

daily Press, that the Government is taking vigorous action towards removing all treaty barriers:—

Ottawa, June 22nd.—An assurance was given by Hon. Mr. Fisher in the House to-day, that the policy of the Government was to recognize Japan as a nation with which Canada might profitably enter into trade relations, and that the Government had taken steps through the Colonial Office, to get the benefit of the special treaty made in 1894.

In the meantime, it behoves concerns making goods which Japan buys, to see to it that our Imperial ally is thoroughly advised as to Canadian manufacturing resources.

Coming Renaissance in Metallurgy.

In view of the coming revival in iron and steel industry, it is of vital importance that Canadian Engineers be kept fully informed of the latest Electro-chemical and metallurgical processes; so that the resources of the country—especially our *refractory* ores—may be utilized to the greatest advantage. Hence, while design and achievement in Civil, Mechanical, and Electrical Engineering generally, will be fully set forth in our columns by well-known specialists and experts, the revelations of the chemical laboratory, microscope, and testing machine—as to the properties and commercial values of ores, minerals, and metals, will not be neglected. In carrying out this enterprize, "The Canadian Engineer" is opening out new soil, which it is believed will be as profitable to the alert Engineer, as the prairie lands of Manitoba are to the patient, intelligent, industrious immigrant of to-day.

Upon special request, we have been favored by the Editors of "Electro-chemical and Metallurgical Industry," with the last four issues of that excellent journal, containing the unusually interesting series of papers entitled: "Metallurgical Calculations," by Dr. J. W. Richards, Professor of Metallurgy in Lehigh University. We are unknown to the Treatiser, and have no personal interest in booming his work; but of such intrinsic worth have we found the Thermochemical data contained therein; and of such superlative value to the progressive practical metallurgist, that we deem it a privilege to advise everyone engaged in Laboratory practice, and indeed all interested in the Art of Metallurgy, to secure copies straightway.

Correspondence Section.

Editor Canadian Engineer:—

Sir,—I have been interested and to some extent amused at the manner in which the opposition to the Metric System has developed. Oliver Wendell Holmes described what he called the "hydrostatic paradox of controversy," an analogy drawn from hydrostatics where a small column of water will keep to its own level a much larger column connected with it. So the pros and cons drag on as long as there are debaters who take pleasure in splitting hairs. The whole tone of the opposition has been that of a debating society rather than of sound scientific discussion.

Every report on the Metric System presented to Congress by the Committee on Coinage, Weights and Measures has emphatically recommended its adoption as the sole legal standard in the United States. While we have delayed official action, the system has surely made its way into extensive use for many

purposes. It is decidedly wrong to say that the matter has been "happily ended in this country by the defeat of the proposed compulsory legislation." First, the proposed legislation is not compulsory upon manufacturers, who may use any units they choose, although many prefer the meter even now; it has not been defeated because it has not been voted upon, and the matter is not ended, either happily or otherwise, nor will it be until it is settled right. The "American Pharmacopœia" has all of its standard prescriptions stated in the Metric System. This means that the physicians everywhere are familiar with these units and are to an increasing extent using it. This is especially true of the more intelligent. The entire subsidiary silver coinage of the United States is based on the Metric System. The nickel five-cent piece weighs exactly 5 grams, and the weights of the assay commission are each year standardized by reference to metric standards. In the customs service, the law requires invoices of goods from metric countries to be made out in metric units. This covers more than half of our import trade. As far as known, technical laboratories connected with the customs service use the metric units. In the analysis room for classifying textiles in the New York Custom House the Metric System is used almost entirely, although the final reports are translated into customary units. It is used throughout the entire work of testing imported sugars. It is the official system used in all triangulation and topography (except heights), transcontinental levelling, base-bar work, computations, and in a large portion of the instrument construction. In the Navy Department it has been for twenty-five years the official system in all medical and surgical work in the hospitals and dispensaries. Likewise in the army. The Library of Congress uses the system in giving the dimensions of books, prints, manuscripts and broadsides and the standard library cards, millions of which are printed annually, are all in metric sizes. In the Post Office Department foreign postage rates are based on metric units, metric scales being provided for the purpose. Finally, throughout the entire scientific laboratories of the Government the Metric System is widely used.

In manufacturing, the large firms of tool builders are making full lines of metric dimension tools. They are doing this now for profit even before the Metric System is adopted as the only legal standard. "Nothing succeeds like success," is an old motto, and the wonderful advance of science in the past fifty years is partly to be traced to the fact that scientists have a single universal system in the Metric System. It is true that some old units persist in metric countries, although nothing like a chaotic condition prevails, as Mr. Halsey would have us believe. On this point the opposition has greatly exaggerated the facts. I still hold to my former statement that there is little active opposition to the Metric System in this country. Messrs. Halsey and Dale, two editors, are doing all the talking. Resolutions and votes of organizations are a rather poor test unless the entire discussion is published, as was done by the American Society of Mechanical Engineers and the Franklin Institute. Those who read these documents would be convinced that the metric presentation in the case is convincing. There is no organized movement in the United States in favor of the Metric System. It has made its way by force of its intrinsic merits and will continue to do so even if official action is not taken. The fact that so many associations have favored the Metric System is very encouraging as showing the movement is making considerable headway. In a list of those favoring the adoption of the Metric System should, however, be added the National Board of Trade and the Society of German-American Technologists. The whole theme is far above the claims of those who live only for the present, or for their own community, or for their particular self-interest. The attitude of any man on this subject will depend largely on the breadth of his sympathies, and the great men like Edison, Carnegie, Westinghouse, Lord Kelvin, Elihu Thompson, etc., etc., will be found ranged upon the metric side. I am glad that Mr. Halsey is stirring up the question. I believe that it will help the adoption of the Metric System because some opposition is needed to stir up the deep-seated but unexpressed feeling that exists in its favor. Respectfully yours,

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