

sources; and thus prepared, we shall be enabled to watch with redoubled interest the gradual unfolding of geographical knowledge amongst the nations of antiquity.

The first people who paid any attention to this science were the Chaldeans and Egyptians, and it is said that the first map was made by Sesostris the First, who conquered Egypt. This king, says Eustathius, having traversed great part of the earth, recorded his march in maps, and gave copies of these maps not only to the Egyptians, but to the Scythians also, to their great astonishment. The greatest geographical effort, however, made under Egyptian auspices was that commanded by Pharaoh Necho, who despatched some Phœnicians, says Herodotus, from the Arabian Gulf with orders to return by the Pillars of Hercules and the Mediterranean Sea. This they accomplished, returning to Egypt in the third year, having wintered on the coast of Libya, where they sowed and gathered in their harvest, before advancing further, a somewhat tedious method of proceeding certainly, in the eyes of our present adventurers, but an actual necessity under their circumstances. Modern geographers appear inclined to treat the whole of this narrative as fabulous, and Herodotus himself seems to cast a shade of doubt upon their assertions, for after telling us that while sailing round Libya they declared they had the sun on their right hand, he adds, this "does not appear credible, however it may seem to others." To us, however, this incredible fact appears to give veracity to the whole statement, as they would scarcely have thought of inventing such a circumstance had the expedition been a fable. But though these nations led the van in geographical discoveries, they were followed by many others, Phœnicians, Greeks, and Romans, of whose successive researches, and the motives by which they were produced, we find abundant evidence in ancient historians. We will not here attempt to follow them, our desires being merely to indicate to the student the route he ought to follow.

In judging, however, of the slow pace at which our predecessors advanced, as we trace them step by step, we must recollect that they laboured under far greater difficulties than we do. The early geographers being destitute of mathematical instruments and of astronomical observations, endeavoured at first to ascertain the situation of places according to climate, that climate being determined by them according to the form and colour of the animals inhabiting the different countries whose position they wished to point out. Thus the northern and southern limits of the Torrid Zone were marked by the appearance of negroes and of animals of a large size, such as the elephant and rhinoceros. Now it is evident that such a mode of proceeding must be slow, and liable to many mistakes for which we should be prepared to make great allowances. Thus, Herodotus having learned from Homer that the lambs of Libya have horns at their birth, and seeing that sheep in Scythia remained hornless all their lives, he concluded that a warm climate is especially favourable to the growth of horns. Had he seen the four and six horned sheep inhabiting the shores of the Baltic, he would have been strangely perplexed as to the climate of their country. Similar difficulties must have been of constant occurrence in the then limited state of general knowledge. Another great source of confusion must have arisen from so much of their information being obtained from hearsay, rather than actual observation. Thus, Herodotus, in describing India from the reports of others, related that there were ants there as large as foxes, who burrowed in golden sand, and were so extremely formidable that it was not without great danger that the soil was collected and carried off!

The geographical confusion of the old world would have been still greater had not the Egyptians and Babylonians subsequently adopted a second and surer method of determining the situation of places, or their distance from the equator, by observing the length of their longest and shortest days. This they performed by means of a gnomon erected upon a horizontal plane, by which they were enabled to measure the length and shortness of the shadow in proportion to the height of the gnomon. Thus did our ancestors proceed, feeling their way as it were in the dark, till the fourth century B.C., when the famous school of Alexandria gave a new impetus to geographical science. Timocharis and Aristillus, 295 B.C., established the position of stars according to their longitude and latitude, taken with respect to the equator; these were subsequently transferred to the ecliptic, and then by an easy transition, Hipparchus was led to dispose the different points of the earth also, according to their latitudes and longitudes, and is consequently allowed universally to have first fixed the solid foundation of geography by uniting it to astronomy, and thus rendering its principles self evident and invariable.

If, however, the ancients were wanting in correct and extensive information, they amply made up for their deficiency by their superabundant store of tradition and allegory; and this is a phase well worthy of our careful consideration, as the myths of a nation are strikingly illustrative of its character. Thus, with the Greeks in Homer's time, their actual knowledge extended only to Greece,

Egypt, Asia Minor, and the adjoining islands. Beyond these limits all objects appeared to them in the prismatic hues of wonder and enchantment, and in their records we find nothing but monsters, nations of dreams and the abodes of bliss. These delusive forms were chiefly gathered in the north-western quarter of the hemisphere. All the early writers in Greece believed in the existence of certain regions situated in the west, beyond the bounds of their knowledge, and as it appears, of too fugitive a nature to be ever fixed within the circle of authentic geography. Homer describes at the extremity of the ocean the Elysian plains, "where, under a serene sky, the favourites of Jove, exempt from the common lot of mortals, enjoy eternal felicity." Hesiod, in like manner, sets the Happy Isles, the abodes of departed heroes, beyond the deep ocean. The Hesperic of the Greeks continually fled before them as their knowledge advanced, and they saw the terrestrial paradise still disappearing in the west. Now with the light these vague dreams throw upon the subject, let us compare the intellectual character of the Greeks with that of surrounding nations, the Egyptians for example.

The Grecian myth of a terrestrial paradise, the everlasting abode of departed heroes, shews us their belief in immortality after death, that this present life was not their all; it marks also that they could not conceive the soul enjoying a happy existence independent of the body; their paradise was on earth not in heaven, and those most fitted for its enjoyment were the heroes rather than the benefactors of mankind. Now let us turn to the Egyptians; we do not find with them the same glowing accounts of terrestrial paradise and the eternal felicity of the heroes upon earth, and yet they had the same knowledge of immortality and the soul, but their views were purer and of a less material nature. Their hieroglyphic paintings represent this very clearly. In these they give us a picture of what happens to the soul after death. First it is represented in the form of a bird with a human head, and bearing a sail, emblematical of flight, hovering over the body it has just quitted, and which lies stretched on a bier surrounded by weeping relatives. We then find it standing before Osiris, the judge of all the world, the incarnate Deity himself. Here it is judged, not according as it has been a hero or a warrior on earth, but is literally weighed in the balances, the good deeds being represented as placed in one scale, the emblem of truth in the other. Should the balance be in its favour then it enters at once not to a terrestrial paradise like the Greeks, but into the closest connection with the Deity; should it be otherwise, it is returned to earth in the form of a pig, there to expiate its sins in animal degradation. This is but one example of the information the scholar may draw from the wildest geographical regions of antiquity by comparing them with the allegories (even those of a mythological character) belonging to surrounding nations. It is sufficient, however, for our present purpose. There is another branch of this subject which we ought not to pass over quite unnoticed; those allegories in which the ancients so freely indulged, and which, though at first sight they appear like puerile mythological fables, really refer frequently to geographical facts. We will give an example of this also.

Diodorus Siculus and other ancient writers give us strange, and, at first sight, incomprehensible accounts of the Amazons and Gorgons, and of the strife carried on between them; but if we lift the veil of allegory that envelopes them we shall perceive that they typified the oceanic and volcanic action. The Amazons were a vast host, for the waves of the ocean are countless. The Gorgons were only three in number, because the foci of volcanic action must necessarily be few in any one place. They are represented with wings of gold, a body covered with impenetrable scales, hands of brass, their hair entwined with serpents, and to have had but one eye and one tooth between them which they use by turns. Their golden wings seem to indicate flames, the serpents in their hair, the streams of lava rushing in circuitous courses down their sides; the hands of brass and the body covered with impenetrable scales may readily be applied to their mountain structure, while the possession of but one eye and tooth plainly alludes to the fact that only one crater was in action at a time. Their names also, Stheno, Euryale and Medusa are significant in Greek of their character, Sthenos, is strength, power; Euryalos, wide-spreading; Mudos, light, airy; and Gorgos, swift, vivid.

With this key the fabulous deeds related of the Amazons and Gorgons become actual geographical facts. The conquests of the Amazons under their queen Myrina refer to the diluvial action which has so greatly altered the face of our globe.

Will not an examination of these subjects, studied in the way we have been here endeavouring to point out, enable us to see more clearly into the minds of our ancestors, and while it gives us a juster appreciation of their knowledge, enables us to look more leniently on their ignorance and deficiencies, and by the light and experience thus acquired, the more surely to dispel our own. If we do this, we shall not have studied in vain.—*English Journal of Education.*