

hinge-line from the anterior end. *Caneyella*, as here restricted, includes both costate and a few noncostate species with a relatively long hinge-line, the umbo being usually towards the anterior end. These distinctions, when applied to adult shells, seems to have genetic significance and to separate shells which are not congeneric.

In the British Carboniferous *Posidonia* is represented by *P. becheri* (most common in the P<sub>1</sub> zone); *P. corrugata* and its allies, some of which are undescribed, ranging from P<sub>2</sub> to E<sub>2</sub>; *P. obliquata* Brown in R<sub>1</sub> and possibly R<sub>2</sub> zones; *P. insignis* (Jackson) in G<sub>1</sub>, and *P. gibsoni* in G<sub>2</sub>. The well-known *P. membranacea* M'Coy (Pl. 71, fig. 14) is transferred to *Caneyella*.

#### CANEYELLA Girty 1909

*Type species* by original designation: *C. richardsoni* Girty 1909, pp. 38–39, pl. 4, figs. 1, 1a, Caney Shale, Oklahoma. Elias (1956, pp. 66–67) gives the horizon as the Delaware Creek member, the goniatite fauna of which is evidently of Lower Carboniferous *Posidonia* Age, possibly P<sub>2</sub>.

*Remarks.* Distinction of this genus from *Posidonia* has been given above. Bisat (1924) commented that *C. richardsoni* resembled *Actinopteria* cf. *persulcata* (M'Coy) as found in the Bowland Shales of England. There is a difference, however, in that the growth lines on the posterior part of the shell as they approach the hinge-line in adult *Caneyella* bend back towards the umbo, whereas in *Actinopteria* they bend away from the umbo and form an incipient wing. Young examples of *Caneyella* may show a wing.

Of the species which Girty (1909) referred to *Caneyella* it is proposed that *C. nasuta* Girty be suppressed as a subjective synonym of *Caneyella* [*Posidonia*] *membranacea* (M'Coy), and *C. vaughani* Girty be suppressed as a subjective synonym of *Posidonia becheri* Bronn. Other species of the genus occurring in the British Carboniferous include *C. [Posidoniella] semisulcata* (Hind) in the *Homoceras* zone, *C. [Posidoniella] rugata* (Jackson) in the Upper *Reticuloceras* zone, and *C. [Posidoniella] multirugata* (Jackson) in the *Gastrioceras* zone.

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## A NEW LIASSIC DRAGONFLY FROM GLOUCESTERSHIRE

by F. E. ZEUNER

THE dragonflies of the Lias are of great phylogenetic interest as evolution was at that time very rapid. It is worth while, therefore, to describe a new form from Cheltenham, Gloucestershire.

The specimen is a hindwing of a *Progonophlebia*, larger than the species described by Tillyard in 1925.

*Progonophlebia cromptoni* sp. nov.

Plate 72, fig. 4

*Diagnosis.* A *Progonophlebia* with wings approximately 43 mm. long.

*Distribution.* Lower Lias, Cheltenham, Gloucestershire.

*Holotype.* British Museum (Natural History), In. 49297, G. E. Gavey Collection, presented by Rev. J. Crompton, May 1956.

*Parts known.* Hindwing.

*Description.* To facilitate comparison, I am following Tillyard's wording and terminology closely (Tillyard 1925), although I do not agree with his interpretation of the venation.

Costal space crossed by two strongly formed antenodals, one on either side of the arculus. Nodus placed about half-way along the costal margin, and formed by the subcosta running into the costal margin with a slight bend upwards, and supported below, just before the actual apex of Sc, by a cross-vein, at the lower end of which R bends obliquely downwards for a very short distance, and then turns to run straight below C, giving off a very strong cross-vein placed slightly obliquely, which is the subnodus. Postnodals few in number. Pterostigma of moderate length, enclosed by oblique cross-veins, which are more distal on the Sc than on the R and curved, with their concavity towards the base of the wing.  $M_1$  slightly converging with R towards the pterostigma.  $M_{1A}$  rootless and converging with  $M_1$  in the apex.  $M_2$  arising distad of the subnodus, being separated from it by almost two complete inter-cross-vein spaces. This is characteristic of *Progonophlebia*.  $M_3$  arising from a cross-vein placed in the angle between  $M_{1+2}$  and  $M_3$ , and separated from both by only one row of cells.  $M_2$ ,  $M_3$ , and  $M_3$  terminate close together far distad along the wing in the apex.  $M_4$  slightly zigzagged in the middle of its course, though less so than in *P. woodwardi* Till. It continues to do so toward its end, where it converges with  $Cu_1$ .  $Cu_1$ -well developed, but not stronger than the other longitudinal veins.  $Cu_2$  weak, disappearing in the network of cells. Discoidal cell undivided, longer than wide (shorter in *P. woodwardi*). Anal portion of wing missing. Length 43.5 mm. (apex damaged); maximum width 11.2 mm.

*Remarks.* The agreement with *Progonophlebia woodwardi* Till. is so close that there can be no doubt about the generic identity. Several details are included in the description which are not available in Tillyard's species. The chief difference between *P. woodwardi* and *P. cromptoni* is that the latter is much longer, the total length being 43.5 instead of only 35 mm. The other specific differences are in the shape of  $M_4$  and the discoidal cell, and in slight deviations of the courses of the veins from the picture presented by Tillyard (1925, fig. 1). These are characteristically differences on the species level. Two species of *Progonophlebia*, therefore, visited the coastal regions of the British Lias, just as there are several species of *Libellula* to be observed on ponds at the present day.

REFERENCE

TILLYARD, R. J. 1925. *The British Liassic Dragonflies*. London, Brit. Mus. (Nat. Hist.).

JURASSIC BEETLES FROM GRAHAMLAND, ANTARCTICA

by F. E. ZEUNER

THE Falkland Islands Dependencies Geological Survey has produced a few remains of fossil insects from Mount Flora, Hope Bay, Grahamland, Antarctica. In view of the locality alone these specimens are of considerable interest, though from the point of view of classification