cultivated plants, going down from the vanilla, cacoa, and musaceæ, to citrons and olives, and to vines yielding potable wines. The influence which these scales exercise on the geographical distribution of cultivated plants. The favorable ripening and the immaturity of fruits are essentially influenced by the difference in the action of direct or scattered light in a clear sky or in one overcast with mist. General summary of the causes which yield a more genial climate to the greater portion of Europe considered as the western peninsula of Asia—p. 326. Determination of the changes in the mean annual and summer temperature, which correspond to one degree of geographical latitude. Equality of the mean temperature of a mountain station, and of the polar distance of any point lying at the level of the sea. Decrease of temperature with the decrease in elevation. Limits of perpetual snow, and the fluctuations in these limits. Causes of disturbance in the regularity of the phenomenon. Northern and southern chains of the Himalaya; habitability of the elevated plateaux of Thibet—p. 331. Quantity of moisture in the atmosphere, according to the hours of the day, the seasons of the year, degrees of latitude, and elevation. Greatest dryness of the atmosphere observed in Northern Asia, between the river districts of the Irtysch and the Obi. Dew, a consequence of radiation. Quantity of rain—p. 335. Electricity of the atmosphere, and disturbance of the electric tension. Geographical distribution of storms. Predetermina tion of atmospheric changes. The most important climatic disturbances can not be traced, at the place of observation, to any local cause, but are rather the consequence of some occurrence by which the equilibrium in the atmospheric currents has been destroyed at some considerable distance—p. 335–339.

i. Physical geography is not limited to elementary inorganic terrestrial life, but, elevated to a higher point of view, it embraces the sphere of organic life, and the numerous gradations of its typical development. Animal and vegetable life. General diffusion of life in the sea and on the land; microscopic vital forms discovered in the polar ice no less than in the depths of the ocean within the tropics. Extension imparted to the horizon of life by Ehrenberg's discoveries. Estimation of the mass (volume) of animal and vegetable organisms—p. 339–346. Geography of plants and animals. Migrations of organisms in the ovum, or by means of organs capable of spontaneous motion. Spheres of distribution depending on climatic relations. Regions of vegetation, and classification of the genera of animals. Isolated and social living plants and animals. The character of floras and faunas is not determined so much by the predominance of separate families, in certain parallels of latitude, as by the highly complicated relations of the association of many families, and the relative numerical value of their species. The forms of natural families which increase or decrease from the equator to the poles. Investigations into the numerical relation existing in different districts of the earth between each one of the large families to the whole mass of phanerogamia—p. 346–351. The human race considered according to its physical gradations, and the geographical distribution of its simultaneously occurring types. Races and varieties. All races of men are forms of one single species. Unity of the human race. Languages considered as the intellectual creations of mankind, or as portions of the history of mental activity, manifest a character of nationality, although certain historical occurrences have been the means of diffusing idioms of the same family of languages among nations of wholly different descent—p. 351–359.