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In the nineteenth century, geology emerged as a distinct academic discipline. It pointed the way towards the theory of evolution, as scientists including Gideon Mantell, Adam Sedgwick, Charles Lyell and Roderick Murchison began to use the evidence of minerals, rock formations and fossils to demonstrate that the earth was older by millions of years than the conventional, Biblebased wisdom had supposed. They argued convincingly that the climate, flora and fauna of the distant past could be deduced from geological evidence. Volcanic activity, the formation of mountains, and the action of glaciers and rivers, tides and ocean currents also became better understood. This series includes landmark publications by pioneers of the modern earth sciences, who advanced the scientific understanding of our planet and the processes by which it is constantly re-shaped.

# A Treatise on the External, Chemical, and Physical Characters of Minerals

The renowned geologist Robert Jameson (1774–1854) held the chair of natural history at Edinburgh from 1804 until his death. A pupil of Gottlob Werner at Freiberg, he was in turn one of Charles Darwin's teachers. Originally a follower of Werner's influential theory of Neptunism to explain the formation of the earth's crust, he was later won over by the idea that the earth was formed by natural processes over geological time. He was a controversial writer, accused of bias towards those who shared his Wernerian sympathies, such as Cuvier, while attacking Playfair, Hutton and Lyell. This book, first published in 1805, of which the 1816 second edition is reissued here, gives physical descriptions of the minerals discussed in his three-volume System of Mineralogy (also reissued in this series). Dividing minerals into solid, friable and fluid types, he describes and gives the English, German, French and Latin names of each.



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# A Treatise on the External, Chemical, and Physical Characters of Minerals

ROBERT JAMESON





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#### EDINBURGH:

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ROBERT JAMESON,

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The history of this branch of Mineralogy from the time of Agricola, who published the first systematic arrangement of the Characters of Minerals, to that of the more perfect methods of Werner and Hauv, would afford an opportunity of communicating much curious information; but it is so extensive, that we must abandon it for the present, and rest satisfied with the following enumeration of the authors who have treated on this subenumeration of the authors who have treated on this sub-

1. Agricola,

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- 3. Johan. Gottsch. Wallerii Mineral-riket. Holm, 1747. 8vo. Leipsiæ, 1737. 4to.

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