content with toys as mere resemblances, and begin to inquire more persistently "how they work," there are difficulties in continuing to base their practical activities exclusively on their actual surroundings. The explanation of to-day's social and industrial

processes is a hopelessly complex matter. If, for instance, the children try to build a miniature house, with bricks and mortar, after watching the building of one in the neighbourhood, they must use prepared material, ready-made bricks, prepared wood; and it is impossible for them to trace very far back the ramifications and relationships of our complicated industries. The whole thing is too complex. This is no argument against basing occupations on their immediate surroundings—explaining through their activities, to some extent, the how and the why of processes, and the part contributed by different workers; but it suggests to us the wisdom of beginning, as well, to build up from simpler times and conditions. For though these may be remote in time, they are in many ways nearer to the understanding of the children. But whether the children are occupied with a cave man or with the policeman round the corner, the result of their activity should be to make life to-day a little more interesting and intelligible.

If, then, it is advisable to begin in both ways, we could start at the one end with a somewhat continuous and progressive course of lessons, showing how men in early times provided themselves with necessities; and at the other with activities and stories connected directly with to-day.

The first courses would contain much doing and little talking—on the part of the teacher; such talking taking the form perhaps of a story to supply connexion and personal interest, and of questions and suggestions that may arouse the children's thought and inventiveness. Ideas as to the best ways of doing things would be elicited as far as possible from the children, who may, with unprepared material when this can be found, make models of such things as dwellings, primitive weapons, tools, and utensils, e.g., baskets, pottery, and specimens of rough spinning and weaving. In such a course of lessons, by story, occupation, discussion and dramatic play, the need for combining for hunting and defence, and for the production of necessities, can be brought out; and also even the need for law.

It would be possible to take different types of "early man," making the kind of home or shelter the central idea; to begin with those who used ready-made shelter—trees, caves, pits, etc., and ate ready made food; and then to take lake dwellers, makers of huts of different kinds, tent men, and finally more settled people. It might also be possible to make the children see something of the importance of the domestication

of animals and of the introduction of agriculture. It would be necessary to avoid carefully the idea of any rigid sequence in the order of time : almost all these types of primitive people are represented in the world to-day.

There is now quite a store of ingenious books, some of them compiled with strict attention to the latest research, which tell the probable life of such people in the form of stories. Such books are invaluable for the suggestion they offer as to the method of presentment, and may otherwise be of great use. But they are not meant to be the sole authority for the teacher. The attempt to base a course of lessons on such slender material alone can only result in wrong emphasis, and in hopeless thinness. The teachers will inevitably rush in with their positive statements where the antiquaries fear to tread. Before beginning such a course, or any part of it, some time should be given to the study of what is actually known by antiquaries and ethnologists about primitive peoples of long ago and to-day. Weapons, relics, utensils, etc., should be seen in museums. If nothing farther can be done, there are at least such possible and easy beginnings as Clodd's *Childhood of the World*, *Primitive Man*, and the *Origin of Inventions* (Contemporary Science Series). A short list of books useful to teachers for this side of the work is appended.

If we would prevent this work of the children from being merely hand work, we must to some extent reconstruct the past for ourselves. The interest we convey is the interest we feel, and interest depends partly on knowledge. Acquaintance with the latest method, or even psychological understanding of the children, cannot make up for lack of knowledge of the subject in hand.

Some teachers will probably prefer to attempt something far less ambitious ; to take, perhaps, one or more stories which deal with the dawn of civilization, such as the legend of Hiawatha, or the story of Joseph, and to work out in connexion all possible forms of primitive industries. Or again such work can be centred solely round some imaginary early people of our own land ; but here again a good deal of study will be needful. The course is of less importance than the way in which it is worked out.

Any such work, well done, should have several results in the direction of history. It should give a sense of contrast and of great changes brought about by man's effort ; and it should deepen the children's interest in their actual surroundings.

For however interested the children may be in early man, the happenings and the people of to-day captivate their attention as their intelligence develops. Therefore it seems that we miss valuable opportunities if we do not also begin at our own end of the story of man, with activities, explanations and tales that arise from the children's most vivid passing interests, and from the objects and events and occupations in their immediate neighbourhood; or with stories suggested by anniversaries of events they can understand. This kind of work will depend entirely on the environment of the children, and may be more or less haphazard: but, again, it should succeed in rendering more vivid and intelligent their interest in the life of to-day, and should afford opportunities of connecting the present with the past.

When the children care chiefly for true stories—by which time they will possibly be able to read easily—selected tales from different ages and countries, describing stirring events and interesting people, and well illustrated, will be most valuable. If there be books with such stories “vividly told” and pictures “speakingly drawn,” they will at the same time delight the children, and provide those “vivid centres of association,” the development of which Arnold considered to be the object of history teaching with young children.

Clearly the subject is immense, and the possible lines of work bewilderingly manifold; and dogmatism must be avoided even if the alternative be some indefiniteness. Very divergent lines of activity may have equally good results, if the natural interests and powers of the children and the substance and aim of history in its deeper significance be kept in mind.

So long as she is guided by right principles and aims, the more freedom a capable teacher has to follow the paths that most appeal to her, the better both for her and the children.

C. E. LEGG.

BOOKS OF REFERENCE ON PRIMITIVE MAN

Article on “Primitive Man” in *Encyclopædia Britannica*.

The Story of Primitive Man. Clodd.

The Childhood of the World. Clodd. (Kegan Paul.)

Taylor's Anthropology. (Macmillan.)

Man before Metals. Joly. (International Scientific Series, 5s.)

The Place of Industries in Elementary Education. Dopp. (University of Chicago Press, 5s.)

- From Stone to Steel.* A Handbook to Horniman's Museum. (P. S. King & Sons, 3*d.*)
- Cave-hunting.* Boyd Dawkins. (Macmillan.)
- The Industrial and Social History Series. (*The Tree Dwellers, Early Cave Men, Later Cave Men, Tent Dwellers.* Dopp. 2*s.* 6*d.* each.)
- Days before History.* H. R. Hall. (Harrap, 1*s.*)

SUGGESTIONS AS TO THE BASIS OF GEOGRAPHY TEACHING

GEOGRAPHY is an aspect of life which should arise naturally and almost imperceptibly out of earlier and simpler interests, e.g., nature work on the one hand, and literature on the other, for it is concerned with the relationship between the world of animate (and later inanimate) things and the life of man. It is very often difficult at this point to separate it from certain aspects of history and nature study, nor is it always wise to attempt to do so in the earlier stages.

To establish a basis on realities it is necessary to find out which aspects or relationships of life first awaken a child's geographical sense, as something rather apart from the separate interests which have been referred to. This will largely depend on the actual locality of a child's home. If he lives in the country the first appeal may be the sky: most children wonder where the sun goes at night, and this is especially the case in the short winter days when they can see it both rise and set; the shadows of objects, and especially those cast by themselves, are a constant interest; probably the sundial would make a more effective appeal to children's sense of time, and its dependence on the sun's movements for measurement, than does the ordinary clock. Then the night sky, with the more apparent movements of the moon, and the glowing and twinkling of the stars, arouses a sense of wonder and awe, that should keep the geography sense from ever becoming a matter of mere materialism and fact. That there is so much more to discover than any one has yet discovered is the right intellectual aspect to keep constantly before a child, and in this subject many opportunities occur. The friendly face of the moon brings a kind of personal relationship to this side of the subject. "I raced the moon one night, but he always won," said one child. "One of the curious

things is that you can see the moon in half, but never the sun in half," said another child.

It is a matter of the greatest astonishment to themselves when children discover the moon in the sky during the day. All this side of the subject, and the interest and speculation it arouses, are too important to be ignored.

The shapes of clouds, too, excite that curious and constant desire in children to find relationships and resemblances. To see a rainbow is an event to be remembered.

Besides the sky, the country child is often stirred by the feeling, only to be described as "far-offness," which most people experience in connexion with a distant landscape, especially if there are hills on the horizon: even in adult life one feels that there is a most desirable country in the distance which one never reaches, and many children have been known to construct quite a world of their own out of that possible country. Robert Louis Stevenson had this sense very strongly aroused by a small river, down which he sailed his paper boats, and also by climbing a rather high tree, which gave him a view he had not experienced before.

In the case of town children probably the idea of the train or station corresponds to the "far off" feeling of the landscape in quite another way. They are often taken on long or short journeys, and this is of course the best possible introduction to geography. A Russian lady is reported to have said to her little boy, "When you wish to learn geography acquaint the coachman, and he will take you wherever you desire to go." This is geography in its extremest sense. They, too, have the sky in a more limited degree, and much can be done by shadows. To compensate for the rather "earth" side of geography of the country child, the town child constantly sees strange and foreign goods, fruit, pictures, furniture, ornaments and sometimes people. It is not uncommon for London children to see Japanese, Turks, Chinese, Hindus in native dress, going about the streets. Foreign children frequently come to school, especially in such districts as Deptford and Whitechapel. And there is hardly a child in town or country that has not a relative or acquaintance in a distant land. Children of the British Isles, with its colonies and dependencies, should, more than most children, have this network of geographical realities. The weather is, of course, of general interest, though more carefully regarded by the country child, to whose welfare it matters more. The early

love of adventure appeals to all. Robinson Crusoe has done more for the beginnings of geography than many so-called geographers.

Both town and country children see the beginnings of trade and commerce in the work around them ; the town child in any industry that might be carried on in his neighbourhood, and the country child in farming.

Up to this point we have merely gathered together those aspects of a child's surroundings which form the natural basis of geographical work, and considered the way in which they affect his natural interests. It is evident that in doing this we must deal with each school individually. Much of the subject matter varies, though some background is common to all, such as the sky and the weather, but in many cases the choice of special conditions, and surroundings, and possibly material, is dependent on the special industries of the neighbourhood.

The systematic study of geography is best postponed to a stage of mental development later than that considered in this volume ; but preparatory lessons may be undertaken, and are very desirable in order to foster and formulate to some extent those interests awakened earlier, which have just been considered. As the subject matter throughout the whole of the course should be preparatory to further work, it is absolutely essential that the teacher should have an adequate knowledge of the main principles of scientific geography in order to make a wise selection and to present the matter in a useful way. She must therefore be familiar both with the elements of physical geography, and also with the way in which the physical conditions influence human life. It is always dangerous to select or simplify matter with any but a full and certain background of knowledge.

The material may be variously regarded as : (1) general observations of phenomena and forces ;

(2) that dealing with immediate surroundings and the homeland generally ;

(3) that dealing with other countries.

(1) With regard to weather observations they might deal with (a) the air, e.g., whether clear, misty or foggy ; (b) the clouds, e.g., whether light and fleecy, or heavy and dark ; whether over part of the sky or quite covering it ; (c) the rain, e.g., whether light showers, steady rain, or very heavy downpour ; (d) the temperature, e.g., whether very

cold, cold, cool, warm, hot, or very hot ; (e) the wind, e.g., whether calm, light wind, breeze, strong wind, storm. The direction of the wind might be observed at a rather later stage, when the points of the compass have been learnt.

These observations should be made regularly, at the same hour each day, and recorded in some definite form ; they may be better realized by means of simple drawings with the pencil, or preferably the brush, representing either directly or symbolically the weather conditions. Causes cannot be considered in the earliest stages, but from the very beginning, wherever opportunity offers, the teacher might point out how certain conditions occur along with others. Thus it might be noticed that a clear sky in winter time is accompanied by cold weather, but in summer time by hot weather ; in this way the ground is prepared for the later teaching on radiation of heat to and from the earth's surface. Similarly, the direction of the wind may be discovered to be connected with temperature and with rainfall. The records themselves, if kept continuously, will afford material for the later study of causes and effects. It is not perhaps necessary for each child to make the record each day ; to save time this can be done by the children in turn, though some observations must be made by all.

Early in school life the movements of the sun during the day should be noted. The children should observe that it is always in the same part of the sky at midday ; this direction should be named the south. The points of the compass become most real to the children if they are learnt through something very real and personal, e.g., English children might associate the south with the sun's home (especially in winter), the east where he rises, and the west where he disappears at bedtime ; the north might be the home of the white bear or any other Arctic phenomena they know. Or directions might be relative to the sea, and be emphasized by reference to the surrounding objects, as north, south, east or west of the school or even schoolroom ; such as the sides of the room, the other rooms of the school, the neighbouring roads and buildings. Some might indeed be re-named for the time being, as the West Street, the East Station, the North School, especially if the children are making a model. Then after sufficient observations the children will find that the apparent movement of the sun from above one building to above another is from east to south before noon, and from south to west after noon.

From such a story as that of Columbus, or from an imaginary one, they could well imagine the difficulty of a ship at sea that had entirely lost its bearings, and then one might examine a mariner's compass and find that it always pointed in an approximately north-south direction; they would then realize what it meant to both seamen and discoverers.

An essential part of this general aspect consists of some experiments and observations connected with the circulation of water as evaporated from the surface of the earth or the sea into the sky; the formation of clouds, falling of rain, running over or through the ground into streams, and finally reaching the sea unless evaporated on the journey. These lessons must be largely supplemented by description where observation or experiment is impossible. Even in a town the roads, with their drying puddles and their gutters and drains, give opportunity for some direct work of this kind; a model of a river system, with water sprinkled from a hose and flowing into a "sea," might, along with pictures, greatly help the children to understand this part of the subject. Some of the above work of the geography lesson grows naturally out of the nature work, especially out of the nature calendar; for the two so-called subjects are in reality part of the same side of life, and some portion of the elementary study of plant and animal life which is dealt with in the section on Nature Study affords the necessary ground work for "plant geography" and "animal geography" of later years.

(2) The consideration of the life immediately around the children, or in other parts of their own country, may be going on co-incidentally with what has been just considered. The work and lives of people engaged in certain occupations should form an important part of the syllabus, beginning with those immediately connected with or well known to the children, and going on to those in other parts of the country. The essential facts as to the work of farmers may be familiar to country children, but town children will have to realize them by means of pictures and descriptions and through their gardening. Some knowledge derived from holidays should be utilized. It will help them later to realize larger truths, if they understand such simple connexions as that ripening corn needs sunshine rather than rain, and that cattle are largely pastured on the long grasses of riverside meadows.

Fishing is another occupation that should be dealt with, and in this connexion the actual work in relation to land

configuration should be considered, e.g., fishing on the shallows called "banks," safe harbourage of bays, the work of cleaning and preserving fish, should be introduced. Similarly the work of miners, of quarrymen, the melting of iron ore and making of iron goods, the making of cotton and woollen goods (the latter in relation to the children's own experiments in weaving), pottery, forestry, might all be taken simply, and in relation to the part of the country where they are carried on, with only the slightest reference to causation, perhaps sufficient to make the children understand that their existence in that particular locality is not just haphazard. The transport of these goods will give opportunities for linking the various centres together, and from ideas of the time taken in travelling and transport the ideas of distance may be introduced; difficulties such as mountains and wide rivers, the part played by capes and lighthouses, the advantages of estuaries and harbours, and their improvement by the construction of docks, can come quite naturally in this way.

It will be noted that certain geographical forms, e.g., mountains, capes and bays, are introduced in connexion with their natural relation to man and not as definitions. Similarly lessons on industries, and such things as a lighthouse or a mill, were formerly introduced to children as object lessons in an isolated way. Their true place is surely in connexion with either geography or history, i.e., their relation to human life.

Pictures and models are absolutely necessary in this connexion, but the need for maps has not yet come, nor would they be helpful at this stage. To a certain extent the children are prepared for them by their drawing of the plans of furniture and of doll's houses and gardens, previous to constructing them; often a village has been constructed by a class, and this presupposes some idea of a plan, but the application to maps is later. One can realize how the imagination of the country children as to the country beyond their horizon is helped by this side of the work, and how that of the town child plays around the goods that come and go from his neighbourhood, or dock, or station. A luggage train may become an object of mystery and romance.

(3) The remaining portion of this preparatory geography deals with other lands. By the means we have already described, the children's interest has been aroused in the various peoples of the world and their ways of living, but in all cases

the life of a community should, as far as possible, be shown to be dependent on the physical conditions of the land it inhabits.

It will be convenient for the teacher to make physiographical conditions the basis of selection, both in regard to the types of people considered and to their peculiar characteristics; but to the children, the people themselves must be put in the foreground. Thus a series could be so selected that each type inhabited some region of marked physical conditions. The following are suggested: (a) the agricultural people of India, a hot region, but neither very wet nor very dry; (b) the Eskimo of the far North, exemplifying life in a very cold region; (c) the Arabs of the Sahara for life in a dry region; (d) the Indians of the Amazon valley for life in a wet region; (e) the Swiss as mountain dwellers; (f) the Dutch inhabitants of a very flat country; (g) the nomadic pastoral peoples of the temperate grasslands of Central Asia; (h) the dwellers in the temperate forests of more northern latitudes—hunters and lumbermen.

In preparing such lessons the teacher should set out for her own edification the essential features of each region, and side by side with these the habits and customs of the people which have been evolved as a response to these physical conditions, and thus place, in her own mind, the human beings in close relation to the physical conditions which affect them. By this means the frequent mistake may be avoided of telling the story of the people in such a way that, although interest may be aroused, the story could have almost any geographical setting, and consequently could have very little geographical value. For example, the picturesque national costume of the Swiss and Dutch is largely irrelevant, but the dress of the Eskimo and the processes and implements involved in its making are worth special study, as closely related to both the climate and the animal life of the region.

To a considerable extent child life rather than the life of adults may be described, and stories and pictures should here again be the chief means of instruction. In regard to pictures, experience shows that the work of the teacher is to direct the attention of the children to the desired matters, and this may best be done by questions or even by direct remarks. If the children are not so guided they will probably take notice of unimportant matters and pass without notice essential features. The teacher should also see that the picture is

rightly interpreted ; the present writer taught a class in which no child recognized snow as the white covering of the mountains, while several children thought it represented salt or sugar. Also the teacher may help the children to deduce more than the picture actually shows, as, for example, temperature from the vegetation, or the liability of floods from the fact that the houses are built on piles. Such help, however, must be given very carefully, or the children will deduce from the teacher's unintentional suggestion instead of from the picture. To examine carefully a few well selected pictures is of infinitely more value than merely to exhibit a large number.

The use of models in teaching the geography of other lands is a debatable question. The values attaching to models made by the teacher are quite different and need separate consideration from the values attaching to those made by the children. The former may be useful as giving new ideas, and to that extent must be accurate ; this is possible with simple scenes which can be readily simulated, as the snow field with Eskimo hut, sledge, people and dogs. For these things suitable materials are easily obtained, and no great misconceptions are caused ; but to represent an Alpine valley with its varied features, natural and artificial, is impossible without giving many and seriously wrong impressions. Thus, although clay can be moulded into the required shape, the essential hardness of the rock is lacking ; scale presents another difficulty—the figures and houses cannot be introduced, if the mountains are adequately represented. The solution probably lies in making models of separate parts of such a complicated scene. Models made by the children need not be so carefully scrutinized as to their realism ; their value largely consists in helping to fix the ideas the children have already received, and for this purpose special points may be isolated, e.g., the shape of the valley may be moulded in clay if the children have previously learnt that the mountains enclosing it are of hard rock. The shape only is considered, and even in this crudities may be passed over if more accurate models or pictures are before the class.

Maps are inappropriate to this work ; they need not be introduced until definite regions are studied in later years.

Finally, it may be pointed out that it is both unnecessary and undesirable to deal with the shape or movements of the earth. These matters cannot possibly be taught or understood at this stage ; all that could be done would be to have phrases

learnt and repeated, for it is beyond the power of the children to realize that this world, parts of which they know and upon which they live, is really like a ball, and still less can they have any real idea of its movements; one of the worst features of the old compulsory code for elementary schools was its inclusion of the "shape and movements of the earth" in the first stages of instruction.

J. F. UNSTEAD.

BOOKS OF REFERENCE

For a study of Physical Geography, the following books may be recommended: Huxley and Gregory, *Physiography* (Macmillan, 4s. 6d.) Mill, *Realm of Nature* (Murray, 5s.). Dryer, *Physical Geography* (Philip, 6s.). An excellent introduction to the relations between physical conditions and human life is given in Herbertson's *Man and His Work* (Black, 1s. 6d.). A text book for teachers, which covers broadly the whole ground, is Unstead and Taylor, *General and Regional Geography* (Philip, 6s.), and an elementary book with the same wide scope and by the same authors is *Essentials of World Geography* (Philip).

Descriptive material for the lessons on foreign peoples and lands is given in the *Little Cousin* Series, e.g., *The Little Eskimo* (Ward, Lock & Co., 1s. 6d. each), and in the "*Peeps at Many Lands*" Series (Black, 1s. 6d. net each). Jane Andrew's *Seven Little Sisters*.

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