the Silurian period, which have been preserved, can, it is true, give us but a faint idea of them, because the material of these Algæ, like that of most others, is ill-suited for preservation in a fossil state. As has already been remarked, a large portion of coal is perhaps composed of them.

Less important is the fourth class of Algæ, that of the Rose-coloured Algae (Rhodophyceae), or Red Sea-weeds (Florideæ). This class, it is true, presents a great number of different forms; but most of them are of much smaller size than the Brown Algæ. Although they are inferior to the latter in perfection and differentiation, they far surpass them in some other respects. To them belong the most beautiful and elegant of all Algæ, which on account of the fine plumose division of their leaf-like bodies, and also on account of their pure and delicate red colour, are among the most charming of plants. The characteristic red colour sometimes appears as a deep purple, sometimes as a glowing scarlet, sometimes as a delicate rose tint, and may verge into violet and bluish purple, or on the other hand into brown and green tints of marvellous splendour. Whoever has visited one of our sea-coast watering places, must have admired the lovely forms of the Florideæ, which are frequently dried on white paper and offered for sale.

Most of the Red Algæ are so delicate, that they are quite incapable of being petrified; this is the case with the splendid Ptilotes, Plocamia, Delesseria, etc. However, there are individual forms, like the Chondria and Sphærococca, which possess a harder thallus, often almost as hard as cartilage, and of these fossil remains have been preserved—principally in the Silurian, Devonian, and Carboniferous strata, and later in the oolites. It is probable that this class also had