Education in Handicrafts

Among other disturbing facts which we the people of the United States learned about ourselves at the Centennial Exposition in 1876 was that we totally lacked skill in artistic handicrafts. The discovery particularly worried the educators. They saw that we were growing up without a trace of the peculiar education which comes through using the hand, ~~The results were evident.~~ We were rapidly developing a contempt for hand labor; we had no feeling for beauty; no capacity for producing artistic effects. Manual training must be introduced into the schools they said, to counteract the evil.

An idea planted in America never lacks cultivation. Manual training broke out in spots all over the country. It took various forms- usually in public schools it consisted in a weekly hour in drawing. Kindergartens became popular and for ten years or more most of our babies have pricked patterns in cardboard, pasteboard hearts embroidered in worsted, and moulded birds' nests and ducks. In not a few towns efforts were made to teach trades outright in connection with high schools. Many schools adopted the Swedish system, Sloyd. Others tried cooking and sewing schools for girls and carpentry for boys.

One of the first schools resulting from the awakening was started in Philadelphia in 1880 by Mr. Charles Leland (Hans Breitmann). Its aim was to teach public school children artistic handicrafts. They were set at wood-carving, leather work, modelling, decorating and glazing pottery, brass repousse and art needle work. The results were interesting but gradually the director

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of the school, Mr. J. Liberty Tadd (Mr. Leland had retired in 1882), began to feel that in spite of the pretty pieces of bric-a-brac his pupils produced the institution was not altogether a success. It seemed to him that to try to teach artistic ~~hand trades~~ crafts without any preparation of mind, eye, or hand was beginning at the ~~end~~ top instead of the bottom. So he began to experiment. He tried all sorts of systems, singly and in pairs, studied the effect on the pupils, reserved this feature, dropped that, pondered and wrestled. For twenty years he kept this up until finally he had evolved a principle something like this: Manual training should not aim to teach children merely to make one or more things. It ought to give them dexterous hands, trained eyes, a feeling for beauty, a sense of what is good and bad, ability to design, and perhaps it ought to discover too whether the boy or girl has a capacity for any particular art or craft. This principle of Mr. Tadd ~~was~~ is no closet production. He had worked it out by long and painful experiment and when he announced it he had ready a system of training which, if applied as he suggested, would, he believed, make good every point; to prove that he is right in his claim he points those interested to what he is doing in the public, Roman Catholic, private and night schools of Philadelphia.

When Mr. Tadd has his way with a child he begins at four or five years of age. ~~The~~ Little hands have not as yet learned to do anything, the muscles are weak, the eye uncertain, the interest unawakened. Standing the child at a board, a stick of chalk in hand, he sets him at making as big circles as the little arm can reach. He allows no wrist movement in the work, but a free sweep from the shoulder and he urges him to pile one circle on top of another. No matter how the lines stagger and bulge, he keeps the little arm going around until it has made a

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Fig 1. dozen or more circles. After a few trials the child catches the idea, his unsteady lines grow firmer and after a few lessons he is making a fairly true circle with ease. This is with the right hand. Now the same exercise follows with the left, then with both hands. Then from right to left- now from left to right. In this simple exercise the child has made some discoveries about himself;- that there is a pleasure in doing things with the hands- that with free, swedping movement he accomplishes better results than with close, hard movement- that he can use both hands as well as one. In fact he has discovered several of the fundamental things of the Tadd system. But he is not kept long on circles. He is put at straight lines. He makes them bold and long and with both hands. The child at first sways his body, twists his head, sticks out his tongue perhaps, in trying to draw these lines, but a little correction breaks the habit. He finds he can stand erect, with arms extended, and make his straight lines just as well as when accompanied by contortions. It is a fine lesson in physical control. Unconsciously the little one is learning to handle his body. It is one of the first gains Mr. Tad claims for his system.

Fig 2.

Following the circle and straight line comes exercises practiced at the board in the same free way and with both hands in those elementary forms from which all decorative designs are evolved. First the loop, with a score of variations. (Fig. I) Then the spiral with combinations (Fig. 3) Then the leaf form (Fig.) then the Moorish units (Fig. 4)

The child is kept at each of these forms until he knows it perfectly, makes it automatically, with rapidity and grace with both hands working back or forward This may mean thousands of repetitions but if persisted

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in the form becomes his at last. Of course when he has really mastered the forms he has learned the a-b-c of decoration. And now, just as a child who has learned his letters is put at combining them into words, so the child who has mastered the elementary forms of decoration is set at making patterns. One of the strong features of the method lies here. The child is forced to do something with what he has learned. Nor is he supposed to make an idle decoration. He is told that everything which the hand finds to do should be for some useful purpose. It is explained to him that with these elements he has learned men make decorations to beautify the world. He is asked to look at carpets, wall paper, dress goods, everything which is decorated, and to see if he cannot discover there the a-b-c's he has learned. Then he is interested to make decorations himself.

In visiting a mission night school in Philadelphia, where a class of boys of eight to sixteen were at work, I looked over a score or more designs which had been made that evening. In every case they had a distinct purpose- more or less colored by ~~his own~~ the pupil's surroundings, and interests. One boy had submitted a book cover; "Life of Dewey," by Somebody" was the legend. Another boy had a very beautiful design of a door knocker. I asked him how he thought of that. "Oh," he said, " Down on ---- Street where I live, that's on a house. I asked the teacher last week if I couldn't make it and she said yes, so I went and looked at it until I knew it." He had drawn the design at the class that evening entirely from memory. This little incident illustrates several of the results of the method, how the eye is quickened to see, how long study of pure decorative forms arouses the artistic nature so that it recognises a good thing when it sees it, and, point not to be forgotten, how practice in memoris

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ing the elementary forms so develops the memory for form that a rough lad like the one I talked with is able to look at a beautiful decoration until, as he said, he "knew" it.

The rapidity with which the designing is done by the pupils after two or three years training is astonishing. I saw in various schools in Philadelphia class after class sent to the board to design a decoration. I rarely saw any hesitation. The designseemed to flow from the fingers. Some were better than others, of course, but a all the children seemed to have learned to make original designs. I never saw two alike. The illustrations on pages show some of these impromptu designs. This work, is should be remembered, is executed by both hands, ambidexterity being completely mastered by the time the pupil arrives at this stage.

Modelling in Clay.

But Mr. Tadd does not confine his pupils to drawing alone. He wishes the hand to have more flexibility and delicacy oftouch than it is possible to arrive at with chalk or pencil or brush alone. He wishes him to learn form. So he sets him after a month or more at modelling balls, , sticks,birds' nests, snakes; the most elementary forms begin the work. The child takes to it with eagerness. The change from the flat surface awakens a whole world of new thought. He begins to feel form and to make things with pride. After a certain amount of experiment the elementary forms are tried in clay and the child puts the spiral and loop and anthemioninto relief.

Wood Carving Introduced.

Not content with the hard training resulting from drawing and modelling Mr. Tadd puts his pupil at the end of the second month on wood carving. This work gives strength to both hands and develops a wonderful control

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of the muscles as well as increased delicacy of touch. The pattern which the pupil carves must be of his own design and it must be put on free hand. Nothing so rouses the ire of the master as the sight of a pattern made by the aid of tracing paper, a pattern wheel, or stencils. The eye is the one instrument for testing exactness of form and the pupil is never allowed to use any other. In the wood-carving the panel or tile on which a pupil works is always for some particular piece of furniture. This consciousness that his work is for something adds greatly to the dignity of it in the pupil's eye. The pupils turn out some really beautiful pieces, as the illustrations on page of work done in the Roman Catholic High School of Philadelphia shows.

Nature Work.

The child's hand has now been trained until it is supple, strong and dexterous. The eye sees the grace of things, the mind has been awakened to a sense of form, of harmony and of proportion, and with this preliminary training Mr. Tadd puts his pupil to drawing natural forms. When he has his way in a school room he fills it full of natural objects, mounted birds and beasts and fish, shells, corals, flowers, butterflies, stones. When the child is ready for it , he puts before it one of these as a model.

Suppose it is a fish which is chosen. The model is set on the child's desk and he is supposed to draw it, as he pleases. He is kept at it until he knows this particular fish by heart, can draw every fin, every scale and not only draw it with but without the model, for Mr. Tadd insists that natural forms be assimilated as thoroughly as the conventional units. The child must "think fish" he says and speak fish with his finger-tips before he can lay aside his model. Of course he is modelling

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the fish in clay and he is encouraged too to conventionalize him in decorative designs and put him into wood.

But it is not the model alone he studies. Little parties of children are taken to the fish markets to study the displays. They are encouraged to visit the city aquarium, to find out where fish are exhibited by fanciers. In fact everything Philadelphia has to show on fish the boy is asked to find out. It is not long before he is able to tell- not with his tongue but with his fingers- the difference between various fish. The same work is conducted on shells, which are cheap and easy to obtain and always interest children. Fig 9

When it is possible to carry on the nature work in the country in the summer the pupils revel in animal forms. Mr. Tadd insists on their literally sitting down among the pigs and chickens and getting acquainted. In the Adirondacks, where he has had small classes for several years, the blackboards are carried to the field where the cows are, are set in the chicken-coop or pig-pen and the pupils grouped at their ease work regardless of the restlessness of their subjects, drawing or modelling. Figs 10

The modelling of animal forms is one of the most successful features of the work, particularly among boys. Fig 11 They take to it with the greatest interest and in the night schools of Philadelphia I have seen children from the slums working over an animal or bird with perfect absorbtion and when the time was up leaving it with most genuine regret. In more than one case in the Philadelphia school pupils have been found who had so much talent for clay modelling that they have been put into schools of sculpture. And here again is a point for the system. It is not intended to make artists or sculptors or wood-carvers. It is intended to train the hand, the eye, the mind. It is purely an educational process, but in course of this training the pupil if he has an artistic bent, a natural talent for the

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brush, or the tool, or for clay is sure to show it and he is at once encouraged to give free exercise to this talent.

Color Work.

It is nature which furnishes the inspiration for color work. Very early in the course the child is given a box of water colors and brush and paper. Beside him is put a big butterfly of brilliant hue and he is told to draw and color it. One after another of these radiant things pass under his eye and hands. Gradually he acquires a wonderful accuracy for color and a strong feeling for it. He begins to see it in everything just as he has already learned to see form and designs. As he studies his fish he is required to reproduce its tints. In drawing and modelling birds the feather and its lines are learned. The shells give him still other lessons. Now put him into the country and he is alive to the glory of sky and field and river. He has learned color.

Correlation of Work.

It is not long after the nature work begins before the child himself unconsciously begins to put his new powers to use in his other studies. He finds he has a new way of expressing himself. He is studying botany. He cannot tell with tongue perhaps just what stamen and pistil and corolla are but he can with his fingers and to help his halting tongue he draws what he means first, makes what his eyes have discovered. Where Mr. Tadd has his way with a child this correlation of studies, so instructive and so natural, is systematically followed. He would teach all the facts about the commonest object which surround the child, doors, windows, chairs, and would do it by drawing. Into Botany, Zoology, Chemistry, Entomology, Architecture, he would introduce the habit of expressing the facts learned by the fingers.

Such briefly is the Tadd system of manual training. Its chief peculiarities are obvious enough: (1) It teaches the use of both hands; that is, ambidexterity. (2) It insists on

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memory drawing. (3) It rotates drawing, designing, wood carving and modelling. (4) It studies natural objects incessantly. What are its results? Clearly the valuable ones show only after years of work. They are not to be estimated in the number of designs the pupil makes, the animals he has modeled, the panels he has carved. They are, it seems to me: (1) Making a useful tool from the hand. ~~Most of us are deprived of this means of expression~~. (2) Training the eye to be a sure guide in form, harmony, color and proportions. (3) Arousing the aesthetic sense. (4) Giving the mind the practical education which comes alone from originating and doing things. (5) Finding the "bent," if the child has one, for an artistic handicraft.

There are other good results. One cannot watch the pupils at their exercises without seeing that they are getting healthful physical exercise, which, when continued regularly through the school life, must be of great value. There is a wholesome moral influence about the work whether the pupil be rich or poor. To the rich and idle, this use of the hand in what amounts at least in the hand-carving to real manual labe or is a profound lesson in the dignity of work. It stimulates ambition to do something. Perhaps among none of Mr. Tadd's pupils is the satisfaction over a bit of finished work greater than among the rich who have never before used their hands. On the poor boys and girls of the Philadelphia slums the night classes take a hold unlike anything I have ever seen tried-and I do not overlook the gymnasium either. They come to "see what's going on," dirty, ragged, appallingly alert and malicious. They are given a mallet and chisel and a panel of carved wood, spoiled for use in any piece of furniture. Their joy in hacking the carving is something as pityful perhaps as it is laughable. It satisfies all the longing for destruction which a life time of kicking and ~~storming~~ and struggling has developed in them. Their interest is aroused and they come back again.

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They are always put at some new work until they are sufficiently ~~trained~~ tamed to fall into classes. Self-respect awakes. They begin to wash their hands- up to the wrists-and their faces- as far back as the ears. They grow less ragged, make friends, become often decent, honest and ambitious. It is the moral influence of doing something which awakens their artistic natures and reveals to them their power to produce beauty.

It is not the least recommendation of this method that so perfectly has it been developed, so carefully have the needs of pupils and the practical limitations of schools been considered that it can be applied with small expense (by the aid of the Manuel Mr Tadd has prepared) in any school or in any home. The really essential outfit for it is cheap. In a work so close to nature as this, nature herself furnishes the ~~chief~~ greater part of the equipment. The chief requisites are a teacher who understands and believes in the possibility of the training, a teacher and -time.

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* New Methods in Education. By J. Liberty Tadd
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