

our era, with the inroads of the Hiungnu, a Turkish race, on the fair-haired, blue-eyed, probably Indo-Germanic race of the Yueti and Usun, near the Chinese Wall. Roman ambassadors are sent, under Marcus Aurelius, to the Chinese court by way of Tonkin. The Emperor Claudius received an embassy of the Rasbias of Ceylon. The great Indian mathematicians, Warahamihira, Brahmagupta, and probably also Aryabhata, lived at more recent periods than those we are considering; but the elements of knowledge, which had been earlier discovered in India in wholly independent and separate paths, may, before the time of Diophantus, have been in part conveyed to the West by means of the extensive universal commerce carried on under the Lagides and the Cæsars. The influence of these widely-diffused commercial relations is manifested in the colossal geographical works of Strabo and Ptolemy. The geographical nomenclature of the latter writer has recently, by a careful study of the Indian languages and of the history of the west Iranian Zend, been recognized as a historical memorial of these remote commercial relations. Stupendous attempt made by Pliny to give a description of the universe; the characteristics of his encyclopedia of nature and art. While the long-enduring influence of the Roman dominion manifested itself in the history of the contemplation of the universe as an element of union and fusion, it was reserved for the diffusion of Christianity (when that form of faith was, from political motives, forcibly raised to be the religion of the state of Byzantium) to aid in awakening an idea of the unity of the human race, and by degrees to give to that idea its proper value amid the miserable dissensions of religious parties—p. 199.

V. *Irruption of the Arabs.*—Effect of a foreign element on the process of development of European civilization. The Arabs, a Semitic primitive race susceptible of cultivation, in part dispel the barbarism which for two hundred years had covered Europe, which had been shaken by national convulsions; they not only maintain ancient civilization, but extend it, and open new paths to natural investigation. Geographical figure of the Arabian peninsula. Products of Hadramaut, Yemen, and Oman. Mountain chains of Dschebel-Akhdar, and Asyr. Gerrha, the ancient emporium for Indian wares, opposite to the Phœnician settlements of Aradus and Tylus. The northern portion of the peninsula was brought into animated relations of contact with other cultivated states, by means of the spread of Arabian races in the Syro-Palestinian frontier mountainous districts and the lands of the Euphrates. Pre-existing indigenous civilization. Ancient participation in the general commerce of the universe. Hostile advances to the West and to the East. Hyksos and Ariæus, prince of the Himyarites, the allies of Minus on the Tigris. Peculiar character of the nomadic life of the Arabs, together with their caravan tracks and their populous cities—p. 200–208. Influence of the Nestorians, Syrians, and of the pharmaceutico-medicinal school at Edessa. Taste for intercourse with nature and her forces. The Arabs were the actual founders of the physical and chemical sciences. The science of medicine. Scientific institutions in the brilliant epoch of Almansur, Haroun Al-Raschid, Mamun, and Motasem. Scientific intercourse with India. Employment made of the Tscharaka and the Susruta, and of the ancient technical arts of the Egyptians. Botanical gardens at Cordova, under the Calif Abdurrahman the poet—p. 208–217. Efforts made at independent astronomical observations and the improvement in instruments. Ebn Junis employs the pendulum as a measure of time. The work of Allhazen on the re