incrustations from various places: baskets of shells, and nests with eggs, from Derbyshire; a bird, from Knaresborough, in Yorkshire; and a twig, partially incrusted, from Ireland.

I need scarcely observe, that on breaking such specimens, we find the inclosed substances to have undergone no change but that of decay, in a greater or less degree. In this incrusted bird's nest, the twigs of which it is composed, like the branch above mentioned, are exposed in several places, and, as you perceive, are not permeated by stony matter, but are dry, and brittle. Now, a true *petrifaction* is altogether of a different nature, the substance being saturated throughout with mineral matter; if we break it, we find that every part of its structure has undergone a change; sometimes flint has filled up the interstices, and upon slicing and polishing it, the most delicate texture of the original may be detected. Wood, for instance, which is so commonly petrified by flint or chalcedony, may be cut so thin, that with a powerful lens the ramifications of the vessels and the structure of the tissues may be seen, and from their form, and disposition, we may determine the particular kind of tree to which the specimen belonged, although it may have been cased up in stone for ages. When bone is petrified, the same phenomena are observable; the most delicate parts of the internal structure are preserved, and all the cells are filled up with stone or spar, which is oftentimes of a different colour from that of the