

“That training which leads pupils to be imitators only, does little to develop thought and action. Drawing ought to teach seeing, doing, and knowing. Drawing ought to cultivate the hand and the eye, and increase the knowledge of the object represented.”

W. W. SPEER.

THAT drawing is one of the earliest arts of primeval man is a fact too clearly evidenced and too widely known to need extensive comment here. From that rude picture on the rocks by which the cave-dweller indicated man escaping in affright from the approach of some prehistoric monster, to the likeness of that monster etched on his own bones, the rebus-like inscriptions on the tombs and monuments of the Egyptians, and the hieroglyphics and picture-writing of primitive tribes, some of which are still in use, we come finally to our modern letters, which occupy the highest step in the scale of the language of signs. Picture-writing in shorthand, as it were, may still be seen perfectly illustrated by the whole written language of the Chinese, and should we trace the art of drawing from its earliest inception, we should find that its value in ornament was commonly recognized even earlier than its value as a means of record and communication, for it is a universal truth that man develops the ornamental during the infancy of every race, before the useful.¹

Antiquity of
the Art of
Drawing.

¹ “Following the distinct teaching of history, and particularly the teaching of prehistoric times, it is clear that the artistic faculties of human beings were the first to develop, and

Nor do we need to prove that drawing is natural to children, and is one of the first means which they use to make the inward outward, and the outward inward. A soft, smooth surface, whether it be sand, or earth, or mud, or snow, offers irresistible attractions for marking and rude sketching, even to grown people, and some of us have not even yet passed the time when a cloudy window-pane offers a fascinating field for the pursuit of art. "What child," as a thoughtful kindergartner has lately said, "from Giotto down, has not been reprimanded for defacing margins of books, the wall-paper and woodwork, in his efforts to satisfy the longing to create outwardly the pictures which float before his inward vision? It is a wise mother who destroys such idols only by supplying better ones, which in this case come in the form of suitable materials to serve this craving."

"The kindergarten cannot be too much prized for having gathered in the now scattered work and play occupations, which once kept together around the hearth children with their parents in the spare hours of the evening,"¹ and among these occupations drawing is perhaps the most valuable, as it is without doubt the most universal.

that the art of those times was always of a decorative nature, the existence of many primitive nations being only known to us by their art remains." (Professor Henry Talbot.)

¹ E. Seguin.

In all civilized nations children are now taught to draw, but the object of this instruction by all these varied methods is not, ^{Object of teaching Drawing.} for the most part, and certainly not in the earlier stages, to make artists. It is, — or it should be at all events, — the education of the eye, the training of the mind, and the cultivation of another medium of self-expression. The increased attention given of late years to drawing in our schools has proved, as Dr. W. N. Hailmann says, that “there is no child devoid of a serviceable amount of talent for drawing, that all children can learn to draw just as all children can learn to speak; and that the attention given to this subject has stimulated in our youth the tendency to choose avocations in life that call for the exercise of artistic taste and technical skill.”

We need not discuss here the merit of the various systems by which drawing is ^{Drawing Systems.} taught in the schools of the United States. The mass of literature on the subject and examples of the practical work are within the reach of all and open to the critical judgment of any person, if that person be sufficiently fair and lucid in mind to hear and read patiently and weigh carefully the arguments for and arguments against; the protestations of faith in, and heretical denials of; the attack and defense constantly going on among the champions of drawing systems. It seems to an impartial observer that

there is some good in all of them when rightly interpreted, and that there is little good in any when in the hands of the wrong person.

The lively discussion as to the systems of drawing in schools, however, is equaled and Kindergarten Drawing. even possibly excelled by the agitation of the same matter in kindergarten circles. No one of the Froebel occupations is in so chaotic a state as drawing. Every training teacher has her own method or methods of teaching the branch which are in many respects quite unlike those of any other training teacher; every kindergarten centre is trying experiments on different lines, is casting aside old systems and taking up new ones, or possibly reversing this process; there is little agreement anywhere save in a quite general dissatisfaction with what has been done, an aspiration after better things, and a "discontent" which is perhaps, as John Richard Green says, "the only true source of progress." It is idle for the kindergartner to suppose that she can so arrange her scheme of drawing as to satisfy the artist, the artisan, and the designer, while she avoids everything which she is warned against by the physiologist and the psychologist and puts into practice all that they recommend, at the same time following out her own ideals, gratifying the child, and keeping in fellowship with the leading drawing systems. It is true that Solomon said that he that hearkeneth unto counsel is wise, but

not many pages further on he remarks that it is not good to have respect of persons in judgment. The crying need in all these matters is "still a finer common sense." While the kindergartner listens attentively to her multitude of counselors, she must at the same time retain an independent judgment of her own, and having firmly fixed in her mind certain purposes which kindergarden drawing should carry out, must herself decide what will be the best methods of obtaining the desired results.

Perhaps we should all agree, to recapitulate somewhat, that these purposes are: —

- a.* The education of the eye.
- b.* The training of the hand.
- c.* The training of the mind.
- d.* The cultivation of another mode of self-expression.
- e.* The acquirement of the fundamental principles of art.

And we should also agree that "while the hand, the brain, the eye are growing, is the time to give them the habits essential to their highest utility, such as dexterity, flexibility, skill, and powers of perception and conception."

We shall not here attempt to give our opinion as to what methods will best attain these desirable and valuable results. We shall describe the four kinds of drawing, Linear, Outline, Circular, and Freehand, some or all of which are in use in the

principal kindergartens of the world ; we shall endeavor to give the various arguments for and against them, and having presented all sides of the subject as clearly as may be in our power, leave to our readers the decision as to which and how many of the methods they shall use in teaching the art to little children.

LINEAR DRAWING

“The rolling sphere, the thrown and falling stone, the water dammed up and guided into little diverging ditches, have taught the child that the direction of the effect of power is always linear.”
FR. FROEBEL.

“As the drawing of lines precedes the drawing of figures, so also there proceeds from it the invention of forms, ascending to imitation and copying; and, further, after the pupil has made the required progress in geometry and mathematics, perspective drawing, instruction regarding light and shade, as well as drawing from nature, landscape drawing, etc., will follow. The last aim here, as everywhere, is the representation of the human figure.”
FR. FROEBEL.

“The unpracticed eye of a child will first take in only the principal lines of objects, and of these first the straight ones, before it can master curves, surfaces, and filling in. We notice the same characteristics in the people who first practiced the science of architecture. Their drawings consist of outlines, linear representations in straight strokes, without curves or perspective, as in the first attempts of children.” B. VON MARENHOLTZ-BULOW.

Materials for Linear Drawing: Checkered or dotted paper, the size of the squares in the network being commonly about one quarter inch; slates squared or dotted on the same scale;¹ slate and lead pencils, and colored crayons.

FROEBEL'S idea of drawing, and his plans for introducing it as one of the first occupations for young children, are exceedingly ingenious. The touching or handling of the solid body (the most important means

Froebel's
Plans for
Linear
Drawing.

¹ Slates are now much less used than formerly.

of acquiring knowledge during the first year of a child's life, the period of his unconscious susceptibility) is now changed to the looking at objects presented to his observation, and representing their images by drawing; so that the image of a body, so to speak, takes the place of the body itself. "In drawing, the child has reached the ideal representation of solids, by means of light and shade, marks made upon a surface to represent outlines. We have a complete transition from the tangible solid to the ideal representation of it."

Froebel's method of drawing¹ unites all other kindergarten occupations into an organic succession, by following the use of blocks (solids), laying of tablets (planes), and sticks and rings (lines). These occupations are preparatory; the laying of sticks was a sort of drawing in wood-lines, and gave to the child his first ideas of invention, by making it easy for him to devise figures in which opposites should surround a centre.

Froebel observed, with greatest love and discrimination, the nature and natural instincts of the child; and the pleasure found in scribbling, that universal instinct of childhood, being legitimately controlled and directed, is made the basis

¹ A complete description of Froebel's plans for Linear Drawing is to be found in *The Education of Man* (tr. by Josephine Jarvis), pages 209 to 221.

of kindergarten drawing, an occupation both artistic and mathematical, valuable alike to head and hand, for mental training, manual dexterity, and cultivation of the æsthetic nature. Drawing is of paramount importance as an occupation, because the child is enabled by it to reproduce quickly and easily the images imparted to his mind, and to give them a visible representation, whereby they become truly objective, and are only then understood.

The child, at the early age of three to five years, is considered by many persons to be hardly able to execute satisfactory freehand drawing; and, therefore, an intermediate step is to be provided, which will serve to develop the correct eye and steady hand. This intermediate step is supplied by the use of the net or square, consisting of any open space formed by the intersection of vertical and horizontal lines, and in this the child finds the necessary aid, for it is only an aid, and not too great a one, the dots lately introduced answering the same purpose.¹ The child must be just as painstaking with as without them, and by their help he accomplishes quite wonderful and beautiful results.

These squares, commonly about one fourth inch in size, are found on slates, as well as on paper, enabling him to find distances and compre-

¹ A triangular network on the same scale is also sometimes used.

Use of the
Network or
Web in
Drawing.

hend measurement, — training him to exactness of observation and correct eye-measure.

Froebel explains, as follows, the principle on which the drawing net, or web, is formed, and its value to the child : —

“ All formation is on the condition of uniting various parts ; what is united forms, as it were, a web or texture, and that exists only by the connecting of opposing lines or threads, as, for example, the web of the spider, which only thus holds together. No organism exists without such a knitting of parts, without at least approximately forming a web, even if it is not visible to the eye. The magnifying power of the microscope shows us plainly the net-like web, whether it is upon a leaf, or upon our skin, or whatever it may be. Even the smallest cell, which is not visible to the eye, consists of a web, and everything which comes into view from the invisible point can be formed in no other way than by being produced thus from different directions, or shot forth, as in the process of crystallization.

“ Every web also forms a net, in a certain way, by the crossing of the lines running in opposite directions. But this net exhibits at every crossing, or every point of contact, a centre which is to be referred to some circumference, as it were, and every square of the net is a division which offers the best means of arrangement of the different parts of a whole.

“For this reason I give my children a net consisting of perpendicular and horizontal lines, which serves as a guide for drawing all forms, and regulates and facilitates the proportions of parts to a whole, and their correct and equal coördination. Painters use a net for the same purpose in their copies of pictures.

“The net affords the most intelligible image of the joining of opposites, by the opposite direction of its lines. The web of all nature’s forms is always a net, and expresses the law as the norm of all formation.”¹

This method, ingenious as it is simple, should lead the child early to copy objects of nature, for if he has gained command of his pencil, and has learned how to manage straight and curved lines, the rest is sure to follow.

The school of linear drawing, as used in the kindergartens of to-day, differs somewhat from the so-called Froebel school, but none the less carries out his ideas of development exactly, being there-
Linear Drawing in the modern Kindergarten.
 fore similar in theory, but proceeding in a simpler and somewhat abbreviated manner. This method beautifully supplements the other occupations and the outline lessons in sewing, stick laying, etc., and by giving the child, in comparatively few lessons, lines of different lengths and directions, enables him to handle his pencil easily and freely,

¹ *Reminiscences of Froebel*, pages 231, 232.

and gives him mobility of hand and wrist by exercising them in every possible way.

The course pursued is much the same as that already given for linear sewing, the two occupations being pursued along parallel lines, one interpreting the other.

a. Vertical lines of one "space."¹

Horizontal lines of one "space."

Combinations of vertical and horizontal lines producing angles, squares, borders, and symmetrical figures.

b. Vertical lines of two spaces.

Horizontal lines of two spaces.

Combinations, etc., as above.

c. Vertical lines of two spaces.

Horizontal lines of one space.

Combinations, etc., leading finally to the figure which we call familiarly the "vertical oblong."

d. Vertical lines of one space.

Horizontal lines of two spaces.

Combinations, etc., leading to the "horizontal oblong."

e. Diagonals obtained by crossing one space square in both directions.

Combinations resulting in square turned on point.

f. Diagonals of two-space square.

Combinations, etc.

g. Diagonals of "vertical oblong."

¹ One quarter inch, or more.

Combinations leading to the rhomb, or "diamond" in vertical position.

h. Diagonals of "horizontal oblong."

Combinations resulting in the rhomb, or "diamond" in horizontal position.

i. Right isosceles triangles and their combinations.

Equilateral triangles and their combinations.

Right scalene triangles and their combinations.

Obtuse isosceles triangles and their combinations.

j. Curves of a circle whose diameter is first one quarter inch and is increased according to the ability of the child.

Combinations leading to complete circle.

k. Curves of oval as above.

Combinations as above.

In the majority of kindergartens where linear drawing is used at all, it is preceded by the drawing of large curves and circles as advised by Froebel in the "Kindergarten Wesen." These are executed either from patterns or freehand, to connect with the study of the ball and sphere in first and second gifts, straight lines being introduced when the cube is presented to observation.

Froebel advised beginning with the vertical line in drawing; and the kindergartners in general have continued the practice, as it has seemed to them to be earlier noticed by the child, more easily executed, and first ap-

Order of introducing Lines.

peeling in the kindergarten to his attention, in the string by which the ball is suspended. This practice is supported by Dr. Seguin, who says: "By the physiological method the child draws in the following order: from a vertical line to a horizontal, thence an oblique, a curve."¹

Against this opinion, however, must be pitted that of Henry T. Bailey, supervisor of drawing for Massachusetts, who states as explicitly: "The easiest order for children in drawing is first the horizontal, then the vertical, then the oblique line. Children need most practice on horizontal and vertical because they naturally make use of oblique lines."

This is evidently a matter which only extended observations of children will settle, and it behooves the kindergartner speedily to engage in these observations lest it prove that her method of introducing the lines may have been incorrect from the first.

The rapidity with which the child goes through the "school" of linear drawing is dependent altogether upon his ability to execute the lines and make use of them in invention. Of course, however, he is never to be detained upon a certain kind of line until he can draw it perfectly. That is not to be expected at this early age and is not even to be desired, for a gain in execution here would mean a loss of power later on.

How Linear
Drawing
may be di-
versified.

¹ E. Seguin. *Education*, page 169.

With the smaller children the lines are always to have the light of fancy thrown upon them, and every kindergartner who would be successful must have an unfailing supply of the oil by which this light is fed. A row of one-space vertical lines, for instance, is comparatively uninspiring in itself, but how fascinating it is to play they are fire-crackers and "make believe" that Teddy has pulled them all out of the package and is laying them on the table one space apart so that he can count them. If it is a review day and the one-space horizontal lines are next to be drawn, it is obvious that they are the fire-crackers lighted and thrown down and ready to go off with a delightful splutter and bang. Then the angles, of course, are parts of a frame that the men are putting up to hold the evening fireworks, and the vertical and horizontal lines combined into a border or "Greek pattern," will be the rockets hissing and zigzagging across the sky by and by. Now it is obvious to any person of sentiment that the squares must be the boxes the fireworks were bought in, and let us make a great many and have a magnificent display!

Let us remember, however, that this fanciful interpretation of the lines must have a vital relation to the leading thought in the child's mind and the subject for the month, though it is to be hoped that these last are always synonymous. There is no beauty, pleasure, nor fitness in talking

of the lines as soldiers marching, when every child is aglow with the recollection of the dancing bear he saw on the way to the kindergarten; nor of playing they are fence posts when everybody is thrilled with the Christmas spirit and thinking of the "Wonderful Tree." The kindergartner who makes these mistakes, and they are not as uncommon as might be wished, is one who has but a faint vision of the truth.

When the child is drawing, we should also, as Froebel advised, join to his action the explaining word; that is, connect the visible with the audible, and thus bring it nearer to his insight, recognition, and inner perception. Froebel says, in the "Kindergarten Wesen," "The drawing of lines, of the curved as also of the straight lines, should be combined with the explaining word or with the enlivening little song, such as the earlier ball or sphere songs, not only to awaken thereby, but also to cultivate and strengthen, the general activity of the child."

Drawing and re-drawing a line without considering its length or its direction may give added dexterity, but it can give nothing else, for it is a purely mechanical process. All these small industries of the kindergarten must be lifted from the mechanical into a higher realm and must be connected with the intellect and sympathies of the child. This view of work in the Froebel system, which is one of its distinctive peculiarities, accords

well with Schiller's words in the "Song of the Bell:" —

" And well it stamps our human race,
And hence the gift to understand,
That Man within the heart should trace
Whate'er he fashions with the hand."

The lines and their connections and developments should never be presented arbitrarily to the child and set for him as a copy, but should be the outgrowth of previous work with sticks, when he has *himself discovered*, for instance, how vertical and horizontal lines may be joined into four positions of right angles, and how these may be combined into squares, etc. The world-wide difference between precept and experience lies in the two methods of teaching.

In all this linear drawing the child should be taught to see what he is doing and see the end of the line before he makes it.

Practical
Directions.

The vertical lines should be drawn from up to down, the horizontal from left to right. If a long line is to be made, a dot should be placed at the beginning and the end, and then the two points be connected with a swift light stroke. The children should use *long* pencils, and the teacher should take especial pains to see that they do not bear upon them too heavily. The habit of erasing is especially to be condemned, and constant care should be used in guarding against it, for it is one very easily acquired. The left hand should

be employed as well as the right in many of the exercises, and drawing between the lines frequently be practiced.

In drawing the child has full scope for invention, for synthetic exercises which have been made natural and easy for him by former analysis. He has now for the first time the full delight of producing, and if his training has been careful, his designs will be symmetrical in form and exact in detail. To this end we must be especially careful in all our dictations, and in the sequence of lines and figures which we present to him. They are most valuable for concentration of mind, and are so mingled with mathematical exercises that they fix in the memory all foregoing lessons in direction and number. We should be careful that the child understands each lesson as he passes over it, we must use familiar terms for the vertical and horizontal lines, the acute and obtuse angles, until he can readily remember the proper ones, and require him often to point out to us in surrounding objects these same lines and angles, that we may be sure of his comprehension. The dictations will embrace as in the gifts, forms of life, beauty, and knowledge, and of course have a direct bearing upon the child's inventive work. The language in which they are given should be perfectly simple and plain, and we should be absolutely assured of what we want to say before we say it.

Dictations
in Drawing.

One has only to try the exercise with a class of adults and note the resulting mistakes, to be convinced of the vital necessity of clearness of thought as well as speech in dictations.

Nor should we be too inflexible and dogmatic in these exercises, but should give the child as much freedom as he can wisely be intrusted with. It is a thousand times better to dictate half the central figure and let him complete the other half than to make him follow your words to the last quarter inch, when it was perfectly obvious some seconds ago what the design was to be. Who has not seen the kindergartner holding her children by sheer force of will, — they straining at the leash meanwhile, — and insisting that the exercise shall be a dictation pure and simple, and that any hapless wight who “guesses” what is going to come next and draws it, shall erase his guess and wait for the spoken word.

It is wise now and then merely to give the centre of the design and let each complete it as he desires, for the individual variations on the same theme will be most pleasing and instructive to the children. At another time we may complete the figure and encourage the child to invent an appropriate border, or we can give the border and call for a centrepiece.

Other useful variations of the exercise are to draw a figure line by line upon the blackboard, and let the children follow, or to suggest a group-

work invention on the board, or on large paper, in which each child of the class shall take part.

Memory drawing, too, is often advisable, the kindergartner or an older child drawing a figure upon the board which is quickly erased and then reproduced by the class. Such exercises must of course be very simple at first and gradually become more complex.

The copying of the child's own inventions in sticks, tablets, and rings, is extremely interesting and beneficial, because it results in drawing on reduced or extended scales. The space on the tables being one inch square, and that on the paper being generally a fourth of an inch, he must make his calculations, and transfer the design to the smaller size, so that it will meet his eye when completed, as the invention in miniature. The use of colored crayons for the copying of these inventions, as well as sometimes for the drawing of the school of lines, gives unbounded pleasure to children, and should be considered, as Spencer says, "as the natural stimulus to the mastery of the comparatively difficult and unattractive form."

Slate drawing has grown entirely out of favor in many kindergartens, as an excessive use of it undoubtedly cultivates a habit of too great pressure on the pencil and a hard touch, which are disastrous to paper drawing. Another objection to it is that the ease with

Copying
Inventions.

Slate Draw-
ing.

which incorrect lines are erased often renders the children a trifle careless in execution ; and to add another objection still, and thus pile Pelion on Ossa, it is claimed that the distribution and redistribution of slates and slate pencils is one of the most dangerous methods of transmitting disease germs. This last danger might be averted by a special slate and pencil for each child, and a thorough cleaning occasionally with water containing bichloride of mercury ; but perhaps a better preventive still is to throw aside the kindergarten slate altogether, or only use it for occasional dictations.

Froebel says in regard to invention : “ In no other way can human work be transformed into free activity. It can only become intellectual action out of what has been mere mechanical action, when the occupation of the hand is at the same time the occupation of the mind. . . . Every human work corresponds more or less with creative activity, and this is necessary in order to make man the image of his Divine Creator, — a creator, on his own part, in miniature.” ¹

The kindergartner who fails to bring out this inventive ability in the child leaves unfulfilled the highest promise of the system. People are sometimes skeptical about its existence in such tiny pupils, and doubt their ability to produce original

¹ *Reminiscences of Froebel*, page 238.

symmetrical forms and designs. They almost invariably say that, at all events, if these appear, it must be due to individual talent and not to the Froebel system. But we know the perfection of every detail in that system, how the child is acted upon, and how he responds to the surrounding influences. He understands perfectly, though unwittingly, Froebel's law of the connection of opposites, and without any learning of dead rules or philosophic abstractions he goes straight to the mark and creates his form, whatever it may be. To an outsider the inventive power of the children appears more curious and wonderful than it really is, for none but the initiated realize the effect of the daily training on the child; the great perfection of observation which is cultivated, the clear impressions received, the strict discipline of mind, and above all, the atmosphere of harmony and beauty surrounding him, which develops all that is æsthetic within him and makes him an embryo artist, without special effort on his part. And why should he not be so? The kindergartner is, or should be, an artist herself, in the large meaning of the word, and she is the child's daily companion and example. His play is replete with grace, poetry, and harmony, his hourly occupations are bright with color, and full of symmetry, precision, and dainty neatness. All his possibilities are expanding in an atmosphere of love, joy, sympathy, human affection, and com-

panionship ; in the society of dozens of small beings, for the most part trying to be generous, kind, and lovely ; literally, all the arts wait upon him, why should he not be or grow artistic? Is there not a grave fault somewhere, if he appears to have no love for the beautiful or power of producing it, after he has been acted upon by his surroundings for a sufficiently long time? Our general system of public instruction too often succeeds in well-nigh destroying the creative power in children, and all but "overwhelming and imperious genius" is crushed beneath its relentless methods, so that Art, instead of becoming the ideal of the whole race, unveils herself only to the eyes of a few.

And no art is merely ornamental ; it is also useful. It has been said by experienced and practical men that in nine trades out of ten a boy who can draw well has a vast advantage over one who cannot. The subject of manual training in education is now engrossing so much attention that people cannot fail to see how admirably it is begun in the kindergarten.

Manual
Training in
the Kinder-
garten.

The training must, of course, be entirely of a preparatory nature with us, indeed it may be questioned whether, in any case, a child could master a trade during his school life, or whether it is best that he should do so ; but what we desire is the training of the eye and hand in design

and the principles of construction, so that when our children come to the work of life they will not be entirely unprepared. As the director¹ of the Public Industrial Art School of Philadelphia has wisely said, "Regard for the individuality of the pupil is the thing to be constantly kept in view; to give additional power and facility to his hand, arm, eye, and brain. Give him the power to think and create anew, see that his eye is trained, his hand made dexterous, and his brain quickened, and you may trust him to learn with ease the art of handling machines or instruments of precision. He will handle and use them the better that his whole organization has been trained. Michael Angelo said, 'Man must carry his measuring tools in his eye, not in his hand.'"

That teaching children how to use their hands would be allied to developing quickness of perception and cleverness in general, great writers and thinkers long ago held to be true, and it is now being successfully demonstrated. Charles G. Leland alludes to this in an article on "Hand-Work in Public Schools," and goes on to predict that the education of the future will embrace hand-work at every stage, from the kindergarten upward. It will be artistic at first, because art is easy, but gradually it will ripen into the practical or technological.

If our youth were all familiarized with work in

¹ J. Liberty Tadd.

school, if it had been associated in their minds with art and design, it is certain that all prejudice against it as work would disappear and our American children would have less antipathy to hand-labor.

We must remember, however, in conclusion, that whatever the technical value of drawing or its usefulness as an accomplishment, its highest value, as Dr. Hailmann says, "lies in the respectful, loving nurture and development which it gives to the art-impulse of the learner."

DRAWING AS EDUCATION. ITS PRACTICAL VALUE PROVED IN GERMAN SCHOOLS AND FACTORIES.—The United States consul at Chemnitz has been much impressed with the important place which drawing holds in the schools of Germany, and has summarized the results of his observations in a report which had just been published by the State Department.

"I never knew the value of drawing," he writes, "till I came to Germany. At Mannheim its meaning as an essential part of a German education had just begun to dawn on me. I saw its importance to the jewelry trade at Pforzheim. The more I studied the question of German education, especially technical education, the more drawing I found. It is the beginning and end of all technical education.

"A good knowledge of drawing makes a boy more useful to his employer than any other branch. It is believed here that to be able to make or build anything, one must be able first to draw it. Then, again, a drawing mechanic can carry home exact ideas of things seen. It is the custom not only in Chemnitz, but in every city I have visited on the Continent, and more especially in Germany, to send out trained draughtsmen to expositions and fairs for the purpose of copying designs, new machines, etc. How well they have done their work is seen in the manufactures of Aix la Chapelle, Crefeld, Plauen, Leipsic, Chemnitz, Frankfort, and Berlin.

“The importance of this study may be seen in the many hours devoted to it from the kindergarten to the university. No other study in technical schools gets so many hours or more careful instruction. In day schools, evening schools, and Sunday schools, it is the same thing — drawing! drawing! drawing! It is an aid rather than an injury to the memory. It trains the mind as well as the eye. It is as great an aid to the reasoning powers as is logic or mathematics. It is the very essence of both. One is always dealing with relations, making comparisons, seeking exactness. Besides, a sense of the harmonious and beautiful is developed.

“What I want to point out is its practical value. The agents of houses in the United States who haunted the halls of sale in Roubaix, Lyons, and Troyes ten or twenty years ago, now come to Chemnitz, Plauen, Crefeld, Gera, and Glauchau. It was formerly four weeks in Lyons or Troyes, and one or two days at Chemnitz, Crefeld, or Plauen. Now it is four weeks here, and days in the French textile centres. I do not say that this remarkable change is entirely due to drawing and designing, but I do claim that a very large part of it is. Nor am I alone in my belief that drawing may be an excellent substitute for logic and mathematics, for I found, after I had begun this report, books published in Germany containing the same ideas.

“The best auxiliaries to the imagination or fancy are the different styles of drawing. One author claims it as the best aid to technical skill for training the eyes, the best help to an appreciation of objective and perspective forms, and the appreciation of light and shadow. It is also regarded as a great aid to the understanding, — to mental measuring. . . .

“I always find technical teachers enthusiastic over the subject. I know what opinions manufacturers hold in regard to it; I know how eagerly the creations of French fancy (*fantasie*) and imagination are copied here and made cheaper than in France and sold all over the world. By and by, with a wider development of this art, Germany will not need to go to France for ideas. With the power to put down on paper the myriad forms found in the forests and fields, to make combinations, to depict things seen by the mind's eye, will come novelties and perfect independence.”

A HANDFUL OF SIMILES ON DICTATION VERSUS INVENTION

DICTATION is the science ; invention the art of applying the science.

Dictation furnishes the means ; invention is the end.

Dictation is one of those unobtrusive agents which lie out of sight, as the root does in the ground ; invention is the blossom. The fruit is the conscious use of power in after years.

Dictation is the moving cause ; invention the effect.

Dictation is the text-book ; invention works through the book, but clothes each word with new meaning. It uses the book merely for a text, and the sermon should illuminate the text, and lift it into a higher significance.

Dictation is the ladder on which to climb ; invention the blue sky beyond.

Dictation is the eggshell, the thing visible ; invention the living thing that issues therefrom, — the life-principle.

Dictation furnishes an inward guide, a governing law ; invention lifts it up and changes it into something higher than law. If there is too much

law, the higher powers are too fully employed in obeying it, — creation languishes.

If an eggshell were too thick, the principle of life, for the protection of which it alone existed, would be stifled.

Dictation is the letter; invention the spirit. It is the letter which is in danger of killing, but the spirit giveth life.

All great achievements are the result of preliminary discipline of mind, heart, or body, except in the case of genius, which is amenable to no laws, and works according to no fixed theories; that sort of creative genius is higher than law, and can afford to do without it.

OBJECTIONS TO LINEAR DRAWING

HERBERT SPENCER, in discussing erroneous methods in drawing,¹ says that if teachers were guided by nature's hints in making the art a part of education, they would first lead the child to represent things that are large, that are attractive in color, and around which pleasurable associations most cluster. He wholly disapproves of the formal discipline in making straight lines, and curved lines, and compound lines, with which it is the fashion of some teachers to begin, and likens it to a dry analysis of elements which, in the teaching of language, has been exploded. Mr. H. Courthope Bowen, in his pamphlet on the "Education of Man," argues on much the same lines, saying, in particular, that Froebel seems to be premature in his insistence on the use of elements. He readily allows the inventiveness exercised by his plan, and thinks the checker-work full of useful suggestions, but holds that the inventiveness is far too little free, and very liable to resolve itself into what is merely mechanical. "Checker-work," he adds, "also affords but little help in exercising expression, for that to which it gives outward

¹ *Education*, pages 140-147.

visible shape corresponds but in a very limited way to what is in the child's mind. It rather suggests new things to the child than expresses thoughts already his."

The Committee on Kindergarten, and on Form Study and Drawing, presented a report to the New York Conference of Educational Workers, as long ago as October, 1889, in which the network drawing was criticised as follows:—

"Drawing should be a means of thought expression. The old network system of drawing on checkered paper should be discarded. It is wrong in principle, it cramps execution, prevents consideration of the drawing as a whole, debars the child from the free expression of thought, and is at variance with all other work of the modern kindergarten."

For those who still believe in linear drawing, however, there is a little hope, in spite of the above criticisms, and a few champions yet remain to lead them against the foe. Dr. E. Seguin, although he criticises the "bi-lateral plan," and the "too symmetrical exercises" of kindergarten drawing, defends as follows the use of the network or the dot:—

"From the standpoint of the principles, there is only one true drawing, that is from nature, instead of from others' drawings; and two methods: (*a*) one which leaves the field—or plan to draw upon—a blank upon which the imagination

Answers to
some of
these Ob-
jections.

images, and the hand traces the image; (b) the second method covers the plan with lines or points of reference, which serve as guides to the eye and hand. Froebel adopted this latter course, likely the easier for infants, whose hand, alert at automatism, is irresolute under the dictates of a yet confused imagination.”¹

Professor T. G. Rooper, in his study in practical psychology, called “Drawing in Primary Schools,” defends kindergarten drawing very warmly, and some of his remarks will be given in full, as his opinion, as coming quite from the outside, must at least be impartial. He says: “Kindergarten drawing on square-ruled paper is, to begin with, a happy and an absorbing occupation; were it no more, it would be valuable for this alone. But it is much more. Children can early learn from it what is the use and meaning of symmetry, and this without technical language. . . . The point to remember is, that Froebel was much interested in crystallography and its connection with geometrical forms. All kindergarten drawing which is not founded on geometrical forms is debased, and not according to the idea of the founder. Symmetry is not the same thing as proportion, but is of even greater practical value in every-day life. . . . It is my belief that it is of great consequence to establish early in the mind of a child conceptions of symmetry, such as,

¹ Seguin's *Education*, page 169.

I think, drawing on square-ruled paper leads to . . . We have seen how large a share the mind has in combining the impressions which it receives from the outside, and we can understand how important are the early images which a child learns to construct for itself in interpreting impressions. Geometrical patterns, both in curved and straight lines, seem to me the best foundation for this all-important sense of symmetry." Professor Rooper also defends the drawing of curves on square-ruled paper, as the natural form is based upon the geometrical one, and the regular curves may be used as an introduction to the artistic curves of growing and living forms, such as the branches of trees, the veins of leaves, or the shape of fruit.

There is another serious question, however, to be considered in using the network in drawing, and that is the evil physiological and psychological effects of too fine work. The size of the squares has gradually increased on kindergarten paper until now one never sees the checkering of one sixth and even one eighth of an inch, upon which linear drawing was sometimes executed a dozen years ago. The squares now used are commonly one fourth of an inch in size, but those kindergartners who continue to use the network would probably be much more nearly right, and certainly far safer, if they increased the scale to a half or three quarters of an

Evil Effects
of "fine
Work."

inch. If even this is found to produce evil effects, then it is obvious that this method of drawing must be promptly dislodged from its place in the kindergarten, for no intelligent follower of Froebel would for a moment retain an occupation which its designer would have been the first to discard, had he held the objections against it to be cogent.

This brings us back to the question, already several times discussed, of the fundamental versus the accessory muscles, and the danger of over-training the latter by too fine work at the expense of power in later years. If all the principles on which the question rests are correctly stated, then it is evident that we should not expect accuracy at first from little children, but be satisfied with crudity and get accuracy afterwards, or in other words that beauty must not first be considered, but power.

Professor John Dewey has lately written a letter to a prominent kindergartner regarding the fine work, which is of application here and is worthy of quotation, because of the eminence of the author and the value of his opinion as an expert. Professor Dewey says: "I do not have any practical data at hand regarding 'fine work;' theoretically, there is no doubt in my mind of its inadequacy and perverseness. I think physicians would be of one mind as to its bad effects upon the optic nerve

Professor
Dewey's
Objections.

and the motor nerves of hand and eye, leading to some strain in eye, and tendency to chorea (if in subtle form) in muscular system.

“The evil psychological effect is just as certain if not quite so obvious,— it tends to *fix*, to *arrest* imagery, and thus produce that cramping effect which you speak of having noticed. In holding attention to minute work, there is certainly a habit formed which thwarts attention of the free, easy flow it might otherwise attain. The large flow of imagery is balked in being held down so minutely and narrowly. Free coarse work gradually refining itself, seems to me the law. . . . This fine work, it seems to me, calls attention to technique *before* the idea is formed, therefore disturbing and hindering the growth of the idea. First the crude idea, then the technique in order to perfect the idea, seems to me the law.”

The only objection to be made to this opinion, so far as we see, at least, is that it is questionable whether children naturally incline to large movements and large designs in drawing, or whether, on the contrary, they do not instinctively make petty figures. “Just so in the infancy of a race,” as Charles G. Leland says, “it perfects the pettiness of illuminating manuscripts before designing grandly.” To begin with large figures, then, if the above theory be well founded, would be to contradict, in that respect at least, the parallel

Do not Children instinctively make petty Figures?

between the development of the child and the race ; but there is no doubt that we may easily make too much of this theory and strive to carry it farther than it should legitimately go.

Practically we can lay it down as a principle, that the child who has been too long accustomed to short lines, small designs, and petty figures will never be able to do the large free work which is so valuable, so artistic, and so effective, though the reverse of the principle is as certainly not true, for in this case, as in all others, the greater includes the less.

OUTLINE DRAWING

“Objects which the child could move, which were in sight, he laid on the board, or bench, or table, and drew their forms on the plane surface, following the boundaries of the objects with his hand. Soon scissors and boxes, but soon, also, leaves and twigs, even his own hand, or the shadows of objects, will be thus copied.”

FR. FROEBEL.

“The *Encyclopædia Britannica* says the children, when left to themselves, draw in outline, and we know that the early races did so. The Egyptians and the ancient Romans used words which expressed the conception that drawing was done in line. The historical development of drawing may always be seen in the practice of children when left to draw for their own amusement. They begin as the human race began, with firm outlines representing men and animals, usually in profile. The next thing they do, if left to their own instincts, is to fill up the spaces so marked out with colors, the brightest they can get. This is genuine primitive art.”

Materials for Outline Drawing: Simple forms of animals, fruits, flowers, geometrical plane figures, etc., cut from heavy colored cardboard; black and colored pencils; unruled paper or slates.

THERE is perhaps no art which, like drawing, is at the same time so purely æsthetic and so thoroughly practical. It rewards its devotee with equal beneficence, be he artist or artisan. It is of as much service to the man who designs a bookcase, as to him

Æsthetic
and Prac-
tical Value
of Drawing.

who decorates a palace. And does not this very fact prove its preëminence as an art? It can descend to the depths and rise to the heights; it may be used, and with good effect, both by the rudest savage and by the man who, in education, refinement, and æsthetic taste, is the very flower of our modern civilization. And it is well, in our practical age, that an art which, like drawing, is so preëminently useful, should at the same time be linked of necessity to all that is beautiful. It can never be degraded to purely sordid ends, for its service is an education in the largest sense — used even in the rudest way it contains a hint of something higher. It serves best him who loves it best, but he who best loves it is he who takes infinite pains, who spares neither time nor trouble in perfecting his work. And there is, no doubt, a reflex influence upon the pupils in the enthusiasm with which a master or teacher regards his work. The influence is largely unconscious, entirely so in the case of young children, but it is none the less, or perhaps all the more, effective.

This is especially true in regard to the kindergarten and her tiny pupils. If she be herself something of an artist, that is, if she have the artistic feeling and a correct idea of symmetry and design, she will not allow the children under her charge to make awkward, inharmonious designs, to perform coarse, blurred work, to draw crooked, wav-

Unconscious
Influence of
Kindergart-
ner upon
her Pupils.

ering lines, and make thick strokes. If it be a pleasure to her to handle the pencil, a real delight to draw, if only a row of lines, so long as they are straight and regular, then her children will find it a pleasure, too, and there will be inward and outward rejoicing in the drawing hour. This love of drawing is a special bent of mind or fingers, better developed in some people than in others, but it can be cultivated to a great extent, and there is no reason why every kindergartner may not, with sufficient trouble and study, and by the aid of the various methods at her command, make her children thorough little artists in the bud.

Though the kindergarten system of drawing does not profess to do more than lay the foundation for future artistic work, yet if properly carried out in its varied branches it should and does accomplish certain things.

What Kindergarten Drawing should accomplish.

The child who has spent three years in the kindergarten should have good command over his fingers, should be able to draw curved lines as well as straight, and make use of both in symmetrical design; he should have some conception of color and its artistic use, and have an idea, however small, of freehand drawing.

One common and well-founded objection made to kindergarten drawing is that, as it is commonly used, it does not make the children suf-

ficiently self-dependent. The network, or dot, has been considered invaluable as a guide to eye and fingers. We hardly thought we could teach drawing to such little children without it, and by its use beautiful results were certainly accomplished; but we must remember that it never was intended to be anything but an aid, and when the fingers had attained some dexterity, it was expected that we should be able, now and then, to dispense with it. A child learns to walk, clinging to its mother's hand; he needs her aid and encouragement, but surely there comes a time when he may essay a few trembling steps alone, when he may let go her hand and trust to his own effort. We should not then use the network or the dot so constantly as to hinder the child from ever taking a step alone.

Linear drawing, though it gives command of fingers, correctness of eye, knowledge of straight and curved lines, and power of combination and invention, can scarcely be called, save in these respects, a preparation for freehand work. Therefore, we need another branch of drawing which shall supplement the linear, giving what it lacks; and this we find admirably supplied in outline drawing. This, for four reasons, has not been sufficiently used in many of our kindergartens,—First, it is comparatively difficult to provide good patterns; second, they are not at all durable, being made of paste-

Value of
Outline
Drawing.

board; third, the work needs rather more oversight for its proper performance than does the linear drawing; and, fourth, many kindergartners have failed to appreciate its importance. Its value, however, is recognized by Froebel when he says: "Much is developed in the child by this action, more than it is possible to express; he gains by this clear comprehension of the form, the possibility of representing the form separate from the object, the possibility of retaining the form as such, the strengthening and fitting of the arm and hand for the free representation of form."¹

Outline drawing is performed by means of a series of pasteboard patterns, including
How it is performed. geometrical forms, forms of animal life, household furniture, etc., each pattern being carefully shaded and decorated by the kindergartner. The pasteboard model is laid on paper, or the unruled side of the kindergarten slate, by the child, who holds it in position and marks its outline. When the outline has been drawn, he should add the various finishing touches after the model in his possession, this work being necessarily freehand. If it is a cat, he must add eyes, whiskers, marks to show the division of the feet into toes, etc.; if it is a leaf he must add the stem, the midrib, and the veins. Every kindergarten should possess full sets of these patterns,

¹ *Education of Man*, page 44 (Jarvis translation).

carefully graded as to difficulty, and divided into forms of life and knowledge. The forms of knowledge are easily convertible into forms of beauty, thus making the three divisions of objects, according to Froebel. The forms of knowledge are, of course, geometrical, are much simpler than the other patterns, and may be used by the younger children in connection with the less difficult forms of life. The geometrical forms themselves may and should be converted into forms of life by kindergartner and children, thus giving them a more vivid interest to the baby mind.

The child will outline rows upon rows of squares, if the kindergartner only suggests with word or pencil a tiny lock and a cover, thus making them into pictures of boxes. The right isosceles triangles may be made into cocked hats, by adding a plume of feathers ; the equilaterals serve for tents, with a line to show where the curtains open ; the pentagons may be turned into charming little houses, with door, window, and chimney all complete ; the circles become wheels, the octagons clocks, and so on, in an endless and delightful whirligig where everything is itself, and at the same time something else. The circle is indeed a veritable Protean form, and lends itself to as many disguises as the wicked magician in the fairy tales who can turn himself with equal ease into a smoking volcano, or a "wee, sleekit" mousie. It

Transformation
and
Combination
of Forms.

needs but a magic touch to transform the circle into a kitten, a Jack-o-Lantern, a rabbit, a sleeping bird, a globe of goldfish, a teakettle, a sun hat, a round-eyed moon, a downy chicken, or the head of an almond-eyed Chinese baby.

The geometrical forms may also, as has been suggested, be used in producing forms of beauty. The child makes really beautiful inventions by placing the pattern in various positions, and tracing the outline, working according to the connection of opposites, and thus making a complete figure. The forms of life are more difficult and complicated, but they may be carefully graded and sets kept in stock for both older and younger pupils. For the younger, we may have eggs of various sizes and kinds on which the spots are to be placed, simple leaves like the eucalyptus, where the midrib only is shown; fruits, vegetables, pitchers, cups, teakettles, hats, bells, flower-pots, etc.

For the older ones, we may have any pattern, Varieties of Patterns. not too delicate or difficult, which our brains may devise and our fingers serve to work out. In the insect world, bees and butterflies, beetles and dragon-flies are easy of accomplishment; ducks and geese, swans and ostriches, birds resting and flying, when drawn on a moderately large scale, can be successfully outlined; fish and reptiles, pigs and horses, dogs and cats, many kinds of leaves and the simpler

flowers can all be drawn, if the child has practiced the simpler models well, and been trained to be exact in his work and careful of his pattern. If he has been allowed to drop his simple model on the floor without rebuke, to convey it to his mouth in temporary abstraction, or use it as a weapon against his neighbors, you may be sure he will do the same with the animal or the leaf it has taken you half an hour to prepare for him. So at the very first lesson we should insist upon great care in the use of these patterns, since with the best of treatment they do not long remain in good condition.

When the child is sufficiently advanced and has drawn the outline of the pattern a number of times, he should lay it one side and try to sketch it, his eye being the only guide ; while later on, he should try to draw it from memory. This is an important step toward freehand drawing, and is really not so difficult for the child as might at first appear. There is great danger in giving indiscriminate praise in all this work. Undoubtedly the child should be encouraged and his efforts appreciated, but there is no reason why he should be told his work is beautiful, when it bears no resemblance to the pattern he is copying. If he makes a vertical line, as straight as an arrow, through the middle of a geranium leaf, and on either side draws slanting lines that look like nothing but

Connection
with Free-
hand Draw-
ing.

herring-bones, in what respect are these like the beautiful curving veins of the leaf itself? If we tell him his work is "beautiful," why should he try to do better next time? Is not "beautiful" quite well enough?

Nor should we hurry him in this outline work, but rather hold him back. His natural desire appears to be to get his paper "full," and have another pattern as soon as possible. It is our place to inculcate such maxims as *Haste makes Waste, Quality not Quantity*. It is not absolutely essential that he should draw ten leaves as quickly and as carelessly as possible, and then exchange his pattern with his neighbor, but it is essential that he should draw one leaf moderately well, and at least slowly and with care. We sometimes content ourselves with too little in our labors with the children. They can do really good and artistic work, and that without overstimulation or pushing, but if we are content with less than their best, we shall always get just that, and nothing more.

It is the first steps which cost in the kindergarten. If we are untiring in our efforts to make the children neat and careful during their first year of systematic education, then neatness and carefulness will grow to be second nature with them, and having sown the good seed, we shall find it springing up and blossoming in a thousand lovely forms.

In all this drawing, the shading and decorating of the patterns is of course the essential thing, and the thing for which the occupation exists. The simple drawing of the outline is of little benefit to the older children, unless accompanied by the artistic finishing touches, and to fill a paper with outlines, no one of which has received a single original line from the child, is to defeat the very object for which the work was devised.

If it is true, as Colonel Parker says, that an ill-written word should never be seen for a moment by pupils learning to write, how is it about drawing and the models given to the child? Can we suppose for a moment that a strong influence, in the wrong direction, will not be made upon the child's mind when he draws from a soiled, discolored bit of pasteboard, with shading and decoration poorly done and half effaced? We do not claim that the child will fully appreciate the artistic work, the care and skill bestowed on a really good set of drawing patterns, but if there is anything at all in education by means of the beautiful, — in unconscious example, — then here it may be felt.

Necessity of Care in making and selecting Patterns.

It is sometimes well in outline drawing to teach the child to combine the patterns. For instance, he may be given the model of a table. After this has been successfully drawn, give him a cup or pitcher, perhaps, and let him

Combination of Patterns.

outline them in their position on the table. When he is given a leaf, show him how to make the branch, and let him draw a number of leaves in various positions, attaching them to the branch at proper distances. This work may be very well done with the natural leaves, when the children are somewhat advanced, and are beginning to have an idea of freehand drawing. They have already some command of their fingers and pencil, and can hold the leaf in position and trace its outline without tearing the delicate edge. Single flowers can be very prettily done. The single dahlia, the wild rose, the marguerite, the single sunflower; in fact any flower having one row of petals radiating from a round or oval centre, can easily be drawn. Each child is given a model the size and shape of the centre of the flower, and also a model of one of the petals. Having drawn the centre, he can move the pattern of the petals around in regular order until all are drawn, and can afterward add the stem and leaves according to suggestion. When the children can do the leaf and flower work with comparative ease on the slates, they may use paper and colored pencils, filling in the outline with the appropriate color. This, of course, is a delightful exercise, and affords a good opportunity for artistic effects in color. This work may also be combined with paper cutting. The children may draw the leaves and

Drawing
and coloring
Flowers.

flowers on the proper colored paper, afterwards cutting them out and decorating them and pasting them in their books of school work.

Outline drawing being an absolutely flexible occupation, there is no reason why it should not be related, whenever given, to the other work of the week, and thus aid in strengthening the desired impressions. Enough patterns can be fashioned to suit any thought which the kindergartner desires to express, and thus the handiwork of the child be only another note in a strong harmonious chord, instead of the touch upon a single string, incomplete in itself and related to nothing else.

Connection
of Outline
Drawing
with other
Work.

All this work of course demands carefulness, patience, and perseverance on the part of kindergartner and child. As for the kindergartner, she must ever be shod with the shoes of patience and clad with the garment of perseverance. She knows that in all work, in proportion as the result is beautiful and artistic, so the effort used to produce it must have been long continued. There is no royal road to learning, nor has one ever been found to manual dexterity. Continued practice is necessary until the hand and fingers have become trained into good habits, into rapid, unconscious response to the dictates of the mind.

Demands of
the Work
on Kinder-
gartner
and Child.

Outline drawing is a very simple occupation, it is true, but it is valuable in various ways, and in

order that the child may gain real good from it, the kindergartner must exercise constant care that he does his best, and that the models she sets before him are well-made and well-chosen. If she attends to these essentials, and if the atmosphere of her kindergarten is a serene and harmonious one, with no hurry or worry or fretfulness or fever about it, then all things conspire together for the child's benefit, and in this as in all other occupations the manual and mental results obtained will be really beautiful and satisfying.

CIRCULAR DRAWING

“But soon these lines become, for the child that is led to observe nature and surrounding things, a means of further representation. So the circle that he can draw fairly, now becomes for him the picture of the moon, the sun, a disk even of an apple, a ball, a hoop, a ring, etc. He has seen in meadows, in the garden and field, the three-leaved clover with its roundly single leaves, and the five-leaved flowers of the most different kinds with their circular corolla, and represents them easily with winding curved lines, and, still further, radiating flowers and the numerous feathered leaves, that are sometimes quite circular; as, for example, the beautiful feathered leaves of the matterdorn (a sort of field rose), of the acacia, etc., or, further, beautifully paired stem-leaves; as, for example, in the sunny blooming pfennig-kraut. But the child's impulse to represent by drawing ventures also near the living; he tries to represent the rabbit, with its rounding forms, the little mouse, sheep, dove, etc.”

FR. FROEBEL.

Materials for Circular Drawing: Wooden disks three inches, two inches, one inch in diameter; drawing paper; lead pencils and colored crayons.¹

THE passage from Froebel given at the head of this chapter sufficiently shows his opinion in regard to the importance of the curve in drawing. In a letter to one of his pupils, written in 1852, he says, concerning

Froebel an
Advocate of
Circular
Drawing.

¹ The Conté crayons give, in our opinion, the greatest variety in color and the best results, though those made by Faber are also good, and Dixon's red pencil is very useful.

the subject of drawing: "Little of this can be done in the kindergarten, because the fingers are still too weak. Stick-laying takes the place of drawing, and the making of *circles* with the slate pencil, of which the children are so fond; and this can be carried to the representation of simple forms of leaves and flowers." In another place he shows quite elaborately how the child, through the sketching of all kinds of curvilinear representations in the sand or dust, or on a window-pane covered with a film of moisture, at last reaches drawing, as such, of lines, and, he adds distinctly, "*of the curved line first and afterwards of the straight line.*"¹

Miss Marwedel's system of circular drawing was described by her under the name of "Childhood's Poetry and Studies in the Life, Form, and Colors of Nature," — the whole scheme, however, embracing exercises with the first and second gifts, circular sewing, and plays with the ellipsoids and with the colored wooden rings, which she termed "Baby's Ringolettes." It is based upon the strength of her feeling that the simplest forms of nature which surround the child are earliest comprehended by him, and first awaken the wish of imitation. "Education must avail itself of this fact," she said, "not with the heaping together of externally given words — stifling all individual

The Marwedel System of Circular Drawing.

¹ W. N. Hailmann, *The Kindergarten Messenger*, October, 1882.

conception — but by activity, which leads to true knowledge.” This is, of course, the purest kindergarten doctrine, and the whole system seems to follow out quite perfectly Froebel’s suggestions in regard to the use of the curve.

In a little pamphlet entitled, “A System of Child Culture,” Miss Marwedel thus describes her circular drawing, and we give the description in full, as the original is now difficult to obtain:—

I. *The Sphere Divided.* Into halves, quarters, segments, hollow, concentric hemispheres, and the ovoid in the sphere. This brings before the eye of the child a series of geometrical bases of plant-forms, such as the calyx, the open flower, blossom, and leaves, while the circle may serve to convey a picture of the inner structure of trees and branches. The parts are to be copied in clay, in cement, or by drawing and shading from the models.

II. *Methodical Making and Application of the Circle.* Use forms giving views of the circle, as bottles, lids, rings of different sizes. In making the circles the child may at first use compasses, and later eye-measurements.

(1) Finding the centre of the paper.

(2) Making the centre with a dot.

(3) Placing a ring or circular form on the paper, centre to centre.

(4) Tracing the circular form with pencil — to be done with the left hand as well as the right. All these exercises to be executed at first on the blackboard, then

on paper with black, and finally with colored pencil on drawing paper.

Series A.

Forms of Knowledge.

Making the circle and filling it with lines, drawn either from the circumference to the centre, or the reverse. Use of both hands. This exercise develops the much needed flexibility of the wrist.

Making the circle in three sizes for comparison.

Applying the three primary colors.

Inventions.

Series B.

Forms of Knowledge.

Comparison between exercises 1 and 2 in Series A.

Making concentric circles.

Applying the three secondary colors.

Inventions.

Series C.

Forms of Knowledge.

Comparison of exercise 2 (Series B) with exercises 1 and 2 (Series A).

Making the circle, divided from the centre by eye measure.

Applying the three tertiary colors.

Inventions.

Series D.

Individual and coöperative inventions, using colored circles, half-circles, etc.

Series E.

Four Charts on the Origin of Secondary and Tertiary Colors.

Series F.

Four Charts on Shades, Blendings, Analysis, and Synthesis of Color.

All the foregoing exercises lead from the understanding of the circle to simple conceptions of similarity and dissimilarity in botanical forms. The forms are based on the circle, and lead gradually through fruits and flowers to leaves and roots.¹

The circular drawing is closely connected with the study of the ball and sphere, the child by the division of these being led School of
Circular
Drawing. to find the ring or curved line. He impresses rings, saucers, tins, bottles, and box-covers of different sizes in the sand, and also handles and draws them, and thus by his study of the round playthings, as Froebel says, "gains a clear and distinct perception and representation of the curvilinear form."

After the making of circles in the sand, they are practiced on the blackboard with the right and left hands alternately, no particular size being prescribed; but every effort made from the beginning to get the desired easy movement of the wrist, and the circular sweep of the chalk. Then the children graduate to slate and pencil (if desired) or directly to pencil and paper, using now the wooden patterns or disks, and finally take up the work with colored crayons.

¹ Series E and F (eight Color Charts) and four Form Charts (sphere, cube, cylinder, and sphere divided) may be had of D. C. Heath & Co.

Much practice is required before the little child can hold even the three-inch wooden disk firmly in place, trace its outline, and then fill it into a circle, working from circumference to centre, with round and round movements of the pencil. The two-inch disk is next to be conquered, then the one-inch, using successively the red, yellow, and blue crayons, and lastly the three sizes drawn together for comparison, first in vertical then in horizontal lines, touching each other. Now simple inventions in the three sizes and colors are attempted, and then comparison made between the three circles arranged concentrically, — the colors of orange, green, and purple now being introduced. Miss Marwedel considers these, on the Newton and Brewster theory, as the secondary colors, and provides for a series of exercises with overlapping circles, which show that a coating of the red crayon laid over the yellow will produce a more or less recognizable orange.

Now the broken ring or half-circle which gives the first idea of the end (or bud) comes into use, and the inventions grow much more elaborate, as it is possible to use three sizes of circles, three of half-circles, and the six colors. The next series of exercises takes up the regular separation of the circle into halves, thirds, fourths, fifths, and sixths, the six colors being used in succession, and the orderly fractional divisions being intended to prepare for a corresponding division

in the petals of flowers. The three tertiary colors, citrine, russet, and olive, are now applied in a series of exercises ;¹ and inventions, both individual and coöperative, are provided for.

All this work in colors upon complete curves, broken curves, circles and half-circles, is preparatory, as Miss Marwedel said, to ^{Natural} _{Objects.} a study of the life, form, and colors of Nature. We now enter upon nature work, taking up first the fruits as being attractive in appearance, pleasantly known to all children, and most closely connected with the ball. First the sphere must be studied, however, and drawn from the object itself, and as this is the first time that attention has been directed to light and shade, some patience will be required as well as considerable practice before the fundamental principles of shading are discovered, and the children have learned how they may turn a flat disk into a veritable ball with softly rounded sides. The time and pains spent here, however, are fitly bestowed, for all the beauty and value of the subsequent drawing depends upon how well these fundamental principles are taught, and how well they are understood and practiced.

When the sphere can be drawn in a tolerably

¹ These exercises are arranged according to the Newton and Brewster theory, and endeavor to show the formation of the tertiaries, — citrine (orange and green), russet (orange and violet), olive (green and violet).

satisfactory manner, the fruit nearest it in shape is to be studied, the children selecting it themselves and generally agreeing at once upon the orange. Of course the blending and overlaying of colors and the shading are more elaborate here, as well as the stroke of the pencil, which differs from the absolutely circular movement used in making the disk, and all these are always to be studied from the natural object. Then another nearly spherical fruit, the peach, for instance, is represented, and so on through a series of fruit studies. Each of these is drawn within a circle of suitable size, that its approach to and departure from the geometric outline may be clearly noted, — it is represented in the natural size and studied from the natural object.

Vegetables next occupy the field, always leading the children first to select the one most nearly spherical, then to handle it and study its varied tones of color and its distinctive peculiarities of form. Each vegetable is still represented within the circle, for the object of the entire system is to show that from that form all else in nature is evolved. The pencil stroke again differs here, and the reason why we may no longer draw exactly “round and round,” or from top to bottom, is easily found out by a little study of the surface of the beet or the turnip.

The representation of flowers in the circular drawing system begins, as in all the other series,

by the selection of as perfect a specimen of the desired outline as can be found, and the first blossom studied must have an entire corolla like the morning glory, thus corresponding to the undivided circle. Two, three, four, five, and six petaled flowers follow, and it is desirable that the children select them all themselves in journeys with the kindergartner through field and garden, for only as we see them growing can we really know and love these visible proofs of the Father's goodness.

After the flowers are drawn and studied, the circular system takes up leaf work, beginning perhaps with the "rounded shield" of the nasturtium, and passing on to the more irregular leaves, with their varied forms and edges exquisitely cut. Roots and bulbs next occupy the children's attention, still being represented in circles of appropriate size, — though most of the roots have evidently now wandered far away from the original ground-form, and with these Miss Marwedel's circular drawing system closes.

Froebel noted, in the extract from the "Kindergarten Wesen," given at the beginning of this chapter, that the child's Animal Forms. impulse to represent by drawing ventures also near the living, and that he tries to make the rabbit with its rounding forms, the mouse, sheep, dove, etc.

The circular drawing, as planned by Miss Mar-

wedel, has never attempted anything of this kind, but there seems no reason why an animal series should not follow the botanical forms, and be much enjoyed by the children of the connecting class, for instance. Many young animals, when quiet or asleep, resemble spheres as closely as do the fruits; witness, for instance, the downy chicken, the yellow, fluffy gosling, the kitten, or the rabbit. There are a variety of picture-books for children which make use of this resemblance, and show, by a few slight touches, the transformation of a ball into a drowsy cat, or the rear view of one intently watching a mouse-hole, of the mouse himself, of a long-eared rabbit, of a lambkin, a squirrel, a baby bear, a puppy, a turtle, a bird asleep on his perch, a globe-fish, a pouting pigeon, a hedgehog, or a porcupine. "The Nimble Pennies," a series of sketches by "Boz," lately published in "Little Men and Women," give many useful suggestions for this work, and the major part of the designs in "The Magic Pear"¹ could be appropriated for circular drawing. In these the pear is successively transformed into an elephant, a mouse, a dog's head, a rooster, an owl, a cat, a duck swimming, a wide-mouthed fish, a frog, a robin, and a rabbit, and one change is quite as easily effected as another, apparently. Older children would greatly enjoy depicting this animal series, and it would not be

¹ *The Magic Pear*, designs by Morgan J. Sweeney.

at all difficult to procure living models of some of the above suggestions, and coax them into sufficient quietude for a hasty sketch.

One objection to be made to circular drawing, though this does not apply to the system itself, but to its application, is the fact that the drawing and coloring of the fruits, leaves, flowers, etc., is so often done from copies and not from the objects. The whole intent of the work is obviously to lead the child to the appreciation and interpretation of nature, and this object is never gained by interposing a copy between Nature's handiwork and the interpreter. The rudest colored sketch of a peach, which the child makes from the peach itself, is worth immeasurably more than the finely executed copy of a pictured peach. Such copies, as Professor T. G. Rooper says, "soon become deeply engraven on the memory, and supplant the more accurate mental images formed by the contemplation of the object; and, secondly, they form a kind of mould into which all fresh observations are run, and thus prevent the child from gaining new knowledge, even by a prolonged study of the object. The imperfect mental image hinders the acquisition of knowledge, partly by preventing any attention being paid to especial features, or features not previously observed, and partly because, through mental laziness, the familiar mental and conventional image of the object sup-

Possible
Objections
to Circular
Drawing.

plants the fresh image before it has had any permanent effect. . . . The child looks and learns nothing. Eyes he has, but he cannot see."

Is there not, also, a certain objection to the somewhat analytic method which studies and represents one single flower and one single leaf by themselves, without regard to their connection? Should not the process of drawing be rather a synthetic one, and show the flower and leaf together, as they grow upon the stem?

Lastly, is not the smallest drawing pattern — one inch in diameter — somewhat too small, and would not the series of three disks be materially improved for the use of little children, if the size were increased from one half to one inch? All these questions are put tentatively, and may be answered by each kindergartner for herself.

A famous English artist¹ has spoken of the
 Values of
 Circular
 Drawing. kindergarten in words which apply quite perfectly to circular drawing. "The Froebel system," he says, "teaches children by forms before they can read and write, and I believe it is right. . . . The more you teach children to look for beauty around them, the more they will think of it in later life. Then let us open their eyes to the beauty of nature, and let them find joy in form and color. It will bear fruit, as throughout life they will be guided by taste, and art and industry will profit by it."

¹ Laurence Alma-Tadema, R. A.

The long series of exercises with the various colored crayons upon whole and half circles of different sizes, and curves of varying lengths, the wide field for inventions thus opened, and the easy freehand movement of the pencil, which must be practiced, are so many of the values of circular drawing (even should they not be followed by nature work), for they teach "the art of color, of life, and of form in direct application to what we are to do with each, and the children study the harmony of color as the notes in music."

Not all artists are agreed that the child shall use color in sketching from objects and nature throughout his entire school life, some contending that between the first or second school year and the high school, there should be an intervening period devoted to long and rigid drill in drawing and in light and shade. No objection, however, could be made to allowing the kindergarten child to express ideas of form from nature with color, because here technical excellence is not expected.

The varied uses and beauties of this system of circular drawing, however, are best epitomized in Miss Marwedel's own words: —

"Therefore, as the curved line presents the line of all life and beauty, enabling the child to recognize in diversity similarity, and in similarity diversity, the unity of the universe and the

simplicity of its laws, let us lead the child to use its relation to all that exists, in order to create in the unity of right seeing, right doing, and right knowing, the poetry of childhood found in Nature's great alphabet of form."¹

¹ Emma Marwedel, *Kindergarten Messenger*, October, 1882.

FREEHAND AND NATURE DRAWING

“It is the fault of all current systems of drawing that they limit the youthful mind to *small* inventions. . . . All who propose to teach or learn art in any form should seriously consider *freehand* as the true key to all its practice. It is a great stimulant to quickness of perception.”

CHAS. G. LELAND.

It seems to be supposed by some critics upon kindergarten drawing, that Froebel confined his plans for the occupation exclusively to that department of the art which could be executed upon the net or checker work, and which would lead eventually to designing, while giving ideas of symmetry and regularity and the development of geometric form. That this is not so, however, is evident to any one who will read his writings carefully, and note that he explicitly states that *after* the pupil has made the required progress in the preliminaries, then perspective drawing, appreciation of light and shade, and drawing from nature will follow.

Froebel's
Plans for
Drawing not
confined to
Linear Rep-
resentation.

As a matter of fact these have not followed in most cases, and many drawing teachers have even gone so far as to say that kindergarten drawing absolutely unfits the child for working from nature.

Linear
Drawing not
considered a
preparation
for Free-
hand Work.

That there is good cause for such a criticism in some quarters at least, not even the willfully blind can deny, but it may well be asked how much of this unfitness results from the system, and how much from the interpreter. Many kindergartners have augmented all the bad features of the Froebel drawing by using too small checker work ; by giving petty, trivial figures in dictation, thereby filling the child's mind with petty images ; by detaining him so long on one kind of line as to give a permanently cramped position of the hand ; by using the linear drawing only, to the exclusion of the other methods, and by deferring until very late in the kindergarten course, or not introducing at all, the curved lines which are so valuable for later school work and for sketching, and so satisfying to the child. There is, of course, no need for any of these abuses, but no person of experience can deny that they have been the rule, rather than the exception, in linear drawing.

So far as the network is concerned, it was merely intended as an aid to eye and fingers when these were too weak and unpracticed to carry out the dictates of the mind, and if used merely as an aid, and for preliminary exercises, would probably do no harm, but on the contrary be quite useful if the scale upon which it was constructed was large enough not to injure the eye, or require too delicate movements of the hand and fingers.

It seems undeniable, however, that drawing by

the aid of dots or checkers, the execution of lines of various lengths and inclinations, and the combination of these into symmetrical figures and borders would lead much more naturally to all kinds of designing, to architectural and industrial drawing, etc., than to the representation of natural objects. Though many kindergartners of to-day willingly acknowledge the use and beauty of linear drawing, they feel it quite as necessary that the children under their charge should be artists in the sense of interpreters of nature, as that they should be designers, and that the natural order of things would be to cultivate the faculty of design after the ability to represent nature had been developed. From this feeling and from the various objections already given to linear drawing, has grown the demand for freehand work from the first. That this demand is universal, we do not assert, for many kindergartners, be they right or wrong, still claim that by beginning with the linear drawing properly carried out, and alternating it regularly with outline and circular work, they so train the child's eye to correct seeing, and his hand to respond to the dictates of the will, that in his last year in the kindergarten, he is able to execute freehand drawing in a most pleasing and satisfactory manner, and after a little practice to sketch intelligibly any simple object placed before him.

A Preparation
for
Design.

“It is easier,” says Mr. Charles G. Leland, “to learn to draw well than to write well, and there is no child who would not do both admirably if it were obliged from the first hour to use *freehand*; that is to say, to control the pen or pencil from the shoulder, allowing the arm to rest on the table just enough to prevent fatigue.”

To adopt such a method of drawing in the kindergarten, if it is practicable, would certainly satisfy the physiologist and the psychologist, would come nearer to suiting the artist, and would meet with no disapproval from those who feel that the object of kindergarten drawing is not “the imitation of art-forms, but the cultivation of artistic self-expression.”

The great arguments advanced by the champions of freehand drawing, or plastic drawing as it is sometimes called, are that in the natural order of mental development, synthetic exercises should come before analytical, mass before detail, and the whole before its elements. “Children,” says Mr. Court-hope Bowen, “and a great many adults also, do not see outlines at all at first, or only very dimly. Things appear to them as masses of color or light and shade, with edges not by any means sharply defined. We should begin with masses of color and light and shade, and work gradually towards improvement of outline — at least, so it seems to some of us.”

Freehand
Drawing
defined.

First Exercises in
Freehand
Drawing.

These arguments seem to be borne out by the spontaneous drawings of children so far as these have been studied, the results of special observations in this line by several paidologists, proving that young children (five years and under) "do not regard details in things, but look upon them as wholes capable of being put to some practical use." Our own experiments in a different line have gone to prove the correctness of the observations by showing that very young children naturally concern themselves little about the size or form or color of an object, or animal, but very much about what it can do and what it is good for.

The first exercises in freehand drawing are upon circles, thus connecting with the study of the sphere. The child should be carefully trained in the position of hand and pencil and paper, and know before the drawing begins what he is expected to do and the manner in which it is to be done. It is well for the teacher first to draw a number of circles upon the blackboard so that all may watch the round and round movement of the chalk; in some kindergartens the children execute all the first exercises on the blackboard, as it is thought that they thus become accustomed from the beginning to larger, freer movements. It is well also in the beginning to practice circular movements in the air, in time to music or a song. One might suppose that it would be very easy for

children to make approximately perfect circles in this manner, but partly because they have never observed the form closely, and partly because their hands are untrained, they commonly produce at first, parallelograms, ellipses, polygons, or strange amorphous blurs and unintelligible scratches. Even the circular movement of the pencil is not easily learned, and must be practiced so often that it becomes necessary, in order to avoid monotony, to join with the work — as Froebel advised in the “*Kindergarten Wesen*” — “the explanatory word that speaks to the mind,” or “the clearing, rejoicing word of song.” Color may also add its magic touch here and make the work all golden to the child. He may have bright chalks for the blackboard, and crayons or powdered pastels and stumps for the paper, — the color being used, if considered desirable, as a legitimate reward for effort and improvement.

If the circles are drawn on paper, each effort should be discussed and compared with others to see whether the form is in the middle of the paper, whether it is of an appropriate size and has a proper margin, whether the circular form is approached or reached, and whether the desired stroke has been kept throughout. The child takes great delight in his own improvement, and if his practice papers are kept and shown him from lesson to lesson, he will observe with pride his steady climb, round by round, up the ladder of progress.

When the circular movements have been learned fairly well; when the children can make circles of various sizes, so Subsequent Exercises. that he who does not run too fast may read them; when they have been combined in various ways, and when, therefore, eye and hand have received much preliminary training, we may begin a little study of light and shade by means of objects. Let it not be supposed, however, that the above knowledge has been gained in a day or in a week or a month; for infinite pains, and much good and inspiring teaching have been bestowed on that rough circle which the casual visitor looks upon so carelessly. The fact is, that drawings produced by the freehand method are not for a long time what can be called "show work." They are truthful and honest, therefore beautiful, in one sense, and they are always interesting to the teacher; but they are absolutely crude at first, and sometimes discouraging to those who have not learned to estimate effort and achievement at their true value. When, however, in the judgment of the kindergartner, the children are ready for the work, the ball suspended by its string is frequently first attempted, each exercise being preceded by a talk about the object, so that an intelligent beginning may be made. Even now, strange as it may appear, the string will be represented, quite as frequently, as coming from the side, or lower portion of the ball, as from the

top, and sometimes is not connected with it at all; though the fact that it is always conspicuously drawn somewhere on the paper, is proof that it is seen and considered important. Repeated effort is necessary here, comparison with the teacher's ball and with the balls of other children, before it is properly drawn, and even then it is a circle with a string, and not a sphere. The gradations of light and shade, which are needed to make it look spherical, are much more difficult, and can only be represented approximately by little children. Some kindergartners prefer a fruit, — a rosy apple, for instance, — instead of a ball for this first sketching, as the variety in color is more attractive, and the gloss on its rounded sides makes the high light more easily seen. If the kindergartner uses a reading glass to focus the rays more perfectly, it will be an illumination to the children, as well as to the apple, and if the fruit be placed on white paper the shadow will be seen more easily. A great many experiments will be made here before satisfactory results can be obtained, for it is essential that, in various playful ways, the kindergartner should lead the children to *see for themselves* the light and the shadow, and not point it out to them, or indicate in so many words the fault in the sketch. We may, of course, use parti-colored apples, as well as red, for this first work; but it is easier to see the light on a dark-red fruit

than on a yellow one, for instance. Then follow pears, tomatoes, oranges, etc., and any vegetables which are approximately round and regular, and by and by, if we have patience, we shall be astonished at the truth with which the child represents simple objects. After a year's training, the child of five years draws quite well, and with expression, flowers, and fruits, and leaves, and other simple objects, as a vase or a cup to hold the blossoms, a flower-pot with its growing plant, or a bunch of cherries with its leaves. It is the easier to teach the child to draw in this manner, because he is entirely without "the embarrassment of knowledge," which, as the artists say, so "perverts the appearance of things," and therefore draws from what he sees, and not from what he knows.

All the other occupations and gift work of the kindergarten are so many aids to drawing, for they all cultivate observation, develop the æsthetic nature, and train the hand, the eye, and the mind. Modeling is of particular value in this regard, for by handling the soft clay the child makes the very object which he subsequently draws, and so learns to know, as he could in no other way, its distinctive peculiarities of form. We have no conception, until we have tried to model an object, how little we ever knew about it, though we may have looked at it every day of our lives since childhood. Modeling, cutting, and drawing are now

Assistance
of other
Kindergar-
ten Work to
Drawing.

used as means of expression in the majority of our schools, and the results are full of promise to those who believe in spontaneity rather than imitation.

Freehand drawing, however, whether it be used as an introduction to design, or to the representation of natural objects, requires a teacher who thoroughly understands at least the elementary principles of art. She has no traditions to follow, no absolute and formal system to cling to, and so much depends upon her judgment and experience and taste and artistic feeling, that it is impossible for her to teach drawing as it should be taught, unless she can draw well herself.¹ Fortunately, we can all learn the art more or less successfully, if we begin early enough ; but if the years have gone by and left us absolutely without capacity for this mode of thought-expression, it is better to intrust this department of our work to some one who does understand it.

The true
Teacher of
Drawing
herself an
Artist.

¹ "The only text-book from which may be learned this fine art of uncovering artistic expression to little children, is that of the inspirational and enthusiastic interpreter, one who is a devotee to the cause of all that is true, constructive, and of good repute. The art feeling comes not through evolutionary or hereditary processes, but through revelation. The teacher who has the exquisite wisdom to detect the budding genius, and the faith to await its blossoming with gentle appreciation, she is a revelator. There is no patent method for such teaching, and the teacher, as the children's friend, is the only practice-manual." (Amalie Hofer.)

We are accustomed to talk quite freely about the value of kindergarten work in developing ambidexterity, but it may be questioned whether, in many cases, practice follows as close upon theory as it should do. Undoubtedly the work may be used for this purpose, but how often do we in reality lead the children to employ the left hand, save as an aid to the right? The purpose and value of training the left hand was dwelt upon at some length in a previous volume,¹ and need not here be greatly enlarged upon. People are sometimes inclined to doubt the worth of such training, but a little thought will show that in many trades both hands are equally necessary, and in all work it would obviously be a great added convenience to have a skilled left hand able to take the place of the right on occasion. "The right hand is also influenced through sympathy" — to quote from the report of a leading art school — and "better results are claimed from the right hand, working the left also, than from the right hand working alone, in the same space of time. Biology also teaches that the more the senses are coördinated in the individual the higher the type," and no one who has tried training the "idiotic left hand," as Dr. Stanley Hall calls it, can fail to be impressed with the resultant gain of power. If we begin early enough, the children readily learn to use one

Left and
Right Hand
Drawing.

¹ *Republic of Childhood*, Vol. I., *Froebel's Gifts*, pages 156, 157.

hand nearly if not quite as well as the other, and neither make objection to doing so, nor show less ability in the right hand in consequence, while marked improvement results in other directions. Linear drawing can be quite easily done with the left hand, but perhaps the best field for it is the blackboard, where the children have room for large designs, and can work first with one hand, then with the other, and finally use both in a series of exercises.

“The correct holding of the fingers and of the hand, for the free use in drawing, requires a Right Positions of Children. correspondingly correct free use of the whole right arm; this requires again, indispensably, a corresponding use of the other limbs and the whole body of the child who draws, if it would represent what it creates with free action of the body and with a free spirit. For a free, skillful use of the body presupposes, necessarily, a free, bright spirit, as both mutually condition one another.”¹

The child should be taught to sit upright while drawing, — this is imperative from a hygienic point of view, — for bending over the work is a prolific cause of curvature of spine and near-sightedness. He cannot make large movements, or get free execution, if he is allowed to rest his nose on the paper, and as an aid in this matter he should use *long* pencils. He should also hold

¹ Friedrich Froebel.

his paper square on the table, parallel with its edge, and be taught to work from the shoulder and not let the weight of his body fall upon his arms. All these positions, however, must be taught while the preliminary exercises are being practiced, so that they will be natural and easy, for when it comes to sketching, to hold the child back with directions about positions of body, arms, paper, and pencil will take all the joy and freedom from the work, and very likely discourage him altogether.

When the children have had a little practice in pencil holding, though this many of them have had before coming to the kindergarten, they will take the greatest pleasure in illustrating simple poems and stories, and the younger they are, commonly, the more rapid and confident are their sketches, and the more un-daunted do they seem in the face of difficulties. In fact, they do not recognize difficulties at all, generally speaking, and are just as ready to draw the tossing ocean as a mud-puddle. These drawings are most valuable for the student of childhood, and the less previous instruction the children have had the better for this purpose, as the drawings are then more spontaneous. The poem or story must be well known, of course, so that there may be a more or less clear mental image of the objects or personages mentioned, and then, after it has been repeated, these will be

*Illustrative
Drawing by
Children.*

rapidly drawn and with little hesitation. It is most important that the kindergartner should add neither line nor suggestion to these rude pictures, for their greatest value is in their spontaneity. If she gathers and preserves, from year to year, large collections of the illustrations, sorting them according to the age of the artists, she will do a service to education, since many valuable deductions may be made from them, — and a service to herself, because she will thus the better understand the individuality of each child under her care. It is to be regretted that more really good verses and simple poems suitable for children of kindergarten age are not to be had, for these are most useful for various purposes besides that of illustration. The kindergartner, however, who keeps a scrap-book, into which she may gather the useful bits of flotsam and jetsam from her daily reading, can supplement these with selections from the various collections of children's poems, and thus always have something appropriate at hand.

The spontaneous drawings above described are useful in another direction, because they greatly increase the sum of the teacher's pleasure. Of course this pleasure must be quite concealed when the sketches are being made, but they are often so original, so quaint, so unconsciously humorous, that they touch all the secret springs of laughter.

In some kindergarten normal schools a complete course in blackboard drawing is now given

to the students, and it has long been the practice to do so in several of the English training schools, the Froebel Society of Great Britain and Ireland giving examinations in this branch to students who apply for its certificates. No accomplishment is more useful for any teacher than to be able to illustrate simply and quickly her ideas and her lessons upon the blackboard; and for the kindergartner it is especially valuable, on account of the youth of her pupils and the fact that a picture is always intelligible to children of all ages and all races, when a spoken word may or may not be understood.

It is certain that all intelligent and normal persons, if taught by the right method, could learn to draw freely enough for ordinary purposes, as easily as they learn to write; but what are we, who were not so taught and have no natural ability, to do in the matter? Some of us can now never learn to draw well enough to sketch in the presence of the children the required object or figure, unless we have given it long practice beforehand. We can, however, by the aid of the various books and manuals on the subject, prepare, for instance, a series of illustrations for any story, and cover each with paper until the right moment comes to introduce it. The effect when the drawing is unveiled is dramatic and thrilling in the extreme, and is not so dependent on the beauty of the workmanship as

Illustrative
Drawing by
Teachers.

might be imagined. A series of picture tales — the “Peter and Patty Stories” — was published in “Babyland” a few years ago, and these lent themselves charmingly to the above method of illustration, the children, by the aid of the pictures, telling the story themselves with the greatest glee when once it was begun. Any continued story might easily be told on the same plan, as the kindergartner could select, from the books at her command, such pictures as she could best make. “The Kindergarten Blackboard,” by Miss Marion Mackenzie, Miss Bertha Hintz’s “Illustrative Blackboard Sketching,” Augsburg’s series, “Easy Things to Draw,” and several of the Prang Art Manuals are all very valuable aids to blackboard work, as the pictures are presented simply, with bold outlines, and the elimination of all unnecessary detail.