

of the sea. The elevation of continents is still progressing slowly, and is being compensated for at some definite points by a perceptible sinking. All geognostic phenomena indicate a periodical alternation of activity in the interior of our planet. Probability of new elevations of ridges—p. 293-301 and notes.

*g.* The solid surface of the earth has two envelopes, one liquid, and the other aeriform. Contrasts and analogies which these envelopes—the sea and the atmosphere—present in their conditions of aggregation and electricity, and in their relations of currents and temperature. Depths of the ocean and of the atmosphere, the shoals of which constitute our highlands and mountain chains. The degree of heat at the surface of the sea in different latitudes and in the lower strata. Tendency of the sea to maintain the temperature of the surface in the strata nearest to the atmosphere, in consequence of the mobility of its particles and the alteration in its density. Maximum of the density of salt water. Position of the zones of the hottest water, and of those having the greatest saline contents. Thermic influence of the lower polar current and the counter currents in the straits of the sea—p. 302-304 and notes. General level of the sea, and permanent local disturbances of equilibrium; the periodic disturbances manifested as tides. Oceanic currents; the equatorial or rotation current, the Atlantic warm Gulf Stream, and the further impulse which it receives; the cold Peruvian stream in the eastern portion of the Pacific Ocean of the southern zone. Temperature of shoals. The universal diffusion of life in the ocean. Influence of the small submarine sylvan region at the bottom of beds of rooted algæ, or on far-extending floating layers of fucus—p. 302-311 and notes.

*h.* The gaseous envelope of our planet, the atmosphere. Chemical composition of the atmosphere, its transparency, its polarization, pressure, temperature, humidity, and electric tension. Relation of oxygen to nitrogen; amount of carbonic acid; carbureted hydrogen; ammoniacal vapors. Miasmata. Regular (horary) changes in the pressure of the atmosphere. Mean barometrical height at the level of the sea in different zones of the earth. Isobarometrical curves. Barometrical windroses. Law of rotation of the winds, and its importance with reference to the knowledge of many meteorological processes. Land and sea winds, trade winds and monsoons—p. 311-317. Climatic distribution of heat in the atmosphere, as the effect of the relative position of transparent and opaque masses (fluid and solid superficial area), and of the hypsometrical configuration of continents. Curvature of the isothermal lines in a horizontal and vertical direction, on the earth's surface and in the superimposed strata of air. Convexity and concavity of the isothermal lines. Mean heat of the year, seasons, months, and days. Enumeration of the causes which produce disturbances in the form of the isothermal lines, *i. e.*, their deviation from the position of the geographical parallels. Isochimenal and isothermal lines are the lines of equal winter and summer heat. Causes which raise or lower the temperature. Radiation of the earth's surface, according to its inclination, color, density, dryness, and chemical composition. The form of the cloud which announces what is passing in the upper strata of the atmosphere is the image of the strongly radiating ground projected on a hot summer sky. Contrast between an insular or littoral climate, such as is experienced by all deeply-articulated continents, and the climate of the interior of large tracts of land. East and west coasts. Difference between the southern and northern hemispheres. Thermal scales of