180 cosmos.

UNIVERSAL DOMINION OF THE ROMANS.—INFLUENCE OF A VAST PO-LITICAL UNION ON COSMICAL VIEWS.—ADVANCE OF GEOGRAPHY BY MEANS OF INLAND TRADE.—STRABO AND PTOLEMY.—THE FIRST ATTEMPTS TO APPLY MATHEMATICS TO OPTICS AND CHEMISTRY.— PLINY'S ATTEMPTS TO GIVE A PHYSICAL DESCRIPTION OF THE UNI-VERSE.—THE RISE OF CHRISTIANITY PRODUCTIVE OF, AND FAVOR-ABLE TO, THE FEELING OF THE UNITY OF MANKIND.

In tracing the intellectual advance of mankind and the gradual extension of cosmical views, the period of the universal dominion of the Romans presents itself to our consideration as one of the most important epochs in the history of the world. We now, for the first time, find all the fruitful districts which surround the basin of the Mediterranean associated together in one great bond of political union, and even

connected with many vast territories in the East.

The present would seem a fitting place again to remind my readers\* that the general picture I have endeavored to draw of the history of the contemplation of the universe acquires, from this condition of political association, an objective unity of presentation. Our civilization, understanding the term as being synonymous with the intellectual development of all the nations included in the European Continent, may be regarded as based on that of the inhabitants of the shores of the Mediterranean, and more directly on that of the Greeks and Ro-That which we, perhaps too exclusively, term classical literature, received the appellation from the fact of its being recognized as the source of a great portion of our early knowledge, and as the means by which the first impulse was awakened in the human mind to enter upon a sphere of ideas and feelings most intimately connected with the social and intellectual elevation of the different races of men.† In these considerations we do not by any means disregard the importance of those elements which have flowed in a variety of different directions—from the Valley of the Nile, Phœnicia, the Euphrates, and the Indus, into the great stream of Greek and Roman civilization; but even for these elements we are originally indebted to the Greeks and to the Romans, who were surrounded by Etruscans and other nations of Hellenic descent. How recent is the date of any direct investigation, interpretation, and secular classification of the great monuments of more anciently civilized nations! How short is the time that has elapsed since hieroglyphics and arrow-headed

<sup>\*</sup> See ante, p. 110, 113, 117, and 141.

<sup>†</sup> Wilhelm von Humboldt, Ueber die Kawi-Sprache, bd. i., s. xxxvii