mining-board, and in the works at Baireuth; but he disengaged himself in 1795, when twenty-five years of age, devoting his time and energies to independent research. The rival theories of geologists, respecting the relative value of the agency of fire and water in the construction of the globe, were then attracting notice; and fresh, as it were, from the Wernerian teachings of the mining-school of Freiburg, he betook himself to Italy (in two journeys), to study the volcanic rocks and phenomena; and few objects in nature and few branches of research were of so much interest to Von Humboldt, from this early part of his career to the last year of his life, as the volcanoes, their products, and the part they have played in ancient and modern times in the history of the earth. Indeed he had already (in 1794) published an account of the basalts of the Rhine, those cold, dumb witnessses of the once raging fires of the Siebengebirge; and his latest energies were partly devoted to the study and re-examination of the characters of volcanic rocks from many parts of the globe,—from the old Silurian hills of Wales as well as from the modern peaks of the Andes.

The young officer of the Mining Corps had already visited France, Holland, and England, and he lost no opportunity of making himself acquainted with the mineral districts of Central Europe and the Alps. His love of botany, and his keen eye for the many peculiarities of animal forms, were everywhere sources of knowledge. His searching glances at nature's operations in living creatures led him to think much of chemical physiology in animals and plants (on which he published a work in 1799), and opened to him the true importance of Galvani's experiments, which he witnessed in Italy; the results of which, simplified by the labours of a generation of hardworking and clear-thinking men, were ever under his contemplation; and in 1849, he was gratified by seeing palpable evidence, afforded by experiment, of the susceptibility of the magnetic needle to the electricity evolved by voluntary muscular contraction in the human body. To study the structure of the earth's crust and its inhabitants was not enough for Von Humboldt's mind; he must know the exact relations of all its parts, from its centre to its highest peaks, and its relations to the planetary and astral worlds around it. For he learned to use astronomical instruments, and the apparatus for working out physical research, qualifying himself for geography in all its requirements.

And now, full of strength and knowledge, the ardent physicist could not be bound by European seas; but war and political disturbances detained him for a while; his energy seeking occupation, and finding experience, in travels in Italy, Styria, France, and Spain. In Paris he had made the acquaintance of Bonpland; and, first intending to go by way of Marseilles to Africa, they had to change their route for Spain. But, instead of leaving Cadiz for Africa, circumstances led them from Corunna to Teneriffe, and thence to South America, under the patronage of the Spanish Court. This was in 1799; and for five years Von Humboldt gratified the longings for foreign adventure and the scenery of the tropics, which he says had haunted him from boyhood, wandered among the forests and wildernesses of the Spanish possessions, exploring the great valleys of the Orinoco and Magdalena, and the mountain-peaks of the northern Cordilleras. The volcanic mountains of Quito received especial attention; and in June, 1802, the travellers ascended Chimborazo, to the height of 19,300 feet—the greatest elevation that had then been attained. Mexico, Cuba, and the United States were also visited; and in 1804, Von Humboldt returned to Europe with an extensive collection, chiefly of plants and minerals, and a vast accumulation of materials for the illustration of the botany, geology, zoology, geography, ethnography, and statistics of a considerable portion of the New World.

The results of these researches he forthwith began to publish in a gigantic series of works, spending twelve years of incessant labour in Paris, without fully accomplishing his Herculean task. He revisited Italy in 1818, with Gay-Lussac; and, after a tour in England, he resided at Berlin, enjoying the favour and regard of his sovereign. In 1828, he was invited by the Czar to undertake a scientific journey through Russia and Siberia; and, with his illustrious companions, Gustav Rose and Ehrenberg, after a long and studious preparation, he explored the Caspian region and Central Asia, reaching the confines of China. This journey occupied but nine months; yet the energetic and well-prepared travellers amassed great stores of knowledge. They distributed information, practical and scientific, especially in the mining districts of Siberia, and instituted observatories. The "*Fragmens Asiatiques*," the "*Asie Centrale*," and Rose's "*Reise nach dem Oural*," record the results of this expedition.

Before this, Von Humboldt had delivered lectures at Paris and Berlin on the physical phenomena of the universe and the correlations; giving to the world in extemporaneous discourses the results of his thought, travel, reading, and experimental research, and reducing these materials, as far as possible, into form, according to his conception of the theory of the whole. He had also published, soon after his return from Mexico, a work entitled "*Ansichten der Natur*" (which the English well know in its translated form), treating of separate branches of physical geography with a picturesque animation of style. Settled at last at Pottsdam, courted by the great, respected and beloved by all, busied with political affairs, occupied with a heavy correspondence with the chief *savans* of all countries, fostering the rising generation of naturalists by epistle, word, and deed, Baron von Humboldt took up his pen to realise his long-cherished hope of carrying out the actual object of all his studies, his travels, and his work. For almost half a century before had he felt the impulse "to comprehend the phenomena of physical objects in their general connection, and to represent nature as one great whole, moved and animated by internal forces;" for this end had he worked perseveringly to obtain a knowledge of special branches of science (though each department is a field for the labours of a lifetime), that he might some day draw a connected picture of nature, and describe the phenomena of the visible universe, and that mutual dependence and orderly connection between them which, though darkly and dreamily seen, led the ancient philosophers to call the divine work "Kosmos." This is the well-known title of Von Humboldt's great work; great in conception—great in execution; though not without the weak points and shortcomings which the finite mind, shackled too with the ties of human feelings, idiosyncrasies, and political interest, must exhibit in its contemplation of the infinite.

Great as were the benefits arising from Von Humboldt's special researches in geography, geology, terrestrial magnetism, meteorology, and other sciences, both to the progress of knowledge and to the improvement of the arts and territories, yet his generalisations of the results of the labours of himself and others in these many fields of nature, have already produced a vastly beneficial influence in science, lessening difficulties and removing doubts and darkness; and for ages yet they will prove a helpful stepping-stone to the student, and a high place from whence the educated man may look forth on nature, and see how great, and good, and wise is the Creator.—*London Literary Gazette.*

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*** Parties in correspondence with the Educational Department will please quote the *number* and *date* of any previous letters to which they may have occasion to refer, as it is extremely difficult for the Department to keep trace of isolated cases, where so many letters are received (nearly 800 per month) on various subjects.

APPORTIONMENT OF THE LEGISLATIVE SCHOOL GRANT OF UPPER CANADA, FOR THE YEAR 1859.

Circular to the Clerk of each County, City, Town, and Village Municipality in Upper Canada.

SIR,—I have the honor to transmit herewith, a certified copy of the apportionment, for the current year, of the Legislative School Grant to each City, Town, Village, and Township in Upper Canada. This apportionment will be payable at this Office, to the Agent of the Treasurer of your Municipality, on the 1st of July, provided that the School Accounts have been duly audited, and, together with the Auditors and Local Superintendents' Reports, have been transmitted to the Department.

I am happy to inform the Council of your Municipality, that I have been enabled to add a considerable sum to the apportionment of this year. The statistics of school population for 1858, upon which the present year's apportionment is based, have been carefully revised and corrected in this Department. Many inequalities in the apportionment have thus been removed, and all parts of the Province share in the grant upon equal terms, and in accordance with the demands