

pith, medullary rays, vascular tissue, and circles of growth, are preserved in the siliceous and calcareous wood found in many parts of England.

STRUCTURE OF CONIFERÆ (*cone-bearing*).—The remains of a numerous family of dicotyledonous trees, termed *coniferæ*, as the pine, fir, larch, &c. are so abundant in the stratified rocks, that it is necessary to describe the peculiarity of structure by which their stems and branches may be recognised. The most delicate woody tissue, as we have above stated, consists of elongated cells or tubes, of two kinds: in one, the membrane of which they are composed is smooth; in the other, the walls of the tubes are covered by little oval or circular bodies called glands (*Lign.* 1, fig. 1, c.). A branch of larch or pine, split longitudinally, and viewed by a powerful lens, will exhibit the appearance here described. This glandular structure is so constantly and largely developed in the *coniferæ*, that although it is also possessed by other aromatic trees, we shall rarely err in referring fossil wood in which this organization is apparent, to this family of vegetables (See Plate V. figs. 2, 3.). These glands in the pines and firs, are supposed to be the cells which secrete a colourless volatile oil, that exudes in the state of turpentine.

From this general view of such organs and structures of recent vegetables, as may be expected