

studied them in detail, I omitted to include them in my list of fossils, as I did all that either John Griffiths or myself did not actually find in situ; as my object was merely to notice what the fauna was in each bed. Many forms I omitted from the list on account of being unacquainted with their horizon.

Had my intention been otherwise, I should have recorded the list of Foraminifera that appeared in Morris's Catalogue; Mr. Topley's more ample list not being published at the time my paper was read.

Mr. De Rance found *Rotalina umbilicata* in his Bed V., which is the same as Bed VII. in my table. F. G. HILTON PRICE.

O B I T U A R Y .

COLONEL GEORGE GREENWOOD.

BORN JUNE, 1799; DIED 3RD NOVEMBER, 1875.

ALBEIT it is long after date, we cannot omit to pay our tribute of respect to an English gentleman, who, had he fallen amongst Geologists in early life, instead of amongst "thoroughbreds," would doubtless have occupied a leading place among men of science. Col. George Greenwood, who was the son of Mr. Greenwood, of Brookwood Park, Alresford, Hants, was educated at Eton, and entered the Army as a cornet and sub-lieutenant in the 2nd Life Guards in 1817, just after the memorable period of Waterloo. He rose rapidly in his profession, although he was never called upon active service. Lieut.-Col. in 1831, and Colonel in 1838. He was highly esteemed as an officer, and was a celebrated athlete, and the finest horseman of his day. Among the useful reforms which he introduced into the Household Cavalry, it is still gratefully remembered that he reduced the weight of the helmet from 8lbs. to 3lbs.! He was highly esteemed for his horsemanship by William IV., and received marked distinction from the young Queen Victoria; but in 1840, owing to an affection of the heart, his physician (Dr. Chambers) advised his retirement from the Army. Living thenceforward the life of a country gentleman in Hampshire, planting and transplanting trees, he devoted much time to reading. In 1844 he published the first edition of "The Tree Lifter," and in 1853 a second and larger edition, in which some of his geological observations were incorporated. In 1857 Col. Greenwood published the first edition of "Rain and Rivers," in which he showed great powers of observation and shrewd reasoning on the influence of meteoric agents in shaping the form of the ground, especially in reference to the atmospheric origin of all river valleys. His trenchant and original style of thought attracted the attention of Professors Ramsay and Jukes, and his book having been highly commended, he issued a second edition in 1866. He was a voluminous writer, and his letters were always appearing in the columns of the *Athenæum*, in *Nature*, and in this MAGAZINE. He also wrote occasional articles on Valleys and their mode of formation.

Just as in the hunting field he rode hard, so in his letters and book he strove to outride all opposition, and having found by observation a *vera causa* for the formation of valleys, he believed it to be THE

CAUSE, AND THE *only cause*. Glaciers he disowned, contending that rain and rivers could do all the work very well without them.

Although a determined opponent in a controversy, he was a highly polished gentleman in his manners, and courteous to all with whom he came in contact. An avenue of purple beeches down the Deane, near Brookwood, will serve *in memoriam* to recall the author of the "Tree Lifter" and of "Rain and Rivers."—His nephew, Mr. Charles W. Greenwood, is preparing to re-issue his books, accompanied by his extensive scientific correspondence.

ADOLPHE THEODORE BRONGNIART,

MEMB. ACAD. FR., FOR. F.R.S., ETC., ETC.

BORN 14TH JANUARY, 1801; DIED 18TH FEBRUARY, 1876.

THIS illustrious French botanist has for half a century justly occupied a prominent place as a man of science. He was the son of Alexandre Brongniart, the famous naturalist, who died in 1847. At the age of nineteen he wrote his first and only zoological paper on a new genus of Crustacea. He afterwards devoted himself wholly to Botany, especially to the study of fossil plants. In 1828 he commenced his great work. "Histoire des Végétaux Fossiles, ou Recherches Botaniques et Géologiques" (4to. pp. 488, illustrated by 166 plates). The work was arrested by M. Brongniart's ill-health when it had reached to 12 parts, and was not resumed for nine years. Only three additional parts were then issued, and the work remains incomplete, to the great regret of all students of Fossil Botany. M. Brongniart wrote the article on *Fossil Plants* in the "Dictionnaire d'Histoire Naturelle" (1849). He also contributed numerous separate papers on Recent and Fossil Botany to the *Annales*, etc.

MISCELLANEOUS.

AUSTRALIAN GEOLOGY.—We have received the first sketch of a Geological Map of Australia, including Tasmania, prepared by Mr. R. Brough Smyth, Chief Inspector of Mines. Although on a small scale (about 110 miles to the inch), it is neatly executed, and affords an excellent summary of the present state of Australian geology. Considerable areas are still uncoloured; but, even as now known, all the three great geological periods are represented. The crystalline and igneous rocks, including granite, trap, newer and older volcanic, are largely developed. These igneous rocks of different ages form a prominent feature of the eastern and western districts, where also occur the Silurian, the Carboniferous of Palæozoic and the Carbonaceous of Mesozoic age; but the far larger portion of the interior, now explored, especially the western half of the continent, is composed of Cretaceous and Tertiary strata, either of Oligocene, Miocene, or Pliocene age. The Map therefore forms a very good and useful index to the relations and distribution of the different geological formations as at present known on the Australian continent.—J.M.