

Still further, the actual provisions for restraining this Insect class within due bounds, by the controlling agency of the carnivorous Arachnidans would lead us to expect that Spiders and Scorpions were employed in similar service during the successive geological epochs, in which we have evidence of the abundant growth of terrestrial vegetables.

Some recent discoveries confirm the argument from these analogies, by the test of actual observation. The two great families in the higher order of living Arachnidans (*Pulmonariæ*) are Spiders and Scorpions; and we have evidence to shew that fossil remains of both these families exist in strata of very high antiquity.

### *Fossil Spiders.*

Although no Spiders have been yet discovered in any rocks so ancient as the Carboniferous series, the presence of Insects in this series, and also of Scorpions, renders it highly probable that the cognate family of Spiders was co-ordinate with Scorpions, in restraining the Insect tribes of this early epoch, and that it will ere long be recognized among its fossil remains.\*

\* The animal found by Mr. W. Anstice in the Iron stone of Coalbrook Dale, and noticed by Mr. Prestwich as "apparently a Spider" (*Phil. Mag.* May, 1834, v. iv. p. 376), has been subsequently laid open by me, and shewn to be an Insect, belonging to the family of *Curculionidæ*. (Pl. 46", Fig. 1.) At the time when it was figured, and supposed to be a Spider, its head and