INDUSTRIAL TRAINING SCHOOLS.

The following list comprises those institutions in the United States which, taken altogether, form a comprehensive class, and embody the educational facilities afforded in this country for obtaining a knowledge of the theory and practice of the scientific professions, as distinguished from the literary or learned professions or the artistic callings. The primary group comprises five well known institutions: 1. The school of mechanic arts of the Massachusetts Institute of Technology, of Boston. 2. The Normal training school of Washington University, St. Louis, Missouri. 3. The mechanical handiwork school of the Spring Garden Institute, Philadelphia, Pennsylvania. 4. The Chicago Manual Training school, Chicago, Illinois. 5. The manual training school of Tulane University, of Louisiana.

In each of these typical schools, drawing is required as a most essential study and is pursued throughout the whole course, the manipulation of tools in personal contact with the material being in English branches and mathematics forms an essential feature of the training given. These are elementary schools, that is, they teach the elements of design and construction. More advanced schools are: 1. The technical schools of the metropolitan museum of art. 2. The technical schools for carriage-draftsmen and mechanics, of New York.

Among institutions devoted to general training in the mechanic arts may be named: 1. The Worcester County Free Institute of Industrial Science, Worcester, Mass. 2. School of mechanical engineering, Illinois Industrial University. 3. Rose Polytechnic Institute, Terre Haute, Indiana. 4. Mechanical courses in Cornell University. 5. College of Mechanics, University of California, Berkeley. 6. The college of agriculture and mechanic arts, endowed by the national land grant of 1862. Nearly every State has one of these. The Utah Agricultural College is at Logan.

Among the technical schools which afford opportunities for the training of original investigators in science and art, who are expected to point out the way to the future development of the resources of the country, may be mentioned the schools of science connected with Yale, Harvard, Columbia, Dartmouth and Lehigh universities, with the Stevens Institute at Hoboken, New Jersey, the Massachusetts Institute of Technology, the Rensselaer Polytechnic Institute, Troy, N. Y., and others. The Lowell school of applied design, is the only school devoted solely to the teaching of practical designing, though the training in the Massachusetts normal art school and in designing and some of the women's art schools give more or less attention to practical training for this purpose.

The Pennsylvania Museum and School of industrial art, the Philadelphia School of Needlework, and the Women's School of Design, complete the list, which will serve as a guide to those contemplating a course of industrial training, besides indicating the advancement this country is making along these lines.

A PLEA FOR MANUAL TRAINING.

Three years ago manual training was added to the normal course at the Utah academy, and 37 students took the work. Last year there were enrolled 162, and at present there are 144. The work consists of paper folding, cutting and mounting; cardboard modeling; clay carving; wood and metal sloyd, including wood turning and carving; sewing, knitting, with cooking to be added very soon. The work continues four hours per week throughout the second year of the normal course. All the children of the training school spend from one to two hours per week in similar constructive work related to geography, history, science and the home; the whole course being closely connected with the ordinary efforts of child life.

In making the dwellings, tools, utensils, weapons, etc., of primitive people children feel that they, though small and young, are equal to or at a full grown Indian or Eskimo. Children love to feel old. They are great imitators, and the nearer they can approach the grown people in all things the better they feel. They want to do everything they see anybody else do, and also to make anything everybody else has ever done. Constructiveness and destructiveness always and necessarily go together. The child pulls his toys to pieces "to see what makes 'em go" simply because he wants to make toys of his own. Give him the necessary conditions and he'll try long, hard and earnestly to do it. Did you ever see a boy who didn't like to own a scrap box, and who wouldn't rummage every box and drawer in creation to find a scrap of iron or string to be used in some living machine? Search the pockets of an average boy and you must conclude that he is a wholesale manufacturer—a veritable Barnum's museum. He collects cracks, calls and strings and bundles of nondescript other things. Robinson Crusoe is a hero to the boyish mind. Children simply because he was a home manufacturer. He believes in home industry. He made everything that any other boy would have tried or thought of. He was a hero because he realized his concepts with boys tools. What did you make in your younger days? Did you ever sew doll dresses, or make fishnets, cages, or the mate of the stove? Did you ever make paper hats, hack boxes, dandelion whistles, wickiups, hack boxes, sawed jigs, cross chairs, whips, baskets, rag horses, hopscotch forms, kangaroo shoes, yokes, waterwheels, guns, bows and arrows, slings, flippers, dickies, bobbs, spoons, boats, sleds, perpetual motion machines, and other inventions of infinity?

If making is a natural tendency of children, why not let them continue to make as long as life shall last? And if "school is life and preparation for life" then why not put more and everyday life into the school? Children today are the men and women of yesterday but born to read, write and cipher, but to do something. They came into this world to subsoil it. They are not philosophers but doers. All children are born workers. And with our present educational system the younger they are the better they love to work. With the amount of hand training received in our ordinary school by the time the children reach the eighth grade they have almost lost the use of their hands. By that time their motor centers are comparatively fixed and stubborn and their hands are practically incapable of high manual training. Our present school life—which is too artificial—has almost ruined their hands and that too, according to pedagogical psychology, at the expense of their brains. What is a school for, anyway? Is it a place where children learn to love work? Is it a place where they learn to love? Is it just enough to "do down long enough to get out?" They prove to dislike common, everyday work and have little respect for men or women who earn an honest living by the sweat of their brow. Too many students found the common schools spend more time and money trying to get out of work than they do on how best to do honest bodily labor. Where would modern inventions be if it had not been for the skillful training of the hand? What would science do without its apparatus and chemicals without the skillful, ingenious man with prime pealing mercury? Give us tools for hands and we'd soon be on a level with the brains of the field. If it is proper for "young ideas" to know how to "shoot" so also might it be considered a good thing to know how to properly turn a gridiron or a loaf of bread. If grammatical parsing is a nice thing, so also is a good patch or a darned sock—especially if your purse likes it. Rhetorical training says: "I am hollow off," scientific training says: "You sew on on one," industrial training says: "Where's my thimble?" Industrial training means that if a man starts down a river on a homemade raft he will land in the White House, and that if he learns how to split a rail he's on the road to Washington. It means, if a man finds heavy bread in his lunch basket he goes home to his wife with a sour face and a sugary heart. It also means that it isn't not only play "Dewey's Two Step," but that she can, when necessary, play Tryfan on a washtub. It also means that she can not only draw from the vat and mix the primary colors, but that she can paint the color of the cow and the sweet bread and butter.

Manual training has been introduced into normal schools all over this Union and other nations. "School is life," and "Life is real," and the children of our nation, with its exhaustless resources, naturally want real life—everyday work—if our teachers can only give it to them. Why do we find manual training in "reform schools?" If "an idle brain is the devil's workshop" should the children toils and a place to use them and the devil will have to hunt new quarters.

AGRICULTURAL COLLEGE, LOGAN.

Commencement exercises in honor of the late Senator Morrill, author of the land grant college bills, were held in the college chapel Friday morning, instead of the regular exercises. President Tanner delivered an address and appropriate music was furnished by the choir.

Prof. Hedrick has charge of the Arbor day exercises today. The program consists of short speeches, declamations, recitations and music, in the chapel, and the planting of trees with appropriate ceremonies by the different college classes.

The editor of The Broad Axe visited the college on Thursday.

A committee reported to the faculty at a special meeting on Friday a few important changes in the course of study and the first three years of the 36 month course provided by recent legislation.

The catalogue committee—Professors Mattheson, Jensen and Thomas, are expecting to have that essential publication ready for distribution by commencement.

The enrollment at the end of the first week of October shows almost no loss of college students, but a tremendous falling off from the preparatory classes.

THE CHICAGO SCHOOL BOARD.

The lecture of Dr. O. Stanley Hall, quoted in part last week in this column of the "News," on the necessity of cultivating manly self-reliance in children, continues to echo in Chicago. According to the Chicago publications in that city, the board of education is something of a father itself. It has a vocabulary for forty odd thousand children and it not counted by any similar body that has anything to do with the education of youth. Its "Rules" governing educational questions are usually characterized by an exchange of words that are too hot to handle. It wears a chip on its shoulder and it gets red in the face on the slightest provocation. The members of a good school board are reckoned to be fanned into flame at any moment.

In fact the Chicago school board is not unlike others that American cities have had of its various sorts of the country. When, therefore, the managers of the Chicago Kindergarten College brought Dr. Hall of Clark University to that city to tell the teachers that boys should be trained to box, and that anger and resentment are essential to the development of character, they were probably not aware of the fact that they were bringing up a batch of new troubles for the school board.

At all events, the next meeting of the school board was a stormy and turbulent reminder of the good old times when the members of the board expressed their opinions of each other with that unmeasured freedom that made it a trial deliberative body. Dr. Hall was the firebrand that started the verbal conflagration, and now it is claimed that the Kindergarten College should be admonished to exercise greater care in the selection of lecturers for its course. Dr. Hall's well established reputation, however, not only for personal bravery, but for general scholarship and good sense, will afford him an easy and adequate defense from the outcome of the frailties of the school board.

ANDREWS ON SEEING AND DOING.

At the Chicago Teachers' Federation, on April 5, E. Benjamin Andrews, superintendent of schools, addressed the Normal Training Teachers' association in the LeMoyne building on what he called "Kindergartening of the Grades."

"The kindergarten principle runs through all the schools up into the colleges," said Mr. Andrews. "It is precisely learning by doing and seeing rather than by printed representation. Neither children nor men can see the actual thing, a good representation of it is the next best thing. The world has learned from Dr. Hayes during the last 10 years from the pictorial papers than it could through all the printed words ever written.

"While I recognize the good in the old schools I feel that there is a tremendous amount of pain to be found in the correlation of those old ideas with new ones. Manual training should be the center of making the child acquainted with what is actually about him. The work in the schools is only a higher course of this knowing by seeing, doing and handling. Domestic science and manual training, the cutting and making dresses in the public schools may lead to the highest attainment of the ideal home beauty of men's and women's dress.

"I have always been sorry for the man who has not been trained in natural things. The bookish man who eats, sleeps and hunt and run, who can't harness a horse and who knows not the beauty of the sky and fields and words is handicapped. The economic value of the ability to do, doubling the income, if this country had spent one-hundredth part of the money in educating its people in designing and decorating as it has in creating tariffs we would now be enjoying a profit as much in those lines as we receive in return."

TEACHING OF MATHEMATICS.

The Utah Mathematical society has appointed a committee of nine to investigate the methods obtaining in the teaching of arithmetic in Utah, and to report thereon to the society at its next regular meeting. The circular letter issued by the committee says:

"It is not the object of the committee to vindicate any man, book, or method. Neither is it the object of the committee anything, either old or new, that can stand the test of a searching, unbiased investigation. The committee will undertake to consider the whole subject thoroughly. In this they will need the help of every teacher in the State. In order to secure part of the information needed, a set of questions is enclosed with this letter. It is strongly hoped that each teacher will give these questions the careful consideration they deserve, and return the answers to the secretary before June 1, 1899."

Part of the work of the committee will be accomplished through personal visitation and observation. To facilitate this work, the State has been divided into nine districts, and to each member of the committee, as follows: (1) Boxelder, Cache and Rich counties, J. E. Roe; (2) Weber county, D. H. Adams; (3) Davis and Morgan counties, J. F. Poole; (4) Salt Lake county, L. M. Gibson; (5) Summit, Uintah and Wasatch counties, F. A. Swangert; (6) Utah, Juab and Sanpete counties, W. M. McKeddie; (7) Carbon, Piute, Sevier, Sevier and Wayne counties, W. M. Stewart; (8) Beaver, Grand, Millard and San Juan counties, J. E. McKnight; (9) Beaver, Garfield, Iron, Kane and Washington counties, Milton Hanson.

Each member of the committee will visit as many of the schools of his district as possible, and collect data respecting the work being done. He will also attend county institutes and assist in every way possible in having the whole matter understood and thoroughly canvassed in his district.

The teachers throughout the State are asked to consider the following questions and send the answers to Professor J. E. McKnight, Salt Lake City, before June 1, 1899:

1. What mathematics have you completed beyond the eighth grade?

2. Do you follow the course of study closely in your work in arithmetic? If not, what divergence do you make? Why?

3. (a) Are you familiar with the Spencerian system of teaching arithmetic?

(b) Is it used in your school?

(c) If so, to what extent, and with what success?

4. How does your work in arithmetic compare with that in other subjects?

5. (a) Do you teach algebra and geometry with arithmetic?

(b) If so, to what extent and to what end?

6. State briefly any difficulties you have encountered in your work in arithmetic, and any other matters pertaining to the subject, not covered by the above questions.

LATTER-DAY SAINTS' COLLEGE (SALT LAKE CITY.)

Last Wednesday evening an interesting talk was given by Dr. Karl G. Maeser, on the subject of the introduction of the Gospel into his native city of Dresden, Germany. He referred to his condition of infidelity before the Gospel reached him, his being accidentally led into an investigation of "Mormonism" and the sending to him first of William Budge, and afterwards of Franklin D. Richards. Incidents in the opportune manifestation of the girl of tongues. After receiving the Gospel and a manifestation of its truth, he entered into a covenant to make every required sacrifice for it, and in return for all he had done, he testified that he had been abundantly blessed.

Prof. Frank Wightman favored the audience with a fine baritone solo, "Calvary."

On Monday evening, April 18, at the Thirteenth ward assembly hall, Mr. Charles Ellis will give the next lecture of the Historical Society course on the subject, "Anti-Mormonism: how to meet it." A most enjoyable occasion is promised.

The Priesthood meeting held yesterday afternoon was a very profitable occasion. The three quorums of the Aaronic Priesthood were represented by their respective presidents, Alma Taylor, Elias Anderson and Fred Adams, in appropriate addresses. Dr. Maeser then gave the young men a kind, fatherly talk on the same and subsequently Prof. Woolley.

Prof. Woolley has been making visits with his class in methods to some of the city schools. The members of the class have gained many valuable ideas from these schools, to assist them in their future work.

It is expected that a meeting of the Alumni association will soon be held to make arrangements for the June banquet.

Elaborate preparations are being made for the commencement exercises of the College. It is intended that they shall be fully up to the standard of such occasions in the past.

The opening of spring has given an impetus to field excursions. The two sections of the physical geography class, with the instructors, Prof. Chamberlin and Dalley, made a trip on Saturday afternoon to Mount Ogden, above the Warm Springs, and inspected the geological formations in that vicinity.

Last evening a pleasant affair was given at the home of the members of the class of '99. A reception and lunch was given by them, the faculty and their ladies, and a few friends of the class members being the guests. The well rendered program, which was provided almost entirely by the members of the class, consisted of an opening address by Leroy Sandstrom, piano solo by Lizzie Thomas, vocal solo by Ethel Alder, by Lucile King and Frank Wightman, mandolin and guitar selection by Ferman Barnett and John Spray, and humorous recitations by Lucile Penrose and Jos. L. Shipp.

The ladies of the class then took the guests in hand, and served dainty refreshments in the daintiest possible way. Social enjoyment of the most pleasant character accompanied the delicious repast of the viands.

At midnight the hosts and guests separated, with mutual regret that the school year offers opportunities for such reunions, will soon be at an end.

BRIGHAM YOUNG ACADEMY, PROVO.

The boys are getting ready for the contest with the U. of U. in field sports.

Many students than usual are present after the Easter vacation.

An epoch in the history of the Academy was the visit of the Presidency and so many of the Twelve on Friday, March 31.

Normal drawing this year is one of the popular studies in institution. Miss Aretta Young is getting excellent results from the students in blackboard illustration.

Prof. Cluff and Prof. Brimhall spoke at the graduating exercises of the people of the Spanish Fork schools.

Mr. Frederick Warde, the actor, delivered his ever popular lecture on Shakespeare before the students on Wednesday afternoon. Many of the students had such a delightful treat. For two hours Mr. Warde held his audience enraptured, and when he had finished they would scarcely let him take his seat, so insistent was the applause for him to continue. The lecture was introduced by a brief review of Shakespeare's life, and a refutation of the Baconian theory of the authorship of his works. The speaker then hurried on to a review of some of the plays and how to study Shakespeare. Study Shakespeare and not his commentators. Why study Lamb's tales of Shakespeare when we can study the author himself?

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