

Museum of Comparative Zoology, at Harvard University, under the immediate instruction of the world-renowned naturalist Agassiz. The effect produced by such an instructor upon the impressible mind of so ardent a scholar can readily be understood. The progress he made in natural Science was most marked. In addition to his favorite studies of Geology and Paleontology he devoted much attention to Zoology. Here he remained three years, with the exception of a part of 1864, when employed on the staff engaged in making a Geological survey of New Brunswick, his native Province.

In 1865 Professor Agassiz set out on the famous "Thayer" expedition to Brazil. Although its primary object was an investigation of the fisheries of that country, yet a study of its Geology formed a part of the plan contemplated. He was accompanied by a corps of able assistants, among whom was enrolled his favorite student, Prof. Hartt, in the special capacity of Geologist. On the voyage out the great naturalist, although in delicate health, delivered a series of lectures to his assistants on the promising field of scientific enquiry and research Brazil afforded. During this expedition the subject of our portraiture explored the south-east coast of Brazil for nearly a thousand miles, from Rio de Janeiro to Bahia or San Salvador, ascending at various points far inland up the rivers which seam the slopes of the lofty table lands that dip toward the sea. In 1867 he set out on an independent expedition to this interesting country, aided by private subscription, and examined the coast reefs and the Geological formations around Bahia and to the north as far as Pernambuco. The results of these two trips to Brazil were published, in 1870, in a work of over six hundred pages, entitled "The Geology and Physical Geography of Brazil." Prior to these Brazilian explorations scarcely anything was known of the Geology of that country. It presented a field for investigation most attractive to the naturalist, and those who knew the ardent temperament of Prof. Hartt can appreciate the zeal with which he prosecuted his researches. His contributions to science proved to be most valuable. He showed there were two distinct kinds of reefs on the Brazilian coast, the Sandstone and Coral, and told in that terse, yet clear and attractive style, characteristic of all he penned, how each was formed. He found in one of the southern Provinces a large extent of marine

cretaceous rocks filled with Fossil shells. After his return in 1867 he spent some time in lecturing, at the Cooper Institute, Pelham Priory, and other places in and near New York City, on the Geological explorations made in that country. In 1868 he was chosen Professor of Natural History in Vassar College, at Poughkeepsie. He soon after resigned this position to accept the Professorship of Geology in Cornell University. In 1869 the Hon. E. B. Morgan, of Aurora, New York, fitted out at his own expense an expedition to Brazil, having as its sole object Geological investigation. The staff consisted of Prof. Hartt, Prof. Prentice and eleven students of Cornell University. He likewise accompanied the second Morgan expedition to that country in 1871. During these two last visits he did more than any living man had ever done to bring the Amazonian valley under the notice of the scientific world. Hitherto, so far as its geology was concerned, it was a *terra incognita*. His revelations were of the most interesting and startling kind. He discovered extensive Carboniferous deposits together with large quantities of Devonian and more recent fossiliferous remains. He was also able to refute the theory of a vast Amazonian glacier. This he did in opposition to the view of his former instructor and patron, Agassiz. That great man, without adequate research and by a too hasty generalization, extended the ice-sheet of the glacial epoch over the whole valley of the Amazon. Prof. Hartt demonstrated that, though glaciers may have occurred on the coast near Rio, no traces of them exist even so far north as Bahia. This settling forever of the question concerning ancient glacial action, at the equator, of itself was sufficient to establish the reputation of any explorer. These four Brazilian expeditions, coupled with the careful, minute and scientific manner in which they had been conducted, rendered Prof. Hartt the best qualified of any living Geologist, and doubtless led to his selection by the Emperor Don Pedro, to enter upon one of the grandest tasks ever committed to a man of science,—to make a Geological survey of an Empire with an area of 3,288,000 square miles, abounding in rich and varied resources and presenting to the eye of the Geologist an almost virgin soil. In May, 1875, he received his instructions from the Emperor as chief of the Imperial Geological Commission, and shortly after set out on his great life work, first making a short visit to England, where he met many of the