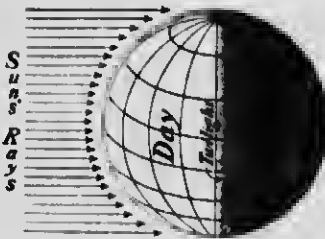


apart vary in time by one hour. Shipmasters carry clocks or chronometers which tell Greenwich time, and, when it is noon where they are, which



Day, night, and twilight on the earth's surface.

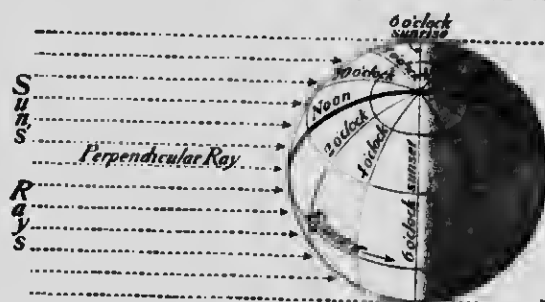
they can tell by observing the sun, they find out by their chronometers what time it is at Greenwich, and thus learn how far east or west of the meridian of Greenwich they are.

For example, suppose it is noon at Greenwich, it is then midnight one half way around the world from Greenwich — that is, on the 180th meridian. At the same moment, at all points west of Greenwich to the 180th meridian, it is some hour between midnight and noon (that is, forenoon of the same day), while in the opposite direction it is some hour between noon and midnight (that is, afternoon of the same day). When it is noon at Greenwich, a new day is beginning at the 180th meridian. As the noon hour moves west from Greenwich, the new day moves west from the

180th meridian until, in twenty-four hours, midnight again occurs at the 180th meridian and a new day begins. Thus, when it is noon at Ottawa, it is almost three minutes

past five in the evening at Greenwich, and almost three minutes past five in the morning of the next day on the 180th meridian.

Standard Time. For the convenience of Railway traffic, Canada and the United States are divided into five regions, each region consisting of a belt about fifteen degrees wide, running north and south. All places in the same belt have the same time, which is that of the meridian running through the centre of that belt. Such time is called *Standard Time*, and in each belt it is an exact number of hours slower than the time at Greenwich. The time in one belt differs from that in the next by one hour. Thus, in going from Halifax to Vancouver a traveller, in order to keep correct Standard Time, would need to move the hands of his



A diagram showing the time on different meridians when it is noon at Greenwich.

watch back one hour at four different points; first at Campbellton in New Brunswick or Vanceboro in Maine; second, at Fort William; third at Broadview; and fourth at Laggan. The following are the different regions:

Atlantic or 60th Meridian time, 4 hours slower than Greenwich.

Eastern or 75th Meridian time, 5 hours slower than Greenwich.

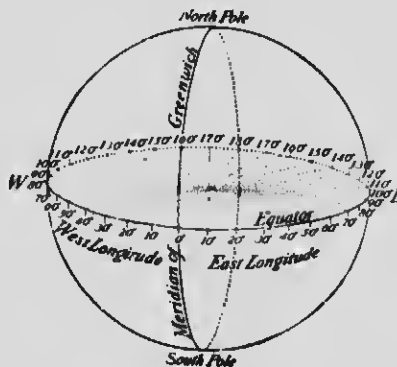
Central or 90th Meridian time, 6 hours slower than Greenwich.

Mountain or 105th Meridian time, 7 hours slower than Greenwich.

Pacific or 120th Meridian time, 8 hours slower than Greenwich.

International Date Line. We have seen that there is a difference in the date between

Greenwich and the 180th meridian; for, when it is Thursday afternoon at Greenwich, it is Friday forenoon at the 180th meridian. The 180th meridian passes through the



Degrees of longitude and meridians by means of which places are located as east or west of the meridian of Greenwich.

