EDITORIAL

TECHNICAL EDUCATION ILLUSTRATED.

By DANIEL DE LEON

Huxley has somewhere said that technical education is a national necessity in competitive society. The nation that would win success in competition with other nations must train its members in the arts of production and distribution. That Huxley was right may be seen in the great stress laid on technical education by the capitalists—who are “the nation”—of all the countries engaged in the struggle for supremacy in the world’s markets. The capitalists of England, France, Germany and the United States lead in its promotion. Those of Germany, especially, excel in this requisite to capitalist triumph. To German technical education is, in a great measure, the success of German capitalism traced. German technology is accordingly at once the fear and the admiration of the whole capitalist world to be copied and improved upon, if victory is to be assured. This applies more particularly to England and the United States, both of whom are being closely pushed by the products of the Teutonic technician, in international competition.

Huxley might have gone a little further and said that technical education is not only a national but a trade necessity in competitive society. Even in trades which are domestic in character and exempt, through the operations of the tariff, from international competition, such as newspaper and job printing, etc., technical education is urged. The necessity for a low cost of production in a trade that is hampered by a lack of inventive genius and a low supply of cheap, intelligent labor, makes technical education imperative, if competitive destruction by other closely related trades is to be averted. Technical education is a means of increasing the labor supply, either indirectly, by enhancing the efficiency and productivity of the labor at hand, or directly, by swelling the actual number of proficient laborers available in a trade. Technical education is now receiving recognition from
employers because it offers a means of breaking down “labor corners,” destroying the restriction of apprentices, and improving the quality and the quantity of labor, while, at the same time, decreasing labor’s wages. Proof of the foregoing can be found in the over-crowded labor market and low wages confronting Germany’s highly trained workingmen; and the favor technical schools find in the eyes of employers’ associations, more particularly the uses to which they are put in times of strike. It was the pupils of the Columbia University technical school who took the places of the striking electrical workers at Watsessing, N.J., some years ago.

Of course, the technical school directors will deny that technical education has any other than laudable aims. They will contend that they desire to teach COMPLETE trades, in the interests of the students exclusively. They will so announce their intentions. Here, for instance, is “The School of Lithography” connected with the Winona Technical Institute of Indianapolis, Indiana. The opening line of this school’s prospectus says:

“The use of Lithography for both art and commerce in America has increased in recent years more rapidly than it has been possible to train young men in the trade.” (P. 11.)

Farther along (P. 17.) occurs the following:

“The production of lithographed work in America is now limited only by the ability of the many large houses in the trade to secure competent men to fill the various positions in their studios and shops. The work pays better than most trades and the employment is constant. . . . Lithography as a trade appeals to those of artistic tendencies. . . . It appeals also to the scientific mind, as the production of the work embraces the sciences of chemistry and mechanics in their highest development.”

As will be seen this prospectus extols Lithography as a trade possessing special attractions and inducements. It is a growing trade. Employment is constant, artistic and scientific. Above all, labor is lacking and wages are high. Who wouldn’t be a lithographer, for, what more can the soul of man desire?

This prospectus is prima facie evidence of the object of technical schools. Why these charms and inducements, if the object be not a bigger supply of cheap, intelligent labor than exists at present? This prima facie evidence is further
strengthened by the actual facts in the case. It is true that “the use of Lithography for both art and commerce has increased in recent years”; so also has lithographic concentration, invention, subdivision of labor and last, but not least, intensification of labor, all of which has increased lithographic productivity while decreasing lithographic forces and wages. It is, therefore, absolutely false to say that “the use of Lithography for both art and commerce has increased in recent years more rapidly than it has been possible to train young men in the trade.” In fact, in all branches of the trade, such are the periodic spells of idleness and the tendency to reduce wages, that young men are leaving the trade as fast as opportunity permits. This is especially the case in the artist’s branch, which was, at one time, the most lucrative and leisurely branch of the trade. But, alas, how the mighty have fallen!

At the present time the employment bureaus of all the labor unions have long lists of unemployed. All of the employees are wondering what use the employers will make of this idleness when it comes to signing trade “agreements” on April 15. They fear that the results will mean more reduced wages, intensified labor, and espionage by the employers’ association. Surely there are a few things that that prospectus has omitted. Facts are among them. All of which will help to make clear the objects of technical education.

“Sufficient unto the day are the evils thereof”—all that remains is to point out that Lithography, though protected by tariff, is beset by severe competition from typography, especially that portion of it using the three color process, in which there is continued improvement and ever better results. Lithography has also international aspirations. It wants to surpass Germany as the “art” producer of the world. Hence it is constrained to provide a surplus of labor that will break any “labor corner” that may arise during prosperous times and strikes.

Though technical education is thus used, it is not entirely without good phases, from a working class standpoint. In making skill and intelligence super-abundant it is breaking down the barriers between high and low paid, i.e., it is promoting the solidarity of labor. It is also creating a body of working men whose education will give them an outlook on life that will cause their low economic condition to become unbearable. Finally, it is developing the men and women who will compose the industrial organizations that will transform Capitalism into Socialism. Technical
like public school education serves not only Socialism but Capitalism as well.