

## THE METRIC SYSTEM IN RELATION TO INDUSTRIAL PREPAREDNESS.\*

BY J. W. ENGLAND.

Across the waters of the Great Deep there is now raging one of the most terrible wars in history. No man knows when or how it will end, but one thing is sure and this is that it *will* end and that it will be followed by another war—the war of trade. Vulcan will supercede Mars. And this war—a war of peace—on the part of Europe and other nations, will be a war for life and growth and development, and it will be waged chiefly and directly against this country. It will be the rest of the world against the United States. Unquestionably, the ending of the European War will produce an industrial crisis in this country, but this country has never failed in the past to meet any crisis, and it will not fail in the future.

But it behooves the American people to prepare for the crisis by putting their industrial houses in order. They must prepare themselves not only for the defense of the nation, but also, along scientific, industrial and financial lines to the end that the wonderful natural resources of this country may be conserved and utilized to the best advantage, that manufacturing industries may be encouraged toward better growth and development and that our export trade may be made worthy of this great nation. The United States cannot isolate itself in the future, commercially. It must develop a world-wide commerce.

The American business man who wants to do an export business has a whole lot to learn from his European competitors. He must give the foreign buyer what the latter wants, not what he (the American business man) wants. He must ship as the foreign buyer wants shipments made. He must give longer credits. And he must give a service that completely satisfies.

In all foreign trade, except that of Great Britain, the metric system of weights and measures is used almost exclusively, and if the American wants to do an international trade he must manufacture his goods in metric units, and when he does this, he will see the folly of using two systems of weights and measures, the older and the new; and he will be in favor of making the use of the metric system compulsory in this country, as he will not want to manufacture goods in two different systems, one for export trade and one for home trade.

Now what has retarded the general adoption and use in this country of what is admittedly the simplest and most scientific of all the systems of weights and measures in the world, a system whose value was legally recognized in the U. S. Government Service half a century ago?

It has been probably an inherent dislike on the part of the American people to change the every-day methods of doing things unless this has to be done, and it has been, also, the absurd system of exact equivalents that has been used to express the relative values of the two systems. Furthermore, no account has been taken of the fundamental habit of the American to *write* in units and decimals, and *speak* in units and fractions—a hybrid practice, if you will, but *still* one

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to be reckoned with. The American has not been taught to *think* in metric terms; he has been taught to use only equivalents, and this has been a serious mistake.

The American people have been using a metric system of currency for the past century, and would never consent to use a pound-shilling- and pence-system. When an American *writes* his currency, he uses units and decimals; when he speaks he uses units and fractions. Thus he writes \$1.25, \$2.50 and \$3.75; he does not write, respectively, one dollar and twenty-five hundredths, two dollars and fifty hundredths, and three dollars and seventy-five hundredths; and he *speaks* of  $1\frac{1}{4}$  dollars,  $2\frac{1}{2}$  dollars and  $3\frac{3}{4}$  dollars. He does not say 0.25, 0.50 and 0.75 of a dollar, but 25, 50 and 75 cents, or  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$  dollars, respectively.

It seems to me that any attempt to popularize the metric system and bring it into common use must take into account this national characteristic.

Of course, the user of the Metric System should have a reasonably accurate conception of the relative values of the metric units in comparison with the older units to which he has been accustomed, but it is sufficient for all practical purposes, to remember that a *meter* is about 1 yard (39.371 inches), a *liter* is about 1 quart (2.1135 pints), and a *kilo* is about 2 pounds (2.2045 pounds). Then, the American housewife could order her dress goods in meters and fractions of the same, and her household goods in kilos and fractions for solids, and in liters and fractions for liquids, and in a very short time would become as familiar with metric units and fractions as with the American dollar and cents.

The big thing in using the metric system is to use as few terms as possible and to *think* in these terms and fractions or decimally, and then the use of the metric system will become as absurdly simple as the use of the American system of currency.

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Colonel George W. Burr, U. S. A., Commandant at the Rock Island Arsenal, has had the following "sermonette" placarded in all the shops there. It is an appeal which is directed to everyone:

I am more powerful than the combined armies of the world.

I have destroyed more men than all the wars of the world.

I am more deadly than bullets, and I have wrecked more homes than the mightiest of siege guns.

I steal, in the United States alone, over \$300,000,000 each year.

I spare no one, and I find my victims among the rich and poor alike; the young and the old; the strong and weak; widows and orphans know me.

I loom up to such proportions that I cast my shadow over every field of labor from the turning of the grindstone to the moving of every train.

I am relentless. I am everywhere—in the home, on the street, in the factory, at railroad crossings, and on the sea.

I bring sickness, degradation and death, and yet few seek to avoid me.

I destroy, crush or maim; I give nothing, but take all.

I am your worst enemy.

I AM CARELESSNESS.

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