

often too apt to overlook the moral sentiments in human nature, and appeal too much to mental and physical in their system of moral discipline. Let us not forget that youth is to age what time is to eternity, and that the present life is the seed-plot of immortality.

Scientific and Literary.

THE METRIC SYSTEM.—There has been recently incorporated in Boston an association of teachers and others interested in the introduction of the metric weights and measures, under the name of the American Metric Bureau. Art. 2 of its constitution reads as follows: "The object of this bureau shall be to disseminate information concerning the metric system; to urge its early adoption, and to bring about actual introductions wherever practicable. To this end it will secure the delivery of addresses; publish articles; circulate books, pamphlets and charts; distribute scales and measures; introduce the practical teaching of the system in schools; and in all proper ways, as far as the means at its disposal will allow, the bureau will urge the matter upon the attention of the American people till they shall join the rest of the world in the exclusive use of the international decimal weights and measures." This bureau already includes among its members many prominent educators, and its numbers are rapidly increasing. An office has been opened at 13 Tremont Place, Boston, and, as soon as suitable arrangements can be made, branch offices are to be opened in New York, Philadelphia, Chicago and other central localities, where all persons interested are invited to call or write freely in regard to any matter pertaining to the work of the Bureau. Nearly every other nation of Europe having led the way, Russia is about to adopt the metric weights and measures. The special committee which is sitting at St. Peter-burg, at the headquarters of the Russian Imperial Technical Society, have not only come to the conclusion that such an innovation would be useful, but have also emphatically declared that the present is the fitting moment for the introduction of the metric system. They think that the change ought to be accomplished within two years. It is a remarkable fact that Americans, with all their boasted readiness to adopt labor-saving inventions and having led the world in a decimal currency, should be one of the very last peoples of the globe to adopt what John Quincy Adams, in his official report, pronounces the greatest invention of human ingenuity since that of printing, and a greater labor-saver than steam. The metric system of weights and measures has been adopted in France, Germany, Austria, the Netherlands, Southern Europe, and South America, and has been legalized in Great Britain and the United States.

The metric tables are decimal and simply related; for example:

LENGTH.			
10 milli-meters make	1 centi-meter	$\frac{1}{10}$	meter
10 centi-meters "	1 deci-meter	$\frac{1}{10}$	"
10 deci-meters "	1 meter	(1)	"
10 meters "	1 deka-meter	(10)	"
10 deka-meters "	1 hecto-meter	(100)	"
10 hecto-meters "	1 kilo-meter	(1000)	"
10 kilo-meters "	1 myria-meter	(10,000)	"

CUBIC MEASURE—CAPACITY—WEIGHT.

- 1 cubic centimeter or 1 milliliter ($\frac{1}{1000}$ liter) of water weighs 1 gram (1 gram).
- 10 cubic centimeters or 1 centiliter ($\frac{1}{100}$ liter) of water weighs 1 dekagram (10 grams).
- 100 cubic centimeters or 1 deciliter ($\frac{1}{10}$ liter) of water weighs 1 hectogram (100 grams).
- 1,000 cubic centimeters or 1 cubic decimeter or 1 liter (1 liter) of water weighs 1 kilogram (1,000 grams).
- 10 cubic decimeters or 1 dekaliter (10 liters) of water weighs 1 myriagram (10,000 grams).
- 100 cubic decimeters or 1 hectoliter (100 liters) of water weighs 1 quintal (100,000 grams).
- 1,000 cubic decimeters or 1 cubic meter or 1 kiloliter (1,000 liters) of water weighs 1 tonneau (1,000,000 grams).

Any one who will try to write down the common tables of long measure, cubic measure, liquid measure, dry measure, avoirdupois weight, troy weight, and apothecaries' weight, and also the cubical contents of the measures of capacity, and the weight of water each one holds, and the weight of a cubic inch or foot of water, may learn why the metric system is coming into universal use.—"*Home and School.*"

UNIVERSITY LIBRARIES IN GERMANY.—The *Illustrirter Kalendar* publishes the following statistics of the contents of the university libraries in Germany:—The library of the Berlin University contains 115,000 printed volumes and 40,000 charts. The University of Bonn contains 180,000 volumes, several hundred manuscripts and a large collection of maps. The University of Breslau has 340,000 volumes of books and 2,900 manuscripts. The Erlangen University has 120,000 printed volumes and 1,900 manuscripts, besides 50,000 treatises, 10,000 autograph letters and a collection of designs and engravings. The Freiburg University contains 250,000 printed volumes and 500 manuscripts. The Giessen University has 150,000 printed volumes and 1,208 manuscripts; that of Göttingen 400,000 printed volumes and 5,000 manuscripts; that of Griefswald 70,000 volumes; and that of Halle 100,000 volumes and 1,000 manuscripts. The University of Heidelberg has 300,000 volumes, 70,000 treatises, 3,000 manuscripts, 1,000 charts, a collection of maps and another of engravings. The University of Jena has 100,000 volumes, and that of Kiel 150,000 volumes and several hundred manuscripts. The University of Leipzig contains 380,000 printed volumes and 4,000 manuscripts. The University of Königsberg 220,000 volumes, in addition to about 50,000 double copies of books for the purpose of exchange. The University of Marburg has 120,000 printed volumes, but very few manuscripts. The University of Munich contains 283,500 volumes, 17,500 manuscripts, 3,600 portraits and 3,200 medals. The University of Rostock has about 140,000 volumes, that of Tübingen 280,000 volumes, 60,000 treatises and 2,000 manuscripts; and that of Würzburg more than 200,000 volumes and 2,000 manuscripts. The library of the Strasburg University is said to contain 300,000, of which 5,400 relate to the history of Alsace, and about 500 manuscripts. The *Illustrirter Kalendar* adds that the library of the Vienna University contains 211,220 volumes and 83 manuscripts, and that the library of the Basle University contains 100,000 printed volumes, 4,000 manuscripts and 180 charts.