

perfect species. But we see at once that the links of this chain are of very unequal length; or rather, that there are in some instances wide intervals between the nearest species, as if one or more links had dropped out. How remarkable that some of these lost links should be found among the fossil species! I will refer to a few examples.

Among existing animals no genera or tribes are more widely separated than those with thick skins, denominated pachydermata; such as the rhinoceros and the elephant. But among the fossil animals of the tertiary strata, this tribe of animals was much more common; and many of them fill up the blanks in the existing families, and thus render more perfect and uniform the great chain of being which binds together into one great system the present and past periods of organic life.

A similar case occurs among fossil plants. In tropical climates we find a few species, not much over twenty, of a singular family of plants, the cycadeæ connecting the great families of coniferæ, or dicotyledons, with the palms, which are monocotyledonous, and the ferns, which are acotyledonous. The chasm, however, between those great and dissimilar classes of plants is but imperfectly filled by the few living species of cycadeæ. But of the fossil species hitherto found above the coal formation, almost one half are cycadeæ; so that here, too, the lost links of the chain are supplied.

“Facts like these,” says Dr. Buckland, “are inestimably precious to the natural theologian, for they identify, as it were, the Artificer, by details of manipulation throughout his works. They appeal to the physiologist, in language more commanding than human eloquence; the voice of very stocks and stones, that have been buried for countless ages in the deep recesses of the earth, proclaiming the universal agency of one all-directing, all-sustaining Creator, in whose will and power these harmonious systems originated, and by whose universal providence they are, and have at all times been, maintained.”—*Bridge-water Treatise*, vol. i, p. 502.

One other fact, showing the identity of former zoological laws with those which now prevail, must not be omitted. I refer to the existence on the globe in all past periods of organic life of the two great classes of carnivorous and herbivorous animals; and they have always existed, too, in about the same proportion. To the harmony and happiness of the present