

a general course. School shops for Industrial training should not teach trades, but general principles and processes underlying all mechanical operations. We should not aim to make carpenters and machinists in these school shops, but to teach our boys how to use the tools that carpenters and machinists use, and to use them skilfully. There are very many industries requiring skilled educated labor that the course in any school shop at present in America, would not reach at all. Among these are the pottery industries, for which we have great natural resources, woven and printed fabrics, as carpets, figured linen, woolen and cotton goods, lace, wall paper, etc., etc. All of these industries depend almost entirely for their value on a knowledge of art and design. It will be seen that Industrial Drawing is the principal factor in a large number of Industries, and hardly one can be named that does not depend more or less on it. In our Public Schools it is almost the only subject at present that leads pupils to think of industrial pursuits. Here is something, then, that every city and town can do and at once, as the expense is very small. In large cities a special teacher, or Superintendent of Drawing, of the broadest requirement, is needed. In smaller ones that cannot, for the present perhaps, afford this expense, a competent instructor could be engaged to plan the work, and come at the beginning and several times during the year to instruct the teachers and inspect what has been done. By this means the expense would be ridiculously small in comparison with the benefit derived. Care, however, should be taken in selecting a system of drawing and a person to direct it. All drawing is not Industrial drawing, neither

are all systems, though they may be so entitled. There is more than one city and town in Ohio that is folding its arms in the most contented manner, fondly believing that it is safe; Industrial drawing is studied in its schools; when the fact is, the drawing it is pursuing is almost worthless and a waste of time, so far as laying a foundation for Industrial education is concerned.

Having come from a state that is most liberal in its provisions for Normal Schools, and having spent nearly five years in them as pupil and teacher, I feel Ohio's great need in this direction. I believe it would be folly to interrupt the agitation for Normal Schools and County Superintendents till those points are gained. The next step would be to place in these schools thoroughly-trained teachers of Industrial drawing and give them well-equipped drawing or art rooms. For nearly ten years, Massachusetts has had the best of drawing teachers in her Normal schools, with art rooms in all of them, splendidly equipped with casts, copies and appliances, and which are not equalled, and only approached by the high school in one city of Ohio. In this way nearly ten thousand teachers have been instructed in addition to the vast influence the State Normal Art School has exerted. In Ohio as soon as possible, a law, similar to the Massachusetts law of 1870, should be passed making Industrial drawing one of the required subjects of study in all public schools, and requiring all teachers to be examined in drawing when appearing before an examining board for a certificate to teach. After these things are accomplished, something can be done towards a special provision for industrial education.