

progress Humboldt led an active life in other directions. In 1827-28 he gave lectures on geography in the University and the Singing Academy. In 1829, accompanied by Gustav Rose and Ehrenberg, he travelled through Asiatic Russia, the Ural mountains, and Siberia to the Altaï mountains. The mineralogical and geological results of this journey were published in an independent work by Humboldt, and in several papers by Rose.

Alexander von Humboldt died at Berlin on the 6th May 1859, in his ninetieth year.

Although many of the geological ideas of the great German scientist were not destined to endure, it is impossible to overrate the value to geographical and geological science of the precedents which he created, and the wide horizons which he disclosed.

What Buffon and Cuvier accomplished for France in attracting the ardent desires of young adherents to the studies of natural science, was accomplished for Germany, after the death of Werner, by the powerful personalities of Leopold von Buch and Alexander von Humboldt.

It is interesting to note that Germany's greatest poet, Wolfgang von Goethe, was one of those who came under the inspiring influence of Werner. Throughout his long life Goethe never lost his interest in mineralogy and geognosy. He wrote several papers on the more popular topics of geognosy, and carried out some detailed researches in the neighbourhood of Karlsbad, Franzensbad, and the Fichtel mountains. While he never could, as a loyal pupil of Werner, look kindly upon the principles of the Plutonists, his critical mind clearly realised that the theories of extreme Neptunists were untenable. In his *Geological Problems* he expressed his disappointment over the absurd contradictions betrayed in the opposing theories, but arrived at no personal decision in favour of either party. Goethe's geological writings were without significance in the progress of the science.

*Hutton, Playfair, and Hall.*—At a time when Werner was in the zenith of his fame, during those seventies and eighties of the eighteenth century when young geologists were flocking to hear the wisdom from the lips of the prophet of geognosy in Freiberg, a private gentleman, living quietly in Edinburgh, was deliberating and writing a work on the earth's surface that will live for ever in the annals of geology as one of its noblest classics.