

September 12th, 1837.

Dr. Bostock in the Chair.

Some observations were made by Dr. Andrew Smith, Corresp. Member, on the necessity for a revision of the groups included in the Linnean genus *Squalus*.

Dr. Smith commenced with stating that in the course of his examination of the Sharks which he had obtained while at the Cape, he found that although they could all readily be referred to the genus *Squalus*, as defined by Linnæus, yet there were many forms among them which would not admit of being placed in any of the subdivisions proposed by Cuvier. This led him to perceive the necessity of either altogether remodelling Cuvier's groups, or of establishing additional ones for the reception of the new species. After mature consideration, he determined upon the adoption of the latter course, finding the new forms so distinct and numerous that they could not with propriety be included in any divisions which only ranked as sub-genera.

Dr. Smith stated that he could not attempt to indicate the higher groups of the family of *Squalidæ*, but he was satisfied that all the sub-genera of Cuvier would receive such alterations and additions as would raise them to the rank of sub-families. In the very first sub-genus *Scyllium*, he had detected nine distinct minor groups, most of which included several well-marked species. Since fixing upon names for these groups, he had learned that several of them had been described as genera about a month previously by Prof. Müller and Dr. Henle of Berlin, and he had consequently adopted their nomenclature in preference to the terms under which it was his intention to have characterized them, with only this difference, that he regarded these divisions as sub-genera rather than genera.

Dr. Smith enumerated the sections above referred to of the genus *Scyllium* as follows :

1. *Scyllium*, restricted, includes four species, *Scyl. stellare*, Linn., *Squalus Canicula*, Bloch, *Scyllium capense*, Smith, *Scyl. bivium*, id.

2. *Catulus*, Willoughby, (three species,) *Squalus Canicula*, Linn., *Scyl. marmoratum*, Bennett, *Catulus Edwardii*, Smith.

3. *Poroderma*, Smith, (four species, all found in the Cape seas,) *Scyllium Africanum*, Cuv., *Poroderma pantherinum*, Smith, *Por. submaculatum*, id. *Por. variegatum*, id.

4. *Ginglymostoma*, Müller and Henle, (one species) *Squalus Gata*, Garra.

5. *Chiloscyllium*, Müller and Henle, (two species) *Scyllium plagiosum*, Bennett, *Le Squale dentelé*, Lacep.

6. *Stegostoma*, Müller and Henle, (two species) *Squalus fasciatus*, Bloch, *Squal. maculatus*, id.

7. *Hemiscyllium*, Müller and Henle, (one species) *Squalus ocellatus*, Bloch.

8. *Chrossorhinus*, Müller and Henle, (one species) *Squalus lobatus*, described in Phillips's Voyage to Botany Bay.

9. *Pristiurus*, Bonaparte, (one species) *Scyllium melanostomum*, Bonap.

Some drawings were exhibited by Dr. Smith, of the forms presented by the teeth of the species composing several of the above sections, and he remarked that on a future evening it was his intention to lay before the Society some further observations upon other groups of the cartilaginous fishes.

Professor Müller of Berlin being present confirmed the views entertained by Dr. Smith as to the number of divisions which might properly be made of the family *Scyllium*, several of which he had already published, as mentioned by Dr. Smith. As to the rank which these groups should hold in a systematic arrangement, he considered this a point upon which we are hardly in possession of sufficient evidence to justify a decided opinion.