

that the military personages, whose ambition is as proverbial as it is natural, would voluntarily surrender the power they possessed over the masses, and retire to the obscurity and poverty of private life when they could enjoy the wealth and influence of political control, so long as they maintained their rank in the army? This would have been too much to expect from the self-denial of creole chiefs; nor is it surprising to behold the people themselves looking towards these very men as proper persons to consolidate or shape the government they had established. It was the most natural thing conceivable to find Iturbide, Guerrero, Bustamante, Negrete, Bravo, Santa Anna, Paredes, and the whole host of revolutionary heroes succeeding each other in power, either constitutionally or by violence. The people knew no others. The military idea,—military success,—a name won in action, and repeated from lip to lip until the traditional sound became a household word among the herdsmen, rancheros, vaqueros and Indians,—these were the sources of Mexican renown or popularity, and the appropriate objects of political reward and confidence. * * * Thus from the first epoch of independence, the People ceased to be a true republican tribunal in Mexico, while the city was surrendered as the battle-field of all the political aspirants who had won reputations in the camp which were to serve them for other purposes in the capital. By this means the army rose to immediate significance, and became the general arbiter in all political controversies. Nor was the church,—that other overshadowing influence in all countries in which religion and the state are combined,—a silent spectator in the division of national power. The Roman Hierarchy, a large landholder,—as will be hereafter seen in our statistical view of the country,—had much at stake in Mexico, besides the mere authority which so powerful a body is always anxious to maintain over the consciences of the multitude. The church was, thus, a political element of great strength; and, combined with the army, created and sustained an important party, which has been untiring in its efforts to support *centralism*, as the true political principle of Mexican government."

We cannot follow Mr. Mayer into his account of the internal distractions of Mexico under the successive military adventurers alluded to in the preceding extract,—of whom Santa Anna was the most remarkable,—nor into his narrative of the war between Mexico and the United States, which gave celebrity on the one side to such men as Taylor, Scott, Mason, Pierce and Fremont.

In the second volume there are full accounts of the antiquities and arts of Mexico, its internal administration, and the manners and customs of its people.

A Monograph on the Sub-Class Cirripedia; with Figures of all the Species. By Charles Darwin. Published for the Ray Society.

Those who know barnacles and sea-acorns when they see them, will know what the subject of this volume is,—and those who have read the Voyage of the Beagle will recognize in the author the indefatigable naturalist who accompanied that Expedition. Among other things which Mr. Darwin brought from South America was an abnormal Cirripede,—and his object at first was to publish an account of this singular creature. In order to do this he sought for other specimens to examine and compare with his own. The specimens which he obtained from friends increased so greatly in number, that at the suggestion of Dr. J. E. Gray, of the British Museum, he determined to write a Monograph on the whole family of Cirripedes. But how to get it published? Here were specimens from the British Museum, collected by those indefatigable collectors, Leach and Gray,—then, there was a collection from Mr. Stutchbury,—a still greater number from Mr. Hugh Cuming,—furthermore, specimens from the College of Surgeons,—and others, dredged by Prof. E. Forbes and Messrs. M'Andrew, Buak, Bower-

bank, and Thompson, from the British coasts. Then, there were foreign contributors:—Dr. Gould, of Boston (U.S.),—Prof. Agassiz, now an American naturalist,—Mr. J. D. Dana,—Prof. Milne-Edwards, of Paris,—and Dr. Müller, of Berlin. Such a mass of barnacles and sea-acorns the eye of no naturalist had ever rested on before.—To compare and describe and get the whole history of these curious creatures were a delightful task to the naturalist,—but who would be the publisher of his labours? The author could not afford it,—no business publisher would undertake to do it,—the expense was too great for the Royal, the Linnean, or the Zoological Society. It was in this extremity that the Ray Society undertook the publication of the work:—and it has thereby added another to the many claims which it already had on the support and patronage of all lovers of natural history.

The creatures to which this volume is devoted are divided into two groups:—those having peduncles, or stalks,—and those without. The former are known by the name of barnacles,—the latter by that of sea-acorns. The present work is confined to the former,—whilst the latter will be treated of in a subsequent volume. The barnacles have a kind of popular natural history interest, on account of the serious mistakes into which the older naturalists fell respecting them. We are gravely told by men who otherwise did good service to natural history, that these barnacles were the fruit of trees which falling into the water became changed into geese. Hence the names "tree goose" and "Barnacle goose" which are given to this day to a species of goose common on our shores. We are thus seriously indoctrinated by Sir Robert Moray, in a paper which was thought worthy of a place in the *Philosophical Transactions*:—"In every shell that I opened I found a perfect sea-fowl; the little bill like that of a goose, the eyes marked, the head, neck, breast, wings, tail, and feet formed, the feathers everywhere perfectly shaped and blackish coloured, and the feet like those of other water-fowl, to the best of my remembrance." Even old Gerard—who has so many good observations on plants in his Herbal—was betrayed by this strange belief into detailing with great minuteness what his own "eyes had seen and hands had touched" of this curious phenomenon. Gerard wrote in 1636;—forty years after, John Ray disproved the whole story, and showed that the fruits which dropped into the water did not become shell-fish, and that the shell-fish never became geese. We may learn from this to refuse our adhesion to the story of the great sea serpent even when we shall find an account of it in the *Philosophical Transactions*.

A comparison between Mr. Darwin's book and Sir Robert Moray's paper would give a tolerable notion of the progress made in the education of the senses by the naturalist during the last two centuries. Instead of looking for fancied resemblances, and making all his observations under the influence of a preconceived notion,—we find the modern naturalist anxious above all things to observe accurately and minutely; and not trusting in this process to his naked eye, he calls in whenever necessary the aid of the microscope. Things that differ are carefully separated, whilst those which agree are brought together. In this manner Mr. Darwin has been enabled to add greatly not only to the number of the species of these creatures already known, but also to our knowledge of their habits, growth and affinities.

There is no department of zoology more interesting than that of the metamorphosis or change which various tribes of the lower ani-

mals undergo before reaching their mature condition. Thus, we find that many of the shell-fishes—as the oyster—which seem doomed to perpetual immobility, lead during the younger part of their existence a very active and even volatile life. Endowed with wings, these “cherub-oysters”—as they are called by Prof. Forbes—find their way from one part of the ocean to another, and by the distance which they travel in their youth are compensated for the quiescence of their age. The young crab is also so unlike his father or mother, that till recently naturalists have called him by quite another name. The young barnacle is no exception to this habit of differing from their parents by the rising generation of our great marine families. To this subject Mr. Darwin has paid great attention; and he adds much information to that which was previously possessed on the subject of the changes of the larvæ of the various forms of pedunculated cirripedes. In this part of his work he clearly shows that the whole analogies of the structure of the Cirripede are with the crustaceans,—the crabs and the lobsters,—not with the shell-fishes, as was very generally supposed by former naturalists.—In every department of his subject Mr. Darwin has given a great amount of new matter, derived from his own dissections and observations. His demonstration of the existence of an eye in the barnacle, and of the mode in which its peduncles are formed, by the conversion of a portion of the ovary into a gland for secreting cement, are matters of great interest,—and the publication of this work will add to the reputation of the author, who has already obtained so high a position amongst the scientific naturalists of the present age.
