

finding their remains indifferently in the calcareous and the muddy deposits.

The second phase of sedimentation, that of the coal-swamps, is marked by a very characteristic suite of organic



Fig. 364.—Carboniferous Fern.
Sphenopteris affinis, Lindl. and Hutt.

remains. Most abundant of these are the plants, which possess a special interest, inasmuch as they form the oldest terrestrial flora that has been abundantly preserved.¹⁸⁸ This

¹⁸⁸ On the Carboniferous flora, consult A. Brongniart, "Prodrome d'une Histoire des Vegetaux fossiles," 1828; Lindley and Hutton, "Fossil Flora of Great Britain," 1831-37. C. E. Weiss, "Fossile Flora d. jüngsten Steinkohl im Saar-Rhein-Geb," Bonn, 1869-72. "Die Flora d. Steinkohlen Formation," Berlin, 1881. Williamson's Memoirs "On the Organization of the Plants of the Coal-Measures," Phil. Trans. clxii. 1872, and subsequent volumes. Zeiller, on the Carboniferous flora of Valenciennes, Autun and Brive, in the series of volumes entitled "Études des Gites Mineraux de la France," published by the Ministry of Public Works; Zeiller and Renault on Fossil Flora of Commeny, Bull. Soc. Indust. Min. St. Etienne, 2 vols. with Atlas, 1888-90. R. Kidston, Trans. R. S. Edin. xxxv. *et seq.*