

provides for the introduction of the metric system into government use. The sentiment in favor of the metric system is so far advanced in the British Empire that it is a question whether we will not be anticipated in its adoption.

"The expression of boards of trade, educational bodies and colonial governments leave no doubt but that England would immediately follow us in the adoption of the metric system should we be fortunate enough to first take the step.

"SCIENCE, 30th March, 1906."

Simon Newcomb, who is one of the leading mathematical scientific authorities of the world, and in this capacity has often represented the United States in international conferences, is a native of Nova Scotia.

### THE WASTE OF ARITHMETIC.

#### ENORMOUS AMOUNT OF ENERGY CONSUMED IN UNNECESSARY CALCULATIONS.

[An Authoritative and late Canadian Opinion.]

Prof. McLennan shows business men the advantage of the Metric System.

'Two-thirds of a year in the life of every child would be saved by the adoption of the metric system of weights and measures.'

Such is the estimate made by committees of inquiry into the subject—an estimate endorsed by Professor J. C. McLennan, of the University of Toronto, in an address to a gathering of business men and others in the reading room of the Board of Trade yesterday afternoon—in Montreal.

The address, which was given at the instance of the Department of Inland Revenue, Ottawa, showed the advantage of the metric system over that of British weights and measures; the relationship which metric standards of weights, measures, length and capacity each bears to the other; the facility with which arithmetical calculations can be made, and the comparative ease with which commercial transactions can be carried out.

The examples which Mr. McLennan gave in illustration of his argument were striking demonstrations of the utility of the metric system. For instance, he showed the difference in the two systems of reducing measures to a common demonstration, by the following calculations:—

Metric system—Reduce to millimetres following distances:—

8 kilometres	6 decimetres
7 hectometres	1 centimetre
8 decametres	2 millimetres,
9 metres.	

No calculation is necessary, the answer being 8,789,612 millimetres.

British system—Reduce to inches the following distance:—

5 miles	3 yards
4 furlongs	2 feet
7 rods	9 inches.

Quite an elaborate calculation was necessary before the answer of 350,007 inches was obtained. It was the same with calculations to find the contents of a tank, the weight of water in a tank, the pressure on the bottom of a tank when filled with water, the volume of water that would be displaced by such a tank if floated in a lake and so on.

Among the reasons which the lecturer advanced for the metric system in Canada and the British Empire generally were:—

The metric system of weights and measures, like our system of notation in arithmetic, which is universally adopted by civilized nations, is a decimal system and involves but the single ratio '10.' For this reason, all reductions in the system are made with the minimum amount of labor, and with no more effect than that involved in the expression of a number. The advantages of the decimal system in the coinage and money of Canada are manifest, and it is claimed that it would be just as convenient to use a similar system in our weights and measures.