nous wood, not unlike that of some modern trees-the most ancient fragment of an angiospermous exogen yet discovered. So abundant are the vegetable remains that in some layers they actually form thin seams of coal.

The interest of this flora is heightened by the discovery of the fact that the primeval forests were not without the hum of insect life. The most ancient known relics of insect forms have been recovered from the Devonian strata of New Brunswick.¹⁵⁰ They include both orthopterous and neuropterous wings, and have been regarded by Mr. Scudder of Boston as combining a remarkable union of characters now found in distinct orders of insects. In one fragment he observed a structure which he could only compare to the stridulating organ of some male Orthoptera. Another wing indicates the existence of a gigantic Ephemera, with a spread of wing extending to five inches. The continued existence of scorpions during this period has been established by the discovery of two genera (Palæophoneus and Proscorpius) in the Lower Helderberg rocks of New York.

The existence of myriapods in the forests of this ancient period has been shown by Mr. B. N. Peach, who finds that the so-called Kampecaris, previously regarded as a larval form of isopod crustacean, really contains two genera of chilognathous myriapods differing from other known forms, fossil and recent, in their less differentiated structure, each body segment being separate, and supplied with only one pair of walking legs.¹⁶⁰ There were also pulmoniferous shells, of which one species (Strophites grandæva, Dawson) occurs in the plant-beds of St. John, New Brunswick.

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¹⁶⁹ For a synopsis of all known species of fossil insects up to the year 1890, see Bull. U. S. Geol. Surv. No. 71, 1891.
¹⁶⁰ Proc. Phys. Soc. Edin. vii. 1882, p. 179.