

Chapter XIV.

Bionomics.

The Term Bionomics—History of Bionomics—Fritz Müller as a Type—Organisms and their Environment—Adaptations—Sprengel—Nutritive Chains—Inter-relations between Plants and Animals—Inter-relations among Animals—Inter-relations among Plants—The Struggle for Existence.

When we think of the life of a man, our first thoughts are usually of his active relations with the world around him, of his family and friends, of his en-
deavours and achievements; and it is in The Term Bionomics. most cases only as a second thought that we inquire into the functioning of his heart or digestive organs. For it seems convenient, if not logical, to distinguish between the internal activities of the body and the wider life in which the man comes into active relations with his fellows, with other living creatures, and with the inanimate world.

So it is with the life of plants and animals. There is the internal life of the body, and there is the wider external life of inter-relations with other individuals and with the world. For the study of this wider life a term is needed, and various suggestions have been made.

Professor E. Ray Lankester, in his article "Zoology" in the *Encyclopædia Britannica*, proposed the term Bionomics, defining it as "the lore of the farmer, gardener, sportsman, fancier, and field-naturalist, including Thremmatology, or the science of breeding, and the allied Teleology, or science of organic adaptation: exemplified by the patriarch Jacob, the poet Virgil, Sprengel, Kirby and Spence, Wallace, and Darwin".

It has been said that Bionomics is merely a learned word for "natural history", but this has already a heavy burden to bear; it has been translated "life-history", but this has a more definite meaning already; it has been called "higher-physiology", but this,