

# **THE EVOLUTIONIST AT LARGE**

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The Evolutionist at Large by Grant Allen

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**GRANT ALLEN**

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AT LARGE**



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BY  
GRANT ALLEN



London  
CHATTO & WINDUS, PICCADILLY  
1881

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## PREFACE.

THESE ESSAYS originally appeared in the columns of the 'St. James's Gazette,' and I have to thank the courtesy of the Editor for kind permission to republish them. My object in writing them was to make the general principles and methods of evolutionists a little more familiar to unscientific readers. Biologists usually deal with those underlying points of structure which are most really important, and on which all technical discussion must necessarily be based. But ordinary people care little for such minute anatomical and physiological details. They cannot be expected to interest themselves in the *flexor*

*pollicis longus*, or the *hippocampus major* about whose very existence they are ignorant, and whose names suggest to them nothing but unpleasant ideas. What they want to find out is how the outward and visible forms of plants and animals were produced. They would much rather learn why birds have feathers than why they have a keeled sternum; and they think the origin of bright flowers far more attractive than the origin of monocotyledonous seeds or exogenous stems. It is with these surface questions of obvious outward appearance that I have attempted to deal in this little series. My plan is to take a simple and well-known natural object, and give such an explanation as evolutionary principles afford of its most striking external features. A strawberry, a snail-shell, a tadpole, a bird, a wayside flower—these are the sort of things which I have tried to explain. If I have not gone very deep, I hope at least



that I have suggested in simple language the right way to go to work.

I must make an apology for the form in which the essays are cast, so far as regards the apparent egotism of the first person. When they appeared anonymously in the columns of a daily paper, this air of personality was not so obtrusive: now that they reappear under my own name, I fear it may prove somewhat too marked. Nevertheless, to cut out the personal pronoun would be to destroy the whole machinery of the work: so I have reluctantly decided to retain it, only begging the reader to bear in mind that the *I* of the essays is not a real personage, but the singular number of the editorial *we*.

I have made a few alterations and corrections in some of the papers, so as to bring the statements into closer accordance with scientific accuracy. At the same time, I should like to add that I have intentionally

simplified the scientific facts as far as possible. Thus, instead of saying that the groundsel is a composite, I have said that it is a daisy by family; and instead of saying that the ascidian larva belongs to the sub-kingdom Chordata, I have said that it is a first cousin of the tadpole. For these simplifications, I hope technical biologists will pardon me. After all, if you wish to be understood, it is best to speak to people in words whose meanings they know. Definite and accurate terminology is necessary to express definite and accurate knowledge; but one may use vague expressions where the definite ones would convey no ideas.

I have to thank the kindness of my friend the Rev. E. PURCELL, of Lincoln College, Oxford, for the clever and appropriate design which appears upon the cover.

G. A.

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