the albuminoid constituents of swill-milk coagulate more firmly than in other milk, and that consequently it is much more difficult to digest. I have made no personal observations in regard to this, and therefore can give no personal information of value. The question is certainly an important one, and I hope you will be able to collect information which will clear up some of the disputed points.

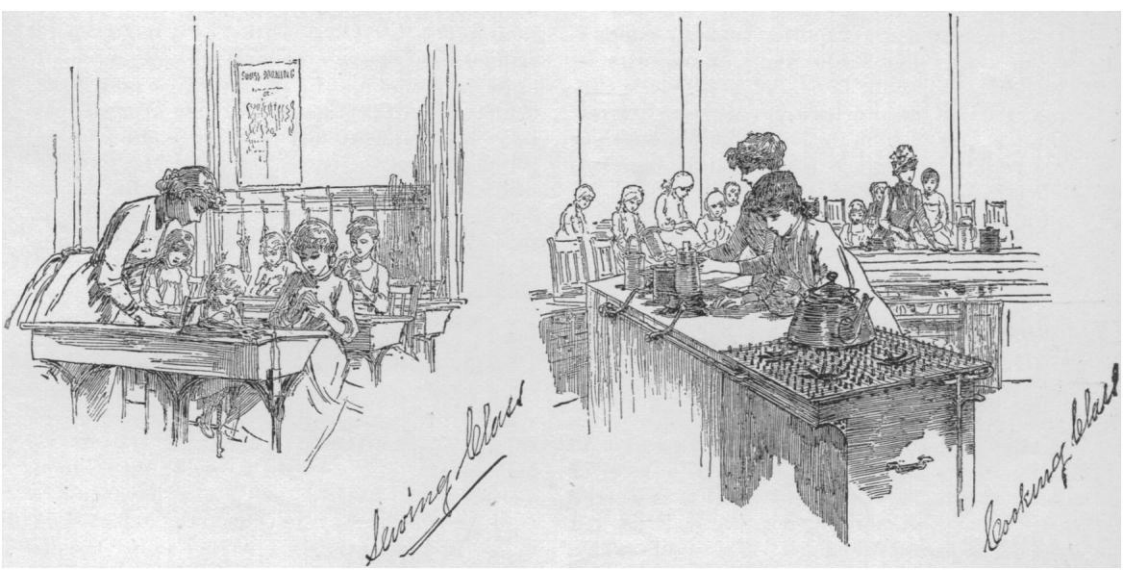
[*To be continued.*]

THE INDUSTRIAL EDUCATION ASSOCIATION.

THE appearance of the third annual report of the Industrial education association of New York City, and the importance of the work which it has undertaken and is accomplishing, serve to direct anew the attention of educators and teachers all over the country to a force which is growing mightier week by week, and which is making itself felt as a power for good in our educational system.

The growth of the association's work is a most excellent example of the development of an idea. In April, 1880, there was incorporated in New York City The kitchen-garden association. The objects of this association were the promotion of the domestic industrial arts among the laboring classes, by giving to the children of the same, and to such others as might be deemed desirable, gratuitous instruction in the household arts, according to the principle of the kitchen-garden system; and also to promote a wide and correct diffusion of the principles upon which the system had been founded, and to prevent its degenerating into careless and erratic methods of teaching, which might expose the system to misconception in its objects and operation.

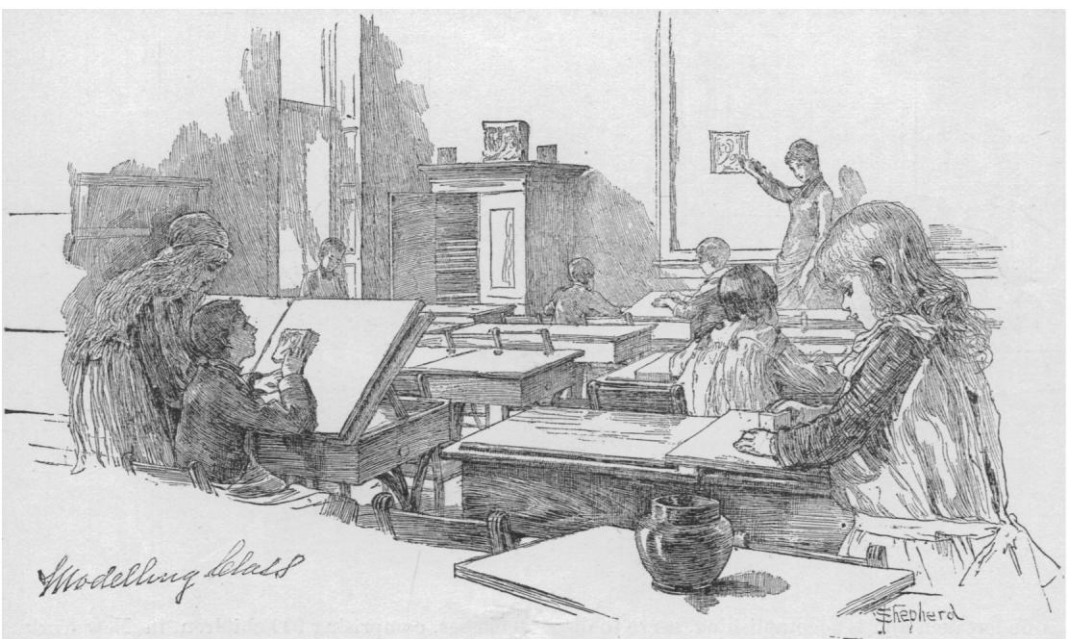
It cannot be claimed that the kitchen-garden system was educational, save indirectly. It was practical philanthropy. The term seems to have originated with Miss Emily Huntington, who published a book on the subject in 1878. By 'kitchen-garden' Miss Huntington denoted an application of some details of Froebel's kindergarten system to domestic service. The association was convinced of the value of the application, and in its first annual report, made in May, 1881, was able to state that during the year the principles of kitchen-garden had been applied in



29 classes, comprising 990 children, in New York City and vicinity alone. Many other cities followed New York's example, and similar classes were reported as existing in Brooklyn, Philadelphia, Boston, Albany, Troy, St. Louis, Cincinnati, Wilkesbarre, Meadville, Newark, Poughkeepsie, Elmira, and Newport. In this initial report the same note is sounded that is heard again in the last report which has just been issued. It is that too much stress cannot be laid upon the importance of training teachers for this work. Persons must not be permitted to take it up without adequate preparation. In thus insisting on a professional training for teachers, the association, in the earliest days of its history, placed itself upon a proper plane, and made its future successful development possible. One year later, in May, 1882, one or two points of advance were chronicled.

The kitchen-garden classes had been continued in all the cities in which they had previously been introduced, and new classes had been established in Orange, Rochester, Yonkers, St. Albans, Cedar Rapids, Germantown, Chestnut Hill, and Cleveland. A normal class had been started, and was meeting with gratifying success. A graduate of the normal class had attempted an extension of the system so that it would suit boys as well as girls. While this extension had not been fully developed, yet progress was reported. The third report, issued in 1883, told of a successful but uneventful year. The fourth report, however, marks a significant stage in the association's development. The board of managers had begun to feel that their present work was too limited, that their fundamental principle admitted of a wider application than it was receiving. This feeling found expression in a resolution passed March 21, 1884, which read as follows: "*Resolved*, that at the next regular meeting of the association the subject of the dissolving of The kitchen-garden association, with a view of re-organizing under a different name and upon a broader basis, be presented, and action taken thereon. It is proposed to make this change, because, first, the title 'Kitchen-garden association' is too limited in its scope; second, experience has proved that a more advanced work in addition is essential; third, it is desirable that industrial training for schools in general, for older pupils, and for boys, be added to the present work; fourth, other systems having been developed, it seems advisable to incorporate them with our own."

In this dissolution the old was not displaced entirely by the new, but it was relegated to a subordinate position. A standing committee on kitchen-garden was provided for, and to it the direction of that work was confided. The result of the re-organization was the Industrial education association. In April, 1885, its first annual report was published; and its whole tenor indicates that a greatly enlarged work had been undertaken. In this report it is stated that the



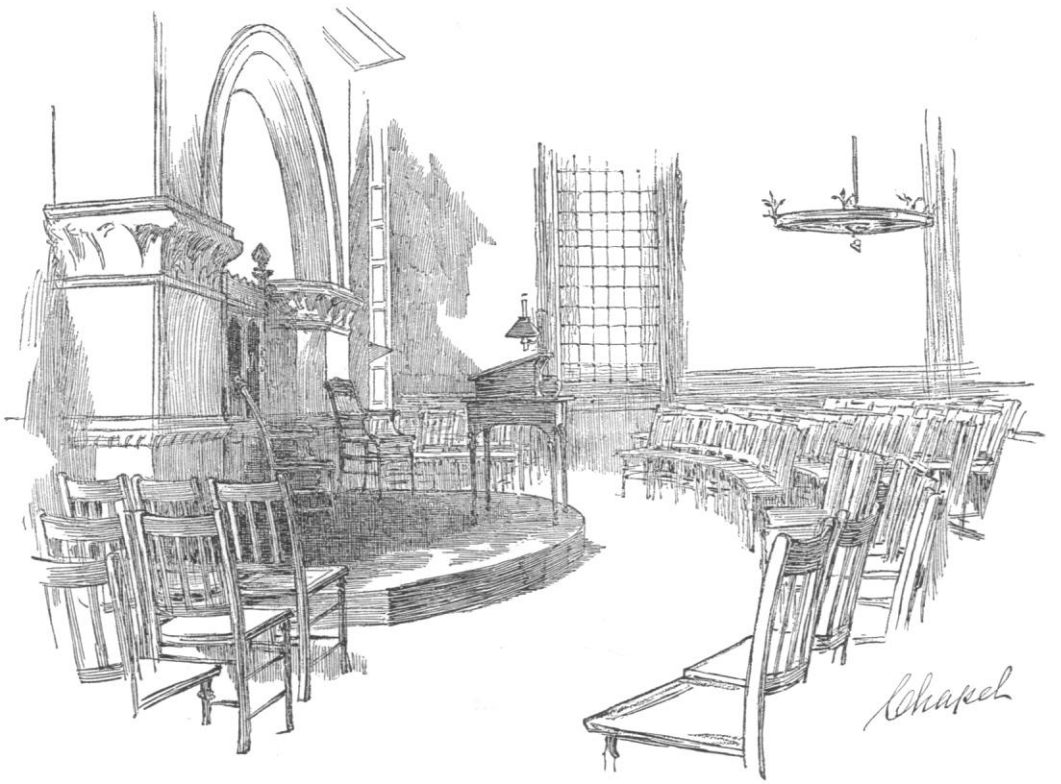
association was organized, first, to obtain and disseminate information upon industrial education, and to stimulate public opinion in its favor; second, to invite co-operation between existing organizations engaged in any form of industrial training; third, to train women and girls in domestic economy, and to promote the training of both sexes in such industries as shall enable those trained to become self-supporting; fourth, to study and devise methods and systems of industrial training, and secure their introduction into schools; also, when expedient, to form special classes and schools for such instruction; fifth, to provide instructors for schools and classes, and, if necessary, to train teachers for this work.

The work of the year, as might have been ex-

pected, had been largely preparatory. Industrial education had been studied, committees on specific topics organized and set to work. The conclusion had been reached that a centre should be established, where, by practical experiment, the value and feasibility of manual training could be demonstrated. To this end the association had applied to the board of education of New York City for the use of a school-building one afternoon in the week, for the purpose of holding classes after the regular school-hours in sewing, domestic economy, designing, modelling, simple carpentry, and the use of tools. The association offered to assume the entire care and expense, and to open the classes to the inspection of teachers, school trustees, and members of the board of education. This request was refused, and on the quite defensible ground that the board was not authorized to permit the use of a school-building for any educational work not wholly under its own control. During this year, also, Gen. John Eaton, U. S. commissioner of education, invited the association to prepare an exhibit for the New Orleans exposition; but it was deemed inexpedient to attempt any such exhibition at that time.

The second annual report, issued in May, 1886, of the Industrial education association, is somewhat more elaborate than its predecessors. The work of the association had attracted sufficient attention to incur misrepresentation, and it was deemed necessary that an adequate explanation of the term 'industrial' be given. The report insists that by this term is not meant the teaching of any trade, nor the introduction of the teaching of trades into public education. But, the report continues, quoting Mr. Washington Glad-

den, "we hold that there is an industrial training, which is neither technical nor professional, which is calculated to make better men and better citizens of the pupils, no matter what calling they may afterward follow; which affects directly, and in a most salutary manner, the mind and character of the pupil, and which will be of constant service to him through all his life, whether he be wage-worker or trader, teacher or clergyman. The training of the eye and of the hand are important and essential elements in all good education. These elements the state is bound to furnish."



The objects of the association were defined anew, and the more essential of them are, 1°, to secure the introduction of manual training as an important factor in general education, and to promote the training of both sexes in such industries as shall enable those trained to become self-supporting; 2°, to devise methods and systems of industrial training, and to put them into operation in schools and institutions of all grades; 3°, to provide and train teachers for this work.

Numerous classes had been started in various branches of industrial work, and an accomplished and efficient superintendent, Miss H. R. Burns, appointed to organize and develop the work. The special committee on industries had been busy investigating the practical working of the industrial feature wherever introduced into reformatories and similar institutions, and was able to report that three very important conclusions had been reached. These were, 1°, that every child in these institutions should be trained to become a producing factor in the community; 2°, that, if such training is to have permanent value in the after-life of the child, it must be conducted on a basis of education to the child, and cannot be made to any extent a source of revenue to the institution; 3°, that the moral results of such training are most satisfactory.

Perhaps the greatest triumph of the year was the success of the Children's industrial exhibition, held under the auspices of the association. The exhibition was opened on March 31, and lasted one week. To meet the often-expressed wish that this exhibition might show the results attained in cities where industrial education has already gained a definite place in the curriculum of public instruction, special invitations were extended to

New Haven, Jamestown, Chicago, Cleveland, St. Louis, Philadelphia, Boston, Worcester, and other cities. The work of all grades of pupils, irrespective of age, was solicited with a view to showing the results possible under systematic training. To the cordial responses from these cities, as well as to the efficient co-operation of schools and institutions in and near New York, much of the success of the exhibition was due. It comprised no fewer than seventy separate exhibits from schools and institutions, representing the work of thousands of children, and one hundred and forty individual exhibits. This exhibition did a great deal to increase the popular appreciation of the importance of industrial training. The attendance of visitors was very large, numbering over seven thousand persons. The press treated the exhibition with gratifying cordiality.

Great as is the progress noted in the report of 1886, that of 1887 surpasses it. The work had now reached a still more advanced stage. Nearly a year ago the association had outgrown its quarters, and the large building, No. 9 University Place, formerly occupied by Union theological seminary, was leased for a term of years. The building was altered and refitted; and in December last, two classes in drawing, one in carpentry, one in sewing, one in cookery, together with the kindergarten and domestic training department, were in progress. In April this number had increased to seven classes in drawing, six in carpentry, six in sewing, twelve in cookery, together with the kindergarten and domestic training department. The association has had under instruction 4,383 pupils, 2,991 of whom have been members of classes held outside of the building but instructed by teachers in the employ of the association. Over 400 pupils were enrolled in vacation classes held in July and August last. A course of public lectures was given, and attracted much attention. The lecturers were President Gilman of Johns Hopkins university, Superintendents Dutton of New Haven, Balliet of Reading, Calkins of New York, and Barringer of Newark, Col. Francis W. Parker of Cook county Normal school, Illinois, Dr. Henry H. Belfield of Chicago, Dr. Nicholas Murray Butler of Columbia, and Mrs. Mary Dana Hicks of Boston. A museum has been opened — which will be largely augmented in the autumn — which serves as an object-lesson in industrial education. It is always open to visitors, and many teachers and other interested persons visit it daily. From it the eye takes in at a glance the possibilities resulting from the combination of manual and mental exercises, and sees how they supplement and depend upon each other. The museum comprises at present some twelve separate exhibits of drawing, together with specimens of carpentry, joinery, lathe and forge work, representing the Chicago public schools, Worcester high school, Montclair public schools, New Haven public schools, Hebrew technical institute, College of the city of New York, Baltimore manual-training school, Chicago manual-training school, and the Woman's institute of technical design. Still other exhibits are in course of preparation.

A library fund has been secured, and by fall a large reference and circulating library of educational works will be at the disposal of teachers and students. But the most important of the new features is the establishment of a college for the training of teachers. This will open in September, and a circular of information has already been issued. This college will aim eventually to become a professional school for teachers, not a mere normal school in which education and preparation for teaching go hand in hand, but a professional school in the sense that a law-school or a medical college is a professional school. As the law-school has its moot courts and the medical school its dissecting-room, to combine practice with theory, so this college will have its model school.

In this model school the training which the association advocates will be given, — here the new system, which combines the old and the new, will be taught, — and the association hopes to have in it a strong confirmation of the belief which it strives to propagate.

Dr. Nicholas Murray Butler of Columbia has been elected president of the college, and will also hold the professorship of the history and institutes of education. The other positions on the faculty are being rapidly filled, and that professional school which all live teachers have long hoped for will soon open its doors to properly qualified applicants. The college-building, No. 9 University Place, contains a large lecture-hall, in which a series of free lectures will be given. Monographs on educational topics will also be issued from time to time, and several have been already arranged for.

The statement of principles which the Industrial education association issued recently is a most excellent pedagogic creed. It should be carefully perused by every teacher. The substance of it is as follows: —

The association holds, —

1. That the complete development of all the faculties can be reached only through a system of education which combines the training found in the usual course of study with the elements of manual training.

2. That the current system trains the memory

too largely, the reasoning-powers less, the eye and the hand too little.

3. That industrial training, to have its fullest value, must be an integral part of general education. While valuable in some measure alone, it is alone little better than manual training as leading to the learning of trades.

4. That it is not the aim of the association to teach trades. That boys and girls will, if educated according to the system which it advocates, be better able to take up the study of any particular trade, it recognizes as one of the results of the system. It is the development of all the faculties which it holds to be the essential aim of the system.

5. That the fact is generally recognized among those best informed on the subject of education that the kindergarten system produces the best results with young children. The association claims that the system which combines industrial training with the usual and necessary branches is nothing more than a development of the kindergarten theory, — a system found wise for young children modified and adapted to children of more mature growth.

6. That it holds the belief, that as children, wherever found, possess the same faculties and develop the same characteristics, this system should be introduced into all classes and grades of schools, the private as well as the public school, and not alone in the primary public schools, but in all those of more advanced grades.

7. It holds that this system tends to the development of certain moral qualities as well as to the development of the intellectual faculties.

8. That the various occupations which are by this system given to the children, render study less irksome than any system can in which the exercise of the faculty of memory is alone involved.

9. That there exists in this country a widespread disinclination for manual labor which the present system seems powerless to overcome. There is a wide range of occupations which our boys and girls might with advantage enter were it not that they are prevented from doing so by a false view of the dignity of labor. That one of the results of this system of education will be to destroy a prejudice which in a measure arises from a want of familiarity with hand-work.

The accompanying illustrations will give some idea of the way in which the present work is being carried on. In the autumn a marked change will take place, and children will only be found as pupils in the model school. The pupils in the college will be persons preparing for the profession of teaching.

NOTES AND NEWS.

THE annual convocation of the regents of the University of the state of New York will be held at the capitol building, Albany, on Tuesday and Wednesday, July 5 and 6. The papers to be read are, 'The education of the working-classes,' by the Rev. Luke Grace of Niagara university; 'The teaching of mental science in schools,' by Principal Samuel Thurber, Milton, Mass.; 'The study of law as a part of general education,' Prof. F. M. Burdick of Hamilton college; 'Moral training in schools,' Principal Eugene Bouton, New-Paltz normal school; 'The newspaper as an educator,' Regent W. A. Cobb, Lockport, N.Y.; report of committee on necrology, by Assistant Secretary Albert B. Watkins, Ph.D.; 'Private librarian,' by the Rev. Ezekiel Munday, librarian of city library, Syracuse, N.Y.; 'Overcrowding of school courses,' by Principal George A. Bacon of Syracuse high school. Andrew D. White of Cornell university will make an address on Wednesday evening. Thursday will be devoted to conference on the requirements for admission to college between a committee from the associated high-school principals of the state of New York and representatives of the college faculties. The committee from the high-school principals includes Prof. O. D. Robinson, Albany high school; D. O. Barto, Ithaca high school; C. T. R. Smith, Lansingburg academy; Arthur M. Wright, Waterville union school; Henry W. Callahan, Penn Yan academy; D. C. Farr, Glens Falls academy; C. H. Verrill, Delaware literary institute; ex-Principal Noah T. Clark of Canandaigua; H. P. Emerson, Buffalo high school.

— The Wisconsin state superintendent of public schools has done what seems a most excellent thing. A similar custom may prevail elsewhere, but, if so, we have never noticed it. He has issued in pamphlet form all the laws relating to public schools passed at the last session of the state legislature. The pamphlet contains a copy of each law amended as it now reads, and a copy of each additional statute passed at the session of 1887. The plan is an excellent one, and should become general.

— Thomas M. Balliet has been re-elected superintendent of schools of Reading, Penn., for a term of three years.

— The Newark (N.J.) board of education had another acrimonious discussion over Barnes's 'History of the United States.' Although the book was bitterly assailed by some members of the board, it was finally adopted as a text-book in the city schools.