

been divided into twenty-four sections, the reckoning in each section being based on a standard, subsidiary to, but directly related to the unit measure. In the twenty-four subsidiary standards the hours are simultaneous, although differently numbered in accordance with the longitude of the several sections. With the single exception respecting the numbers by which the hours are locally to be known, there is complete identity in every sub-division of time throughout the twenty-four sections. The many local days which follow in succession during each diurnal period are by this arrangement of subsidiary standards reduced to twenty-four normal days, each differing an hour in the moment of its commencement from the day which succeeds. Twelve of these normal days precede and twelve follow the primary standard or unit measure of time, which is the mean of the whole series of normal days. By this expedient, which has received the name of "the standard time system," the means have been provided by which all nations, without any apparent great departure from old usages, may observe substantially the one common reckoning.

The adoption of the system of standard time has already made considerable progress. In North America standard time was first introduced in railway economy; it has since been generally accepted by the mass of the community. In Asia the same system has been legally established throughout the Japanese empire. In Europe a general interest has been awakened on the subject, and at the present moment it attracts special attention in Austria-Hungary, Germany and Belgium; late advices give expression to the belief that standard time will be adopted by the railway service of these countries before many months. It is already observed in Sweden and Great Britain.

Thus, at the present day, standard time has been fully accepted in Asia by not less than forty millions of people, in Europe by almost an equal number, in America by more than sixty millions; and there is scarcely a doubt that in no long period it will be in use throughout the greater part of Central Europe, making a total number of probably two hundred and thirty millions of the most progressive peoples in the three continents who will have accepted the principles of reckoning based on a common unit. Without taking into account Central Europe, where the reform is on the eve of adoption, the unification of time reckoning has so far advanced that in Japan, Norway, Sweden, England, Scotland, Canada and the United States, all well-regulated clocks strike the hours at the same moment (although locally the hours are distinguished by different numbers), and the minutes and seconds in all these countries are absolutely synchronous.

The unit of measurement authoritatively established by the resolutions of the International Conference of 1884 is the basis of the system by which these results have been obtained; and we must regard this new system as the one which shall hereafter be observed by the great mass of the civilized inhabitants of the world in their daily reckonings and in their chronology. It is of first importance, therefore, that no doubt or ambiguity should exist in connection with it. By the resolutions of the conference of 1884 the unit measure may be defined as the interval of duration extending from one mean solar passage on the anti-meridian of Greenwich to the next succeeding passage. This standard unit has been variously designated as follows, viz. :—

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| 1. A Universal Day. | 4. A Cosmopolitan Day. |
| 2. A Terrestrial Day. | 5. A World's Day. |
| 3. A Non-Local Day. | 6. A Cosmic Day. |