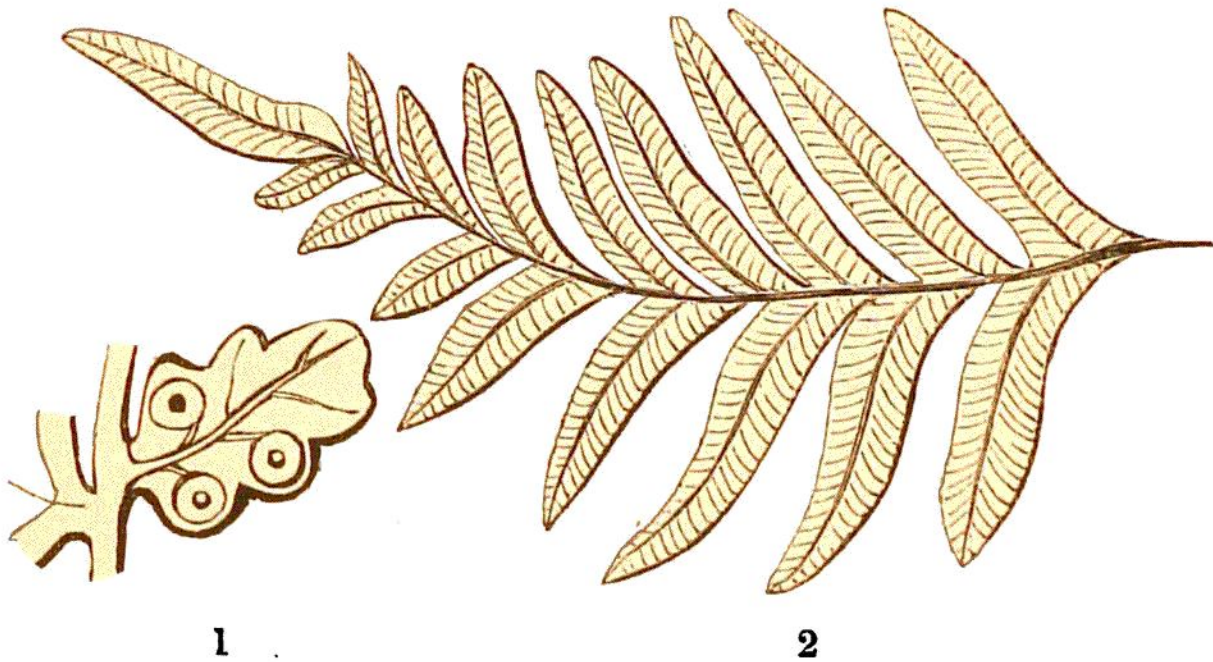


PECOPTERIS (*embroidered fern*). Leaves once, twice, or thrice pinnated; leaflets adhering by their base to the rachis, or rarely free; traversed by a strong midrib, which extends to the apex; veins simple, or once or twice dichotomous, almost perpendicular to the median vein. This genus embraces by far the largest proportion of the ferns which have contributed to the formation of the coal, and



LIGN. 18. Fig. 1.—PECOPTERIS MURRAYANA; a pinnule with the fructification. *Inf. Oolite, Scarborough.*

2.—PECOPTERIS LONCHITICA. *Coal-shale, France.*

whose leaves and stems are preserved in the associated strata. The originals of many species were undoubtedly arborescent, and attained a large size. Some leaves have been observed which were four feet wide, and of a proportionate length. More than one hundred species have been determined. An American species is figured in illustration of certain botanical terms (*Lign. 9.*).