

we consider the discoveries and improvements daily advancing in their departments, it appears evident that just in proportion as the absolute wants of man increase so, the Creator of the Universe is pleased to reveal that knowledge which alone can supply them. When the population of a country becomes too great to be supported by its agriculture; discoveries are made in the arts, manufactories rise, and a due reward is given to industry. When a more ready communication is necessary to promote commerce, and the productions of art, the mighty powers of steam are developed, and a freer circulation is opened to meet the exigencies of the times.

It would be arrogant to attribute these improvements to the perfection of our education, or the strong efforts of our understanding. They are wisely introduced by an intelligent and benevolent Being, to whom we are indebted for all the blessings we enjoy.

When the attention is turned to Natural History, I trust I will be pardoned in affirming that by far the most important branches are mineralogy and geology. If the new departments of knowledge already referred to, are so productive of beneficial results, surely those which reveal the hidden treasures of the earth should not be overlooked. Transported with delight, the astronomer points his telescope to the new born planet, and wanders among the bright luminaries of the heavens; and well do his labors merit reward as he penetrates farther into the work of a boundless creation.

But that science which directs the geologist into the deepest recesses of the earth, abounds in facts still more remarkable, and of far greater importance to mankind. Far beneath the surface of the earth lie buried, myriads of once animated beings. In the lower strata the first dawning of animal life begins to appear; as we ascend these animals increase in proportion, and in the multiplicity of their organs. Family after family of these have become extinct, and more recent tribes are buried upon them. These were succeeded by enormous lizards forty feet in length, and flying reptiles of gigantic size. Forced from existence by changes ever going forward upon the earth, they also in their turn were doomed to perish without leaving a solitary living successor. Then the majestic Hippopotamus, Elephant and Rhinoceros stalked abroad, and droves of Hyenas, Bears, and Jackals, prowled amidst groves of palms and cedars far more lofty than the present growth. The bones and other remains of these animals, found sealed in the massive rock, clearly shew the mighty revolutions that have taken place upon this planet. Shaken by tremendous earthquakes, and overspread by torrents of liquid lava, the earth then offered no resting place for human beings. But a more calm and tranquil state succeeded, the sea had its level fixed, and continents rested above the bosom of the waters. Then man became its Lord, and, endowed with immortality, first bore the image of his Maker.

The practical advantages arising from a study of these sciences are incalculable. When coal is considered in reference to the production of steam, its importance to the safety and prosperity of nations can scarcely be estimated. The power now derived from steam and applied to move machinery in England alone, is estimated to be equivalent to the labor of four hundred millions of men, and Dr. Buckland justly remarks that "we are astounded at the influence of coal, and iron and steam, upon the fate and fortunes of the human race."

It is almost unnecessary to mention the value of lead, copper and other mineral substances. For the utility of those enquiries which discover and apply them must be apparent, especially in a Province where they are now known to exist, but are still imported from other countries.

The study of Provincial botany and conchology has been neglected, and a