

## P R E F A C E .

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THE design of this work is to furnish an epitome of the leading principles of the science of Zoölogy, as deduced from the present state of knowledge, so illustrated as to be intelligible to the beginner. No similar treatise now exists in this country, and, indeed, some of the topics have not been touched upon in the English language, unless in a strictly technical form, and in scattered articles. On this account, some of the chapters, like those on Embryology and Metamorphosis, may, at first, seem too abstruse for scholars in our common schools. This may be the case, until teachers shall have made themselves somewhat familiar with subjects comparatively new to them. But so essential have these subjects now become to a correct interpretation of philosophical zoölogy, that the study of them will hereafter be indispensable. They furnish a key to many phenomena which have been heretofore locked in mystery.

Being intended for American students, the illustrations have been drawn, as far as possible, from American objects : some of them are presented merely as ideal outlines, which convey a more definite idea than accurate sketches from nature ; others have been left imperfect, except as to the parts especially in question ; a large proportion of them, however, are accurate portraits from original drawings. Popular names have been employed as far as possible, and to the scientific names an English termination has generally been given ; but the technical terms have been added, in brackets, whenever misunderstanding was apprehended. Definitions of those least likely to be understood, may be found in the Index.

The principles of Zoölogy developed by Professor Agassiz in his published works have been generally adopted in this, and the results of many new researches have been added.

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