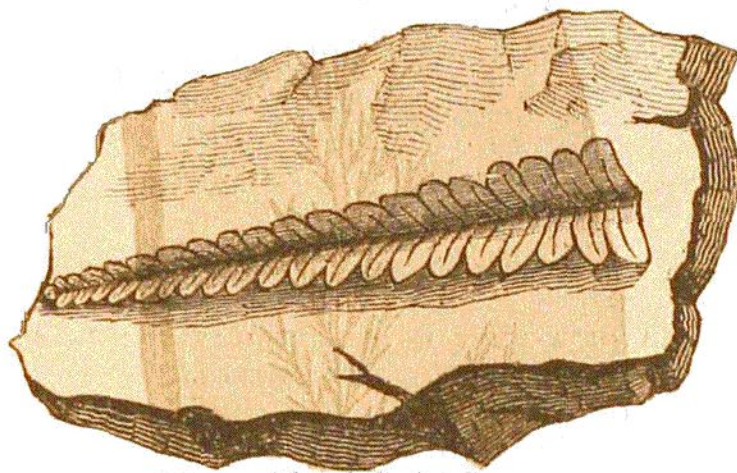


to be the detritus of plants ground to pieces by agitation in sand and water. Specimens in my possession, show that they have been principally derived from two elegant extinct species of ferns, which are peculiar to the wealden. The one is characterised by its slender and minutely divided leaflets (*Sphenopteris Mantellii*—Tab. 72); the other by the distribution of the nervures of the leaves (*Lonchopteris Mantellii*—Tab. 73). This plant has also been found in the valley of Bray by M. Graves of



TAB. 73.—PINNA OF LONCHOPTERIS MANTELLII: TILGATE FOREST.

(A fossil fern, peculiar to the wealden.)

Beauvais, in the lower Boulonnais in France, and in Sweden, in strata supposed to be of the same epoch as the wealden.

These ferns probably did not exceed a few feet in height; I have a stem of the *sphenopteris* which must have belonged to a plant five or six feet high. Several other species are associated