

in 1896, had unfortunately to be given up on account of disasters to the instruments. The expedition sent out from Sydney University to the Funafuti Atoll under Professor Davis in 1897 was more successful, and the preliminary reports state that the borer passed through 643 feet of reef limestone without reaching the fundamental rock. But until the bore samples have been examined microscopically no opinion can be formed regarding the true nature of the limestone. Professor Agassiz visited the Fiji group in 1897, and observed massive coral reefs more than 600 feet thick in several of the islands. As these reefs had been elevated, Agassiz points out that the Pacific Ocean in the vicinity of the Fiji Isles cannot be at present undergoing the movement of subsidence assumed by Darwin and Dana, but rather a movement of elevation, although these massive coral reefs must have been formed during some foregoing period of subsidence.

Some of the most remarkable products of organic activity are the hydrocarbon compounds which, in the form of asphalt, naphtha, petroleum, impregnate sedimentary rocks belonging to different geological ages. Fluid petroleum is usually accompanied by greater or less quantities of inflammable gases, while these may be absent in the rocks impregnated with asphalt or other solid bitumen. Petroleum and naphtha occur exclusively in deposits from salt-water, and very commonly in loose sandy strata or in porous dolomitic and calcareous rocks where these repose upon, and are succeeded by, impervious shales.

In Pennsylvania, Ohio, and Indiana, certain horizons of the Silurian and Devonian formations contain enormous quantities of petroleum and inflammable gases; the naphtha and petroleum wells at Baku on the Caspian Sea, and at Grosny on the north side of the Caucasus, are apparently inexhaustible; and in Further India the so-called Rangoon oil has been found in quantity. The Caspian, Caucasian, Roumanian and Galician petroleum occurs in sandy strata of Oligocene age; both here and in Pennsylvania the oil is always in greatest abundance at the crests of crust anticlines.

During the last forty years geologists have rapidly advanced our knowledge of the occurrences of these natural oils, but it has been less easy to explain the process of their manufacture in nature over extensive areas. Berthelot, the chemist, suggested (1866) that they were produced when water with