SCORPIONS AND THEIR ANTIQUITY

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ion, cxisting hich the first ies. An imalled "pedal mbranc conegs, with the e, or typical o are present ary to further s place; but b-families of f the Sahara, another has but also in the present only in the f the species the tropical group attains

its maximum development, the largest forms being, I believe, South American and South African.

In existing kinds of scorpions the median dorsal eyetubercles are, as a rule, far removed from the front margin of the cephalo-thorax, and thus placed behind the lateral eyes. Apparently the only fossil scorpions agreeing with this group that have been hitherto discovered occur preserved in amber of late Tertiary age; scorpions being quite unknown in lower Tertiary or Secondary rocks. Needless to say that this is not owing to their non-cxistence in those cpochs, but is due either to such rocks being unsuited to the preservation of their remains, or having been deposited far out to sea.

When, however, we reach the Palaeozoic coal-measures, which are mainly of fresh-water origin, and, therefore, just where we should expect to find ε . In the satures, remains of scorpions have been met with be. Uurope and North America, some of the species attaining very considerable dimensions. Both in these Carboniferous scorpions and also in certain still older ones from the Silurian rocks, the eye-tubercles are placed either on the actual front margin of the cephalo-thorax, or only a short distance behind it; and they are thus regarded as forming a group apart from the modern scorpions. In the Carboniferous genus Clythophthalmus, the median eye-tubercles are immense, and occupy almost the entire front half of the cephalo-thorax; the lateral eyes forming a semicircle behind and to the sides of the larger ones. The maxillary palpi form pincers proportionately as large as in the modern forms, while the legs have similar double claws. The genus Eoscorpius, which is likewise common to the Carboniferous rocks of both halves of the northern hemispheres, has all the general features of the preceding, with the exception that the arrangement