

Molasse of Switzerland, because “he has no personal observations to record” on them. But is not this in effect admitting that he is making wide generalizations on a rather limited experience, or, in other words, falling into an error too common among British geologists? But still more serious a defect is his silence as to my main argument, which briefly stated is this: “I think I have a fairly good knowledge of British rocks; I can identify the majority of the Bunter pebbles (not of one rock species only) with rocks which occur *in situ* in the Highlands and as pebbles in later Palæozoic beds in Scotland down at least as far as Arran, but I have as yet failed to find them, either *in situ* or in older conglomerates in the southern half of England, or to discover a spot in which we may assume them to be hidden from our sight.”

T. G. BONNEY.

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OBITUARY.

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FRIEDRICH AUGUST VON QUENSTEDT.

BORN 9TH JULY, 1809; DIED 21ST DECEMBER, 1889.

By the death of Prof. Quenstedt, Science has to mourn the loss of the Nestor of German geologists. He was born at Eisleben in Saxony, and after the death of his father, a member of the Gendarmerie of that town, he was adopted by his maternal uncle, a schoolmaster at Meisdorf; here he learnt Latin and music, and by the latter accomplishment managed to earn sufficient money to go to a University. He went to Berlin in 1830, and having overcome his uncle's wish that he should devote himself to theology, Quenstedt threw himself into the study of natural science and philosophy; he worked especially at crystallography and mineralogy under Wiess and Mitscherlich. After the conclusion of his University course, Quenstedt was appointed an Assistant in the Berlin Museum; his two principal papers published at this time were “Ueber Aftkrystalle des Serpentin” and “Die Entwicklung und Berechtigung des Datholiths.” In 1837 he was appointed Extra Professor at Tübingen, and in 1842 he was promoted to the full Chair of Geology, Mineralogy, and Palæontology. Here he laboured for more than fifty years, investigating the palæontology and geology of Würtemberg, building up the collection of the University, and popularizing the study of geology in the neighbouring district. That the last object was not the least in Quenstedt's ambition is illustrated by the fact that the first work he published in his new home was a small popular volume, “Schwaben, wie es war und ist.” Immediately after his appointment at Tübingen, Quenstedt began the work on the Suabian Jurassics, with which his name will always be associated. His “Flözgebirge Württembergs” (1843) was the first fruit of his labours in this field. In order to compare this series with that of other areas, Quenstedt made a number of walking tours in France, North Italy, Savoy, etc. A serious illness of the lungs in 1859, due to over-exposure, compelled him to abandon these annual excursions; he had however already acquired the knowledge he sought, and his “Der Jura” had appeared in the previous year.

The "Petrefaktenkunde Deutschlands" was Quenstedt's greatest work; the first volume was issued in 1849, and the eighth and last in 1884: it has been calculated that there are no less than 19,029 specimens figured and described in this work. Jurassic palæontology is especially well treated in the *Petrefacta*, and also in Quenstedt's "Handbuch der Petrefaktenkunde," the three editions of which appeared in 1852, 1867, and 1885 respectively; he made further contributions to the knowledge of the fauna of the same system in an extensive series of memoirs. The Cephalopoda was his favourite group: it formed the subject of both his first and last palæontological works, viz. his doctoral thesis in 1836, "*De notis nautillearum primariis*," and "*Die Ammoniten des schwäbischen Jura*," concluded a few months before his death. But though palæontology became the chief work of his life, as was naturally the case with a geologist living among the rich Jurassic rocks of Würtemberg, Quenstedt did not neglect his first love, mineralogy, and his "*Methode der Krystallographie*" (1840), his well-known "*Handbuch der Mineralogie*" (1854, 1863, and 1877), and his "*Grundriss der bestimmenden und rechnenden Krystallographie*" (1873), were his principal publications upon this subject. Probably no German geologist was more prolific of big books than Prof. Quenstedt, and the fact that he accomplished so much is no doubt to be explained by his retention in after-life of the indefatigable energy, the simple life, and abstemious habits, which characterized him in his student days. Born of the people, he was always in touch with them, and he never used the title "von," which had been granted him; his popular works, "*Sonst und Jetzt*" (1856), "*Epochen der Natur*" (1861), and "*Klar and Wahr*" (1872), showed how deeply he felt the need of the popularization of scientific education. His success in forming so valuable a collection from the Würtemberg Jura is probably as much due to the interest in geology spread by his writings as to his own personal popularity with the people among whom he lived so long and laboured so well.

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MELCHIOR NEUMAYR.

BORN 24TH OCTOBER, 1845; DIED 29TH JANUARY, 1890.

Melchior Neumayr was born in Munich on 24th October, 1845, but spent most of his childhood in Stuttgart, where his father was the Bavarian Ambassador. As the son of a family that has borne an honoured name in the annals of Bavarian history, Neumayr was destined for political service, and after leaving the Gymnasium of Munich, he commenced a course of legal studies in the University of that city. Here, however, his enthusiasm for science manifested itself, and led him to abandon law for geology and palæontology, the better to study which he proceeded to Heidelberg. After gaining his Ph.D. at this University, he returned to Bavaria, and worked under Gümbel on the geological survey of that state. After a few months' training he joined in 1868 the service of the Austrian Geologische Reichsanstalt as a volunteer; in the same year