Parallelism between Pteroprosthenics and Pterometasthenics.

(1.) Between the subdivisions of the Pterometasthenics and those of Apipens, or the higher Pteroprosthenics.—The two first subdivisions, Coleopters and Hymenopters, are much alike in having compact well-made forms and comparatively small limits of variation, and freedom from imitation of other species while imitated by many—characteristics which belong to the highest typical subdivision of a group. They are approximately alike in having the mouth mandibulate, although unlike in that the latter (or highest species) are also suctorial; alike also in being with few exceptions terrestrial, and also in being permaturative.

Hemipters and Dipters, or the two second subdivisions, are alike in having the mouth suctorial, and feeble species for their size as compared with those of the first subdivisions.

The typical Orthopters and the Aphanipters, or the types under the two third subdivisions, consist alike of saltatorial and podometasthenic species.

(2.) Between the three subdivisions of the Pterometasthenics and the three of the Pteroprosthenics.—The more prominent of the relations between Coleopters and Appipens have just been mentioned. Those of Hemipters and Amplipens are still closer; Hemipters being so near to Homopters in structure, and especially in the composition of the rostrate mouth, that they have been placed together in the same tribe by most entomologists.

The Orthopters and Neuropters, or the third subdivisions of each, show a degree of approximation in the close resemblance in form between the Neuropterous Mantispids and the Orthopterous Mantids, indicating a tendency to run off into the same style of amplificate structure, and also in the Cricket-like form of the Neuropterous Borei; more profoundly in the resemblance in structure of mouth and the nature of the metamorphosis between the Neuropterous Perlæ and the Orthopterous Phasmids, as remarked upon by Westwood.

Thus the grand divisions of the Pterometasthenics constitute a parallel series to those of the Pteroprosthenics.

The further parallelisms, under both the Pteroprosthenics and Pterometasthenics, between the *third* of the grand divisions of each and the *first* and *second* have been explained on pages 20 to 22, and 24.

The affinities and analogies of species and groups appear hence to be fully exhibited in the system of classification presented, far more so than in any arrangement of osculant circles.

(3.) Between the several groups as to the number of subdivisions, and the grades of types constituting them.—The number of subdivisions in the groups, both the higher and lower, is three, as in most of the classes and orders that came under consideration in Article I.

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