

in the Missouri Lower Coal Measures, and White (1899 p. 37, 40) describes some species which belong perhaps to "that group of Sphenopterids represented by *Sphenopteris Hoeninghausi* Brong." In Europe the plant is one of the most interesting of the Lower Coal Measure flora principally because of the discoveries of the internal structure of its stems, leaves, and fructifications. The stems are indeed the commonest of all the plants petrified in the Lower Coal Measure nodules in England, and though impressions of the foliage are scarce out of proportion to the frequency of the petrified fragments of the plant, it is one of the most important of Westphalian species and affords in itself conclusive evidence of the Carboniferous age of the beds containing it.

Genus *DIPLOTHMEMA*, Stur.

1877. *Diplothmema*, Stur, Culin-Flora 2, p. 226.

DIPLOTHMEMA SUBFURCATUM, Dawson sp.

Plate X, fig. 25; Plate XI, fig. 26, and text fig. 3.

1855. *Hymenophyllites furcatus*, Brongniart, Geinitz, Steinkohlform, Sachsen, p. 17, pl. XXIV, fig. 9.
 1868. *Hymenophyllites sub-furcatus*, Dawson, Acadian Geol., p. 552, fig. 192N.
 1871. *Hymenophyllites sub-furcatus*, Dawson, Foss. Pl. Devon. 1 pp. Silur. Canada, Geol. Surv. Rep., p. 53, Pl. XVI, fig. 180.
 1885. *Diplothmema Zobelii*, Goepfert, Stur. Carbon-Fl. Schatzlarer Schichten, p. 332, pl. XXIX, fig. 14.
 1888. *Hymenophyllites sub-furcatus*, Dawson, Geol. Hist. Pl., p. 72, fig. 22N.
 1910. *Sphenopteris sub-furcatus*, Matthew, Bull. Nat. Hist. Soc. New Brunswick, vol. 6, p. 248.

Dawson's material was of a very fragmentary nature, as will be seen from the drawing of his type specimen (1871, pl. XVI, fig. 180). The original of this is in the McGill University collection, No. D, and is labelled as the type in Dawson's own writing. A photograph of this specimen is shown in my pl. X, fig. 25. All the description given by Dawson (1871, p. 53) is "Similar in general form to *Sphenopteris* (H.) *furcatus* Brong., but with broader and acute divisions of the pinnæ." From the fragmentary remains at Dawson's disposal this was indeed all that there was to be said, but the pinnules are very characteristic and easily recognised, and now the original description can be supplemented from a fine specimen in the Geological Survey collections, found by Mr. W. J. Wilson. A photograph of this