Who has not admired the weird beauty of the auroral lights, the merry dancers of the north, the arcs of light that rest upon dense banks of fog and darkness, breaking into long and slender beams that shoot upward toward the zenith, and at length appear to converge together and form a crown, ever changing in its outline and its brilliant colors—one of the grandest scenes of the earth or heavens, grander because of the want of variation in the monotony of the polar regions. With the appearance of these displays is connected the electricity of the earth. At the same time the astronomer observes dark and deeply agitated spots of darkness moving across the surface of the sun, and connects the aurora and the movements of the stores of electricity with the sun, though how or to what extent remains as yet an unsolved problem to the scientist.

The mission of the rays is not yet completed. Animals for their existence require oxygen, which exists free in the atmosphere, while the vegetable world requires carbon, and how beautifully nature supplies the required wants. The pure oxygen of the air is breathed in by the animal, seizes upon and unites with the carbon which is not required in the system, and comes forth as carbonic acid gas, which, were it allowed to accumulate, would soon smother all animal life; but the vegetable world here intervenes, seizes upon this carbonic acid gas, depriving it of its carbon, which goes to make up the woody fibre of the plant, and gives off the pure oxygen for the benefit of the animal world. What is necessary for the decomposition of this carbonic acid gas? Plants, as you know, require sunlight for their growth. Some of the solar rays are required to fall upon the leaves of the plant and thereby cause the carbon and oxygen to be disunited. Thus we see how the two kingdoms, animal and vegetable, work for each other's prosperity, and are dependent upon the sun to assist in maintaining the purity of the atmosphere. The sun is a source of life to the vegetable world, and is therefore the origin of all our wood; and we may say the same of coal, for coal is but the vegetable accumulation of bygone ages, it is nothing else than mines of