

The Academy of Natural Sciences at Philadelphia, the Lyceum of Natural History of New York, the American Academy of Arts and Sciences, and the Society of Natural History in Boston, are prominent among them. The American Association for the Advancement of Science is an organization including members from all parts of the country, and meets annually in different places. It was originally an *Association of American Geologists*. Then it included all the Naturalists, and ultimately, in 1847, was enlarged so as to admit all sciences, and received its present name.

Nor should we neglect to mention those Cabinets of Geology and Natural History which begin to compare favorably with those of Europe. The largest collections may be found in the Academy of Natural Sciences at Philadelphia, the State Collection at Albany, N. Y., that of the Boston Natural History Society, the collection of the Canada Survey at Montreal, the Cabinet of the Smithsonian Institution at Washington, and that of the New York Lyceum of Natural History. A magnificent museum of Palæontology and Zoology is commenced at Cambridge. Among the Colleges, the most extensive Cabinets are those at Amherst and Yale. These museums are thronged with visitors. For example, the register of the Cabinet at Amherst shows that the collections are visited by 15,000 people annually.

GEOLOGICAL MAP OF NORTH AMERICA.

Accompanying this section, we present a small map of the geology of North America, compiled from the most reliable sources. Owing to its small size, only the more general classes of rocks can be represented. There are six distinctions upon it: 1, Azoic rocks; 2, Palæozoic rocks, including all the formations between the Cambrian and Permian series, except a part of the Carboniferous series; 3, that part of the Carboniferous series which is underlain by valuable beds of coal; 4, Mesozoic rocks; 5, Cainozoic rocks; and 6, Igneous rocks, such as have been erupted since the commencement of the Triassic period.

A general division of the geology of North America is into three great fossiliferous basins resting upon azoic rocks. The first is the *Arctic basin*, occupying the greater part of the islands and peninsulas within the Arctic circle. This may be connected with the other basins. The second may be called the *Hudson's Bay basin*, because it is chiefly developed about Hudson's Bay. The third is the great *Continental basin* of the interior. The last is the one best known.

The Arctic basin has been explored by Arctic voyagers. An excellent map of it is given in McClintock's Narrative of the Expedition in search of Sir John Franklin. Silurian, carboniferous, and mesozoic rocks are found there. The Hudson's Bay basin is composed entirely of palæozoic rocks, so far as any thing is known concerning it. The Continental basin embraces fossiliferous rocks of every age, from the Cambrian to the latest Cainozoic.

The form of the continent is that of a great triangular basin, as described in Section V., Part I. The mountainous regions correspond very nearly with the areas occupied by the azoic rocks, except that along the Pacific coast they are mostly covered by cretaceous and tertiary strata—the latter constituting most of the summits of the Rocky Mountains. It corresponds also with the views already stated, to find that the igneous rocks are generally located near the oceans.

The Rocky Mountains belong to the longest chain of mountains upon the globe, and, with one exception, the highest. Commencing in the extreme southern part of South America, it extends through the whole length of that continental area, under the name of Andes or Cordilleras. On the Isthmus