geographical provinces, and many other fascinating subjects for scientific thought and investigation.

The stratigraphical aspect of palæontology is, however, the chief care of the geologist. He has to unearth the fossils, note their environment, trace the particular fossiliferous bed of deposit in its farther extension, and observe whether the fossils are only of sporadic occurrence in that horizon of rock, or are distributed throughout wide areas; again, whether the fossils are less frequent at that horizon than at some other horizon a little above or a little below in the rock-succession, or if the fossils are so very abundant at that horizon as to represent leading fossil types, characteristic of that geological horizon or zone of rock.

Many writers on fossil organisms have treated them merely as a means of identifying the age of the rocks, and have neglected the biological features. More general interest is commanded by descriptions of complete faunas and floras belonging to a definite epoch in the geological history of the earth. Although monographs of this character are, in the first instance, of stratigraphical value, the data which they bring forward are of use in determining the development of organic creation.

The first attempt at a Chronological Succession of fossil organisms is to be found in H. G. Bronn's[1] *Lethæa Geognostica* (1835-38). This work is a masterpiece of scholarship; it sum-

[1] Heinrich Georg Bronn, born on the 3rd March 1800, at Ziegelhausen, near Heidelberg, the son of a forester, studied in Heidelberg, and became a university tutor there in 1821; in 1828 Professor of Zoology and Technology. Between 1824 and 1827 he travelled in Upper Italy and Southern France for the sake of palæontological and geological studies. From 1830-62 he was one of the co-editors of the *Jahrbuch für Mineralogie, Geognosie, und Pa'æontologie.* His chief works, the *Lethæa Geognostica*, the *Handbook of Natural History*, the *Investigation into the Developmental Laws of Organised Nature*, brought him the reputation of being the most distinguished palæontologist in Germany. His difficulty of hearing was a decided drawback to his teaching powers. Wissmann, Lommel, G. Schweinfurth, and Zittel are among his grateful scholars. Bronn died in 1862 in Heidelberg, from lung disease. The first volume of the *Lethæa Geognostica* appeared in 1835, and was so widely circulated that a second edition of it was called for before the publication of the second volume—the latter was published in 1838. A third edition in three volumes, and with 124 plates, was published between 1851 and 1856, with the co-operation of Ferdinand Roemer, who had undertaken the preparation of the Palæo-Lethæa or Carboniferous Period. A fourth edition was begun in 1876 by Roemer, and is at present being continued by Professor Frech.