INOCERAMUS (Lign. 93.). — This name, which refers to the fibrous structure of the shell, has been given to a fossil genus, of which there are about thirty species in the cretaceous and oolitic formations; and very recently four or five species have been discovered in the Silurian strata of Ireland.\* These shells are chiefly characterized by their hinge (see Lign. 93, fig. 1 a.), and by the fibrous structure of their constituent substance, which closely resembles that of the recent Pinna; and under the microscope is found, like that shell, to consist of prismatic cells, filled with carbonate of lime.† The species vary in size from an inch to three or four feet in diameter. The shell, in consequence of the vertical arrangement of the fibres, readily breaks to pieces, and it is often extremely difficult to extricate a specimen with the hinge and beaks tolerably entire. That they were equally brittle when recent is evident from the numerous fragments diffused through the chalk and flint, and occasionally imbedded in pyrites.‡ The form of

<sup>\*</sup> The term Inoceramus is restricted by the French geologists to the beaked and laminated species of the Galt; and the chalk Inocerami are arranged under the name Catillus.

<sup>†</sup> Dr. Carpenter on the Microscopical Structure of Shells. To detect this structure, the shell should be immersed in diluted hydrochloric acid, and, when partially dissolved, the cells will be apparent.

<sup>‡</sup> It was many years before I succeeded in obtaining a specimen with the hinge perfect; and M. Brongniart, unable