

# THE SCHOOL MAGAZINE.

SEPTEMBER—OCTOBER, 1880.

## INDUSTRIAL EDUCATION.

BY PROF. W. S. GOODNOUGH.

*(In the Ohio Educational Monthly.)*

TO all who have made any study of the subject, who know what Europe has done and is doing for Industrial Education, and who have investigated the state and character of our industries, it is evident that simply as a matter of protection we cannot delay action in this matter much longer. It is a noteworthy fact that those industries which place the greatest value, through skilled and artistic labor, on the smallest amount of raw material are the most valuable from an economic point of view; not only because the value of the raw material is increased perhaps many hundred fold, but because the cost of transportation, in proportion to value, is slight. The Frenchman who sends over lace that could be put in one's hat, which is so costly as to take a cargo of wheat or mowing-machines to pay for it has the advantage of us. Again the Frenchman or Englishman who takes a piece of clay worth five cents and turns it into a piece of pottery worth fifty dollars, is manifestly superior to our workman who can only make the same piece of clay worth one dollar. By an examination of the reports of the Bureau of Statistics it will be seen that we export principally,

natural products and the cruder and more bulky kind of manufactures, such as mechanical appliances, labor-saving machines and the like. Our imports include, mainly, those articles which are costly in proportion to their bulk, and require high technical and artistic skill in their production.

A large manufacturer recently said "I want fifty hands to whom I will pay one hundred dollars a month each, and twice as many to whom I will pay seventy-five dollars each, a month, and I cannot obtain them. Plenty can be found to do the common kinds of work, but I cannot obtain a sufficient number of skilled workmen." The complaint is common. We have no system of apprenticeships, it is almost impossible for a boy to learn a trade; trade unions are against him, and trades are now divided into a multitude of distinct parts or branches. Again, our boys do not want to learn a trade; they prefer some occupation at which they can wear good clothes. Industrial occupations have never appeared dignified in their eyes. How many boys if they could have their choice, would go into a machine shop or any industrial establishment of any