

HOW MANUAL TRAINING CAME TO EAST ORANGE.

At each Annual School Meeting for several years Mr. Johnson, a resident of Park and Washington streets, proposed Manual Training as a part of the High-school course, but both the public and the Board of Education were apathetic, while the School Administration thought it of possible use in a community of mechanics, but hardly adapted to East Orange.

Finally, at the Spring School Meeting of 1902, when it was again proposed, some one moved "that the Board of Education be instructed to investigate the subject and make a report to the next annual school meeting a year hence." It was so voted. This was soon forgotten, except by an alert citizen who reminded a newly-elected School Commissioner that a report would be called for, so he brought the matter up at a Board meeting, whereupon the president, Judge Joseph L. Munn, appointed Messrs. Hulbert and Chambers to investigate and report its findings to the Board. Then Dr. Chambers asked Mr. Hulbert to take it up by himself and he proceeded to gather up what he could find, and having reached a conclusion, formulated his observations and reflections in a written statement.

This was first read to the Board of Education; then it was incorporated in the "Annual Report of the Board of Trustees" and was thus presented to the Public School Meeting of 1893 at Commonwealth Hall, presided over by Judge J. Franklin Fort.

The report made a favorable impression, was adopted without opposition and a special appropriation voted to install it in the High-school. There being no suitable place for such a work in the regular class rooms the High-school basement was selected, a wood floor put down and work-benches put in to test the experiment under adverse conditions.

Happily, the Superintendent discovered Miss Mahon, who had enthusiasm as well as talent, and through her skill, sagacity and progressive ideas the department has won favor and vindicated itself and led to the adoption of manual training by all our grammar schools.

REPORT ON MANUAL TRAINING.

In education there is to be seen a tendency to break away from the traditional and to find a *natural method* by which the mental, moral and physical nature may be trained together in greater harmony and proficiency.

In pursuit of this idea, back in the early part of the century, Froebel invented the children's garden with its object lessons, and the idea has survived until the Kindergarten is becoming engrafted on the school system.

Certain features of the Technical School of Russia, exhibited at our Centennial Exposition in 1876, contained the germ that has grown into MANUAL TRAINING, a term used to define simple processes of mechanical construction after models, which "train the eye to a sense of form and proportion, and the hand to become the ready servant of the mind." It employs an *Intermediate Course* between the Kindergarten and the high class Technical and Trade Schools. The achievements of these Technical Schools, such as the Polytechnic of Brooklyn and Troy, the Industrial of Worcester, the Massachusetts Institute of Technology in Boston and the Polytechnic of Washington University have greatly promoted the idea of a preparatory course. It was under the direct auspices of the latter that the first distinct school of Manual Training was started in St. Louis in 1879; then followed in 1883 the Free School of Baltimore; in 1884 the incorporation of the Manual Training School of Chicago, by members of the Commercial Club, who will this year be rewarded with a mammoth object lesson representing the industries of the world. In the same year came the famous Scott Training School of Toledo; in 1885 followed the Manual School of Philadelphia and in 1889 the Pratt Institute of Brooklyn.

In the meantime Manual Training has been introduced as adjuncts, or as part of the school system, in hundreds of cities and towns east and west. Where school boards have not responded to the demand, public spirited citizens have come to the rescue; as in Newark, where the Manual School was established by the Board of Trade. In Morristown it is supported by popular subscription. There is the Martha Institute in Hoboken, while in Orange, Montclair, Union Hill, Ridgewood and other towns it has become an important and valued feature of the Public Schools.

In Elizabeth it was introduced and then thrown out by the School Board. Agitation for it is renewed with the prospect of its re-introduction. This is the only instance of its adoption and abandonment that has come to the notice of your committee. Elsewhere it seems to be taking deeper root as experiment goes forward.

It should be noted that the cause of Manual Training has advanced through the influence, not of theorists, not even of professional educators, so much as through the substantial support of men eminent in what are called *practical affairs*.

Great significance must be attached to the earnest devotion to an idea exemplified by the founders of Pratt Institute in Brooklyn and the Armour Institute just organized in Chicago.

A few weeks ago your committee called upon Col. Robinson at Cincinnati. While in charge of the Ohio State Penitentiary he was perplexed with the problem of dealing with 1,200 hoodlums under twenty-three years of age, who were mostly illiterate and without training in manual labor or knowledge of any art or trade. What would equip these young men for self-support; what would give them habits of industry and lead to a change in their career when their short sentences should end? He resolved upon a night school for teaching common branches and a day school for Manual Training.

This double instruction worked a great reformation in character and developed the capabilities of these young men in a marked degree; gradually they were found fitted to learn some useful trade and many became skilled workmen during their confinement, and useful citizens since. Col. Robinson arranged with several friends to give employment to these inmates, as their liberty was regained, and he has felt rewarded by their average good behavior and efficiency. His story of the work and its resulting influence on hapless and heedless youth it were impossible to here reproduce in its full force and effect.

On leaving State service, poor in pocket but rich in experience, he ran in debt for rent and equipment to start a Technical School in Cincinnati, charging a moderate tuition. He sought out parents who had incorrigible boys and would get hold of pupils who had been expelled from the Public Schools for one or another misdemeanor. In his workshop the restless, mischievous or vicious youth has a chance to work off his exuberance, and here the dull and listless often receives his first intellectual awakening. Never before has he taken any interest in study or work, but somehow he is captivated, and thus stimulated, he becomes studious, and a complete transformation is brought about.

This *moral* effect of Manual Training was emphasized to your committee by the principal of the English High School and Manual Training of Chicago, as well as by our neighboring School Superintendents. Mr. Cutts, of Orange, and Mr. Spaulding, of Montclair, including the New York College for the Training of Teachers. Some day the unpromising lad now in school will be elected to the New Jersey Legislature and the Citizens' League will hold us responsible for his ethical standing.

Particular stress was also laid upon the *educating force* found in these methods; the tendency to order and neatness. The

pupil of slovenly habits sees the defects of his work staring him in the face; he is impressed there is a right and a wrong way; and that bad work "gives him away." There are no text books to copy, no good means of cribbing from his bright companion. He must perform, and ere he is aware he is emulating and rivaling others in the quality of his work.

These institutions are far removed from the more advanced courses of technical or trade schools. "Positive manual elements are incorporated into the course of study, but dexterity in special work and shop products is not so much aimed at as to quicken the intelligence and embrace all lines of culture." It opens the window and invites the youth to look out upon the various activities of life. Instead of saying "Hands Off" says "Try your Hand," not in a solitary and lonesome way, but in companionship with those who know as little about it.

Shop instruction in mechanics is like laboratory work in science—merely illustrative. No exercise is continued until it becomes a muscular habit. It is useful only so far as it develops thought and observation. In these manual classes no attempt is made to teach a trade. Instead of giving the pupil a full apprenticeship in some handicraft, he is simply taught first principles in drawing, modelling and construction.

All courses of study in the common or public schools are *preparatory*—preparation for college or training for the practical affairs of life. Our children study botany, not with professional intent, but to stimulate close observation, to classify, analyze and the more thoroughly to enjoy the infinite variety and beauty in nature.

Industrial classes are conducted with the like purpose of enlarging the scope of the young mind and of bringing out latent talent. You may fill the mind, at this impressive period, with a large array of unrelated facts, with rules committed to memory, and almost stifle it with knowledge, and yet neither educate it for independent thought, nor develop the pupil's natural powers.

The chief value of the Manual course is its direct means of *educating*; coming at once to first principles; first learning a law of mechanics and then applying it and mastering it through practice, until it becomes a part of the pupil's living experience, never after to be wholly lost.

What is it that gives the country-bred boy self-reliance and a fairer chance in the race of life but this early experience which bids him not only see how a thing is to be done, but take hold and do it?

There is uniform testimony to the fact that the pupils who take manual courses do not fall behind in other class studies. Opportunity for comparison occurs in the high schools in Chicago, where one school gives a great amount of attention to wood-turning, joinery, carving, fine cabinet work; constructing patterns, mould-

ing, casting, turning and fitting of metal: and another High School devoted to a like course in science, mathematics, etc., but without manual training. Then, too, in many schools the manual course is optional or elective as in Springfield, Mass., where its effects are marked.

Manual Training presents things to the mind in a new way and often teaches the pupil how to study, and so helps his acquirement in the use of text books. Then the shift from one to the other is recreating. The class rushes into the Tool Room with enthusiasm; some engage in separate work, while half a dozen will unite in the construction of a table or cabinet. An hour on their feet at bench-work brings fatigue and then the seats in the study-room become restful and mental exercise again refreshing. Reflex influence brings the two into harmonious and prosperous relations.

We sought the opinion of a Senior in a technical college, who graduated a few years ago from our East Orange High School. He is positive such a course would have been of immense benefit to him in helping to find what he was fitted to do. There are hundreds in his college who have no talent for the course they are pursuing; they simply took a fancy to be electricians or civil engineers because of the general activity along these lines. And right here the Manual course seems of especial service in producing natural selection and in giving the youth his bent, perhaps for life; and here it well supplements the older methods.

No part of our education is quite so valuable, after all, as that which finds for us the work we can best do; and in this respect Manual Training is going to be trusted with that faith which the solitary traveller reposes in the sign-boards that mark the way at country cross-roads.

Your committee is converted to its importance and recommends its adoption, after careful scrutiny into the plan best suited to our situation. Many experiments are being tried, from which we can gather valuable hints. In thoroughness and range of experiment perhaps the city of Boston takes the lead, where distinctive methods are being employed side by side.

We believe that Manual Training is coming and that it is only a question of how and when to get ready for it.

In this preliminary report we have not felt called upon to enter upon the cost of outfit and maintenance, but it may be in place to refer to an act of the legislature by which aid is given in the support of any manual training school which expends a sum between \$500 and \$5,000 per year—said school being entitled to draw a like amount from the State exchequer. So if we have half an interest in the subject we may put it to the practical test.

Respectfully submitted,

GEO. S. HULBERT, Chairman.

A Mass Meeting, held at Commonwealth Hall, Feb. 6, 1897, was addressed by Mr. Henry H. Hall, Chairman, and Messrs. A. P. Boller, Henry G. Atwater, Geo. R. Howe, Wm. H. Baker, Geo. F. Seward, Hamilton Wallis and Geo. S. Hulbert.

REMARKS OF MR. GEORGE S. HULBERT.

MR. CHAIRMAN AND NEIGHBORS:

In listening to the discussion that has taken place in two public meetings prior to this one, I have noticed the question that the Chairman has just referred to rather dominated those meetings, and it seemed to me that it was the unfortunate question that projected itself into the last national campaign; and I greatly regretted with many of you that when Senator Hill advised Mr. Bryan to stick to the silver question he had not followed it. Instead of that he listened to Mr. Altgeld, as you all know, and raised the question of class against class, which aroused a great deal of passion, prejudice and bitterness, leaving in the mouths of the American people a bad taste; it will be some time before we outgrow the result of that bitterness; and it seems to me that of itself is a public calamity. In a lively Western State the epigrammatic editor of the *Emporia Gazette* has summed up the result by declaring that "Kansas started in to raise Hell and is now suffering from an overproduction." (Laughter.)

Mr. Chairman, we are in danger of doing the same thing, because we are raising here a false issue when we assume that the citizen who rides a horse has a different interest in the public roads from the man who rides a bicycle or rides on a trolley or goes afoot. Your Law Committee has stated very clearly that these public streets belong to the people, they are public property, and the merest beggar and tramp can walk these streets with as great freedom as you and I. It is not a question of private property or personal estate or personal position. The question never should have been raised and never would have been raised by the people themselves, except that some demagogue whispered it into honest men's ears. (Applause and cheers.)

We can go around to the Oval and witness a ball game and cheer on the contestants; but when we come to watch men win great prizes in the game of life, can we not do the same thing? We admire preëminence in law, in literature, in war and states-

manship, and why not success in business? I am commanded to love my neighbor, and I am going to love my rich neighbor just as well as the poor. I am not going to isolate him and make him lonesome. It has already been said he is shut out of heaven by the story of the needle's eye. (Laughter.) Let us make him happy while he is here. (Laughter.)

Now, it seems to me that if we can get rid of this false issue we will do much to clear the whole situation, and then you have left only the real issue, which is that these avenues under consideration are held coördinately by three bodies, or may be at least by two bodies. Here is the County Board, so called, of Freeholders, composed of thirty men. They have not run away with two avenues (Central and Park); indeed, they have treated these with peculiar respect, since they have surrendered every other county road to the trolley; now, why should five men of excellent reputation, who constitute the Park Commission, seek to injure these avenues when they have a special purpose for beautifying them? I cannot see how the town of East Orange is going to sacrifice anything when it gives its consent to turn these streets over from one County Board to another County Board. If there is danger in that, no one has yet pointed it out.

Now, there may be some underlying questions with which I am not familiar, but as the law has been clearly stated here to-night, it seems to me that the case is one that can be easily adjusted by these three coördinate branches; and while I do not want to say a word that would produce irritation among the people, let me ask, cannot these three coördinate branches come together in the same spirit and fix this thing up in a pleasant and proper way? (Applause.) By any other course the thing may go amiss. For one, I have no personal cause of complaint against the trolley company, and would no more think of abusing it than I would of abusing Benjamin Franklin for bringing electricity from the clouds, or Faraday or Professor Bell or Edison or Tesla. They are all great benefactors; but I do not suppose any one of them could run the traction company as well as Dave Young. Let us look upon him as a public benefactor, and if you want to secure better service, don't scold, carp and criticise, and set the man edgewise, but go to him and tell him what you want, and he, no doubt, will look at it in the right way. If you want to do business with a man, you go to him in a friendly way and show him what is your common interest. Now, let us conduct *public* business as we would *private* business.

You have heard that some men are as sharp as steel traps; but a steel trap that is good for anything knows when to shut up. (Laughter and Applause.)