

nature is a standard for the measurement of time, which humanity in all places and in all ages may accept.

The direct connection between each locality on the earth's surface and the world's standard chronometer is through the hour meridian. It is plain that when any given hour is indicated by the solar passage, the sun will be vertical over every part of that meridian in both hemispheres. Accordingly, the earth's surface being divided into twenty-four sections or zones, each extending seven and a half degrees on each side of its hour meridian, we obtain the means of establishing universally the one reckoning by the common standard. This has been termed the "hour zone system." By its use, the difficulties which have been referred to are overcome without any violent departure from our inherited ideas, and the exacting customs entailed upon us.

The unity of time is indisputable. Looking forward a few years, unity of notation may become indispensable; meanwhile, the present aim and object is to obtain in all civilized countries uniformity of reckoning. If a common notation were at once attempted throughout the world, it would come into direct conflict with the habits and customs which have everywhere prevailed from the first dawn of civilization. The hour zone system, while furnishing the easy means of transition to one notation, provides a way by which correct principles may at once universally be applied, and uniformity in time-reckoning substantially secured.

The hour zones theoretically extend seven and a half degrees of longitude on each side of the hour meridians, but an arbitrary enforcement of this limitation is by no means essential. The boundary line of contiguous zones must be governed by national, geographical, or commercial considerations, as expediency in each case will dictate.

The principles which underlie the hour zone system are: (1) that on the passage of the sun on any hour meridian it is held to be twelve o'clock (noon) throughout the zone to which that meridian belongs; (2) that the notation in each zone is directly connected with the common standard unit of the world by an established relationship. It is obvious, that if the notation in the several zones be thus connected with the world's standard, there will be a complete and systematic identification in the notation of each of the twenty-four zones. There will be differences, but the differences will in every case be known, the gradations being the invariable multiple of one hour. Throughout the globe there will be complete identity in the minutes and seconds. For example: when the reckoning is described in the tenth zone as 6 hours,